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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, 2013

☐ **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 333-169785

LANTHEUS MEDICAL IMAGING, INC.

(Exact name of registrant as specified in its charter)

Delaware	**51-0396366**
(State of incorporation)	(IRS Employer Identification No.)
331 Treble Cove Road, North Billerica, MA	**01862**
(Address of principal executive offices)	(Zip Code)

(978) 671-8001

(Registrant's telephone number, including area code)

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

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 requirements 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 (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ 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 definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

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

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

The registrant is a privately-held corporation, and accordingly, as of June 30, 2013, there is no public market for its common stock. The registrant had one thousand shares of common stock, $0.01 par value per share, issued and outstanding as of March 11, 2014.

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EXPLANATORY NOTE

The registrant has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, during the preceding 12 months but is not subject to such filing requirements.

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PART I

Cautionary Note Regarding Forward-Looking Statements

Some of the statements contained in this annual report are forward-looking statements. Such forward-looking statements, including, in particular, statements about our plans, strategies, prospects and industry estimates are subject to risks and uncertainties. These statements identify prospective information and include words such as "anticipates," "intends," "plans," "seeks," "believes," "estimates," "expects," "should," "predicts," "hopes" and similar expressions. Examples of forward-looking statements include, but are not limited to, statements we make regarding: (i) outlook and expectations related to product manufactured at Jubilant HollisterStier, or JHS; (ii) our outlook and expectations including, without limitation, in connection with continued market expansion and penetration for our commercial products, particularly DEFINITY; and (iii) our liquidity, including our belief that our existing cash, cash equivalents, anticipated revenues and availability under a revolving line of credit are sufficient to fund our existing operating expenses, capital expenditures and liquidity requirements for at least the next twelve months. Forward-looking statements are based on our current expectations and assumptions regarding our business, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict. Our actual results may differ materially from those contemplated by the forward-looking statements. They are neither statements of historical fact nor guarantees or assurances of future performance. The matters referred to in the forward-looking statements contained in this annual report may not in fact occur. We caution you therefore against relying on any of these forward-looking statements. Important factors that could cause actual results to differ materially from those in the forward-looking statements include regional, national or global political, economic, business, competitive, market and regulatory conditions and the following:

- our dependence upon third parties for the manufacture and supply of a substantial portion of our products;
- risks associated with the technology transfer programs to secure production of our products at alternate contract manufacturer sites;
- risks associated with the manufacturing and distribution of our products and the regulatory requirements related thereto;
- the instability of the global molybdenum-99, or Moly, supply;
- our ability to continue to increase segment penetration for DEFINITY in suboptimal echocardiograms;
- risks associated with both supply and demand for Xenon;
- our dependence on key customers, primarily Cardinal Health, Inc., or Cardinal, United Pharmacy Partners, Inc., or UPPI, and GE Healthcare, for our nuclear imaging products, and our ability to maintain and profitably renew our contracts and relationships with those key customers;
- our ability to compete effectively, including in connection with new market entrants;
- the dependence of certain of our customers upon third-party healthcare payors and the uncertainty of third-party coverage and reimbursement rates;
- uncertainties regarding the impact of U.S. healthcare reform on our business, including related reimbursements for our current and potential future products;
- our being subject to extensive government regulation and our potential inability to comply with such regulations;

- potential liability associated with our marketing and sales practices;
- the occurrence of any side effects with our products;
- our exposure to potential product liability claims and environmental liability;
- risks associated with our lead clinical candidate, flurpiridaz F 18, including our ability to:
  - attract strategic partners to successfully complete the Phase 3 clinical program and possibly commercialize the agent;
  - obtain U.S. Food and Drug Administration, or the FDA, approval; and
  - gain post-approval market acceptance and adequate reimbursement;
- risks associated with being able to negotiate in a timely manner relationships with potential strategic partners to advance our other development programs on acceptable terms, or at all;
- the extensive costs, time and uncertainty associated with new product development, including further product development relying on external development partners; our inability to introduce new products and adapt to an evolving technology and diagnostic landscape; our inability to protect our intellectual property and the risk of claims that we have infringed on the intellectual property of others;
- risks related to our outstanding indebtedness and our ability to satisfy such obligations;
- risks associated with the current economic environment, including the U.S. credit markets;
- risks associated with our international operations;
- our inability to adequately protect our facilities, equipment and technology infrastructure;
- our inability to hire or retain skilled employees and key personnel;
- costs and other risks associated with the Sarbanes-Oxley Act and the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010; and
- other factors that are described in "Risk Factors," beginning on page 27.

Any forward-looking statement made by us in this annual report speaks only as of the date on which it is made. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to publicly update any forward looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.

Trademarks

We own or have the rights to various trademarks, service marks and trade names, including, among others, the following: DEFINITY®, TechneLite®, Cardiolite®, Neurolite®, Ablavar®, Vialmix®, Quadramet® (U.S. only) and Lantheus Medical Imaging® referred to in this annual report. Solely for convenience, we refer to trademarks, service marks and trade names in this annual report without the TM, SM and ® symbols. Such references are not intended to indicate, in any way, that we will not assert, to the fullest extent permitted under applicable law, our rights to our trademarks, service marks and trade names. Each trademark, trade name or service mark of any other company appearing in this annual report, such as Myoview®, Optison® and SonoVue® are, to our knowledge, owned by such other company.

Item 1. Business

Unless the context requires otherwise, references to the "Company," "Lantheus," "LMI," "our company," "we," "us" and "our" refer to Lantheus Medical Imaging, Inc. and its direct and indirect subsidiaries, references to "Lantheus Intermediate" refer to only Lantheus MI Intermediate, Inc., the parent of Lantheus, and references to "Holdings" refer only to Lantheus MI Holdings, Inc., the parent of Lantheus Intermediate.

Overview

We are a global leader in developing, manufacturing and distributing innovative diagnostic medical imaging agents and products that primarily assist clinicians in the diagnosis of cardiovascular diseases. Our agents are routinely used to diagnose coronary artery disease, congestive heart failure and stroke, peripheral vascular disease and other diseases. Clinicians use our imaging agents and products across a range of imaging modalities, including nuclear imaging, echocardiography and magnetic resonance imaging, or MRI. We believe that the resulting improved diagnostic information enables healthcare providers to better detect and characterize, or rule out, disease, potentially achieving improved patient outcomes, reducing patient risk and limiting overall costs for payers and the entire healthcare system.

Our commercial products are used by nuclear physicians, cardiologists, radiologists, internal medicine physicians, technologists and sonographers working in a variety of clinical settings. We sell our products to radiopharmacies, hospitals, clinics, group practices, integrated delivery networks, group purchasing organizations and, in certain circumstances, wholesalers.

We market our products globally and have operations in the United States, Puerto Rico, Canada and Australia and distribution relationships in Europe, Asia Pacific and Latin America.

Our Products

Our portfolio of 10 commercial products is diversified across a range of imaging modalities. Our products include radiopharmaceuticals and contrast agents. Radiopharmaceuticals, or nuclear imaging agents, are radiolabeled compounds that are used by clinicians to perform nuclear imaging procedures, such as single-photon emission computed tomography, or SPECT, or positron emission tomography, or PET. Contrast agents are typically non-radiolabeled compounds that are used in diagnostic procedures such as echocardiograms or magnetic resonance imaging that are used by physicians to improve the clarity of the diagnostic image.

DEFINITY

DEFINITY is the leading ultrasound contrast imaging agent delivered intravenously and indicated for use in patients with suboptimal echocardiograms. Numerous patient conditions can decrease the quality of images of the left ventricle, the primary pumping chamber of the heart. Of the nearly 28 million echocardiograms performed each year in the United States, it is estimated that approximately 20%, or approximately six million echocardiograms, produce suboptimal images. The use of DEFINITY during echocardiography allows physicians to significantly improve their assessment of the function of the left ventricle.

DEFINITY is a clear, colorless, sterile liquid, which upon activation by Vialmix, a medical device specifically designed for DEFINITY, becomes a homogenous, opaque, milky white injectable suspension of perflutren-containing lipid microspheres. After activation and intravenous injection, DEFINITY improves the ultrasound delineation of the left ventricular endocardial border, or innermost layer of tissue that lines the chamber of the left ventricle. Better visualization of the ventricle wall allows clinicians to see wall motion abnormalities, namely that the heart muscle is not expanding and contracting in a normal, consistent and predictable way. We believe this allows clinicians to make

more informed decisions about disease status. DEFINITY offers flexible dosing and administration through an IV bolus injection or continuous IV infusion. We believe DEFINITY's synthetic lipid-cased coating gives the compound a distinct competitive advantage because it provides a strong ultrasound signal without using human albumin.

Since its launch in 2001, DEFINITY has been used in imaging procedures in over 4.7 million patients throughout the world. In 2013, DEFINITY was the leading ultrasound imaging agent, used by echocardiologists and sonographers, in approximately 2.5% of all echocardiograms performed in the United States. DEFINITY currently competes with Optison, a GE Healthcare product, as well as other non-echocardiography imaging modalities.

DEFINITY and Optison both carry a FDA-required boxed warning, which has been loosened over time, to notify physicians and patients about potentially serious safety concerns or risks posed by the products. See "Item 1A—Risk Factors—Ultrasound contrast agents may cause side effects which could limit our ability to sell DEFINITY."

We recently transferred our manufacturing of DEFINITY from Ben Venue Laboratories, or BVL, to JHS at its facility in Spokane, WA. See "—Manufacturing—BVL and Technology Transfer."

DEFINITY is currently patent protected in the United States until 2021 and in numerous foreign jurisdictions with patent or regulatory protection until 2019. DEFINITY generated revenues of $78.1 million, $51.4 million and $68.5 million for the years ended December 31, 2013, 2012 and 2011, respectively. DEFINITY represented approximately 28%, 18% and 19% of our total revenues in 2013, 2012 and 2011, respectively.

TechneLite

TechneLite is a self-contained system or generator of Technetium (Tc99m), a radioactive isotope with a 6 hour half-life, used by radiopharmacies to prepare various nuclear imaging agents. Technetium results from the radioactive decay of Moly, itself a radioisotope with a 66 hour half-life produced in nuclear research reactors around the world from enriched uranium. The TechneLite generator is a little larger than a coffee can in size and the self-contained system houses a vertical glass column at its core that contains Moly. During our manufacturing process, Moly is added to the column within the generator where it is adsorbed onto alumina powder. The column is sterilized, enclosed in a lead shield and further sealed in a cylindrical plastic container, which is then immediately shipped to our radiopharmacy customers. Because of the short half-lives of Moly and Technetium, radiopharmacies typically purchase TechneLite generators on a weekly basis.

The technetium produced by our TechneLite generator is the medical isotope that can be attached to a number of other radiopharmaceutical imaging agents, including Cardiolite and Neurolite, during the radiolabeling process. To radiolabel technetium-based radiopharmaceuticals, a vial of sterile saline and a vacuum vial are each affixed to the top of a TechneLite generator. The sterile saline is pulled through the generator where it attracts technetium resulting from the degrading of Moly within the generator column. The technetium-containing radioactive saline is then pulled into the vacuum vial and subsequently combined by a radiopharmacist with the applicable imaging agent, and individual patient-specific radiolabeled imaging agent doses are then prepared. When administered, the imaging agent binds to specific tissues and organs for a period of time, illustrating the functional health of the imaged tissues. Our ability to produce and market TechneLite is highly dependent on our supply of Moly. See "—Raw Materials and Supply Relationships—Molybdenum-99."

TechneLite is produced in thirteen size variations and is currently marketed in North America, Latin America and Australia, largely to radiopharmacies that prepare unit doses of radiopharmaceutical imaging agents and that ship these preparations directly to hospitals for administration to patients. In the United States, we have supply arrangements with significant radiopharmacy chains, including

Cardinal, UPPI and GE Healthcare, and we believe TechneLite has approximately 41% of the market share, competing primarily with technetium-based generators produced by Mallinckrodt Pharmaceuticals, or Mallinckrodt. In Canada and Puerto Rico, we also supply TechneLite to our Company-owned radiopharmacies to prepare radiopharmaceutical imaging agent unit doses.

The Moly used in our TechneLite generators can be produced using targets made of either highly enriched uranium, or HEU, or low enriched uranium, or LEU. LEU consists of uranium that contains less than 20% of the uranium-235 isotope. HEU is often considered weapons grade material, with 20% or more of uranium-235. On January 2, 2013, President Obama signed into law the American Medical Isotopes Production Act of 2011, or the AMIPA, as part of the 2013 National Defense Authorization Act. The AMIPA encourages the domestic production of LEU Moly and provides for the eventual prohibition of the export of HEU from the United States. Although Medicare generally does not provide separate payment to hospitals for the use of diagnostic radiopharmaceuticals administered in an outpatient setting, since January 1, 2013, the Centers for Medicare and Medicaid Services, or CMS, the federal agency responsible for administering the Medicare program, has provided an add-on payment under the hospital outpatient prospective payment system for every technetium diagnostic dose produced from non-HEU sourced Moly, to cover the marginal cost for radioisotopes produced from non-HEU sources. Our LEU TechneLite generator satisfies the new reimbursement requirements under the applicable CMS rules.

TechneLite currently has patent protection in the U.S. and various foreign countries on certain component technology expiring in 2029. In addition, given the significant know-how and trade secrets associated with the methods of manufacturing and assembling the TechneLite generator, we believe we have a substantial amount of valuable and defensible proprietary intellectual property associated with the product. TechneLite generated revenues of $92.2 million, $114.2 million and $131.2 million for the years ended December 31, 2013, 2012 and 2011, respectively. TechneLite represented approximately 33%, 40% and 37% of total revenues in 2013, 2012 and 2011, respectively.

Other Commercial Products

In addition to the products listed above, our portfolio of commercial products also includes important imaging agents in specific segments, which provide a stable base of recurring revenue. Most of these products have a favorable industry position as a result of our substantial infrastructure investment, our specialized workforce, our technical know-how and our supplier and customer relationships.

- *Xenon Xe 133 Gas*, is a radiopharmaceutical inhaled gas used to assess pulmonary function and also for imaging blood flow, particularly in the brain. Our Xenon is manufactured by a third party and packaged in-house. We are currently the sole provider of Xenon in North America. In 2013, 2012 and 2011, Xenon Xe 133 Gas represented approximately 11%, 10% and 8%, respectively, of our total revenues

- *Cardiolite,* also known by its generic name sestamibi, is an injectable Technetium-based imaging agent used in myocardial perfusion imaging, or MPI, procedures to assess blood flow to the muscle of the heart using SPECT. Cardiolite was approved by the FDA in 1990 and its market exclusivity expired in July 2008. With the advent of generic competition in September 2008, we have faced significant pricing and unit volume pressures on Cardiolite. We also sell Cardiolite in the form of a generic sestamibi at a slightly lower price than branded Cardiolite. Since the launch of Cardiolite in 1991, Cardiolite products have been used to image approximately 52 million patients in the United States. Cardiolite represented approximately 9%, 12% and 19% of total revenues in 2013, 2012 and 2011, respectively. Included in Cardiolite revenues are branded Cardiolite and generic sestamibi revenues, some of which we produce and some of which we procure from third parties from time to time.

- *Neurolite*, is an injectable Technetium-based imaging agent used with SPECT technology to identify the area within the brain where blood flow has been blocked or reduced due to stroke. We launched Neurolite in 1995. In 2013, 2012 and 2011, Neurolite represented approximately 2%, 2% and 3%, respectively, of our total revenues.

- *Thallium Tl 201*, is an injectable radiopharmaceutical imaging agent used in MPI studies to detect coronary artery disease. We have marketed Thallium since 1977 and manufacture the agent in-house using cyclotrons. In 2013, 2012 and 2011, Thallium represented approximately 1%, 2% and 2%, respectively, of our total revenues.

- *Gallium Ga67*, is an injectable radiopharmaceutical imaging agent used to detect certain infections and cancerous tumors, especially lymphoma. We manufacture Gallium in-house using cyclotrons. In 2013, 2012 and 2011, Gallium represented approximately 2% of our total revenues.

- *Gludef,* is an injectable fluorine-18-based imaging agent used with PET technology to identify and characterize tumors in patients undergoing oncologic diagnostic procedures. Gludef is our branded version of fludeoxyglucose F 18 injection, or FDG. In 2013, 2012 and 2011, Gludef represented approximately 3%, 2% and 2%, respectively, of our total revenues.

- *Quadramet*, our only therapeutic product, is an injectable radiopharmaceutical used to treat severe bone pain associated with certain kinds of cancer. Previously, we finished and packaged in-house for a third party Samarium 153, the radioisotope used to prepare Quadramet. Effective December 13, 2013, we purchased the rights to Quadramet in the United States and now serve as the direct manufacturer and supplier of Quadramet in the United States. In 2013, 2012 and 2011, Samarium 153 represented approximately 2% of our total revenues.

- *Ablavar*, is an injectable gadolinium-based contrast agent used with magnetic resonance angiography, or MRA, a type of MRI scan, to image the iliac arteries that start at the aorta and go through the pelvis into the legs, in order to diagnose narrowing or blockage of these arteries in known or suspected peripheral vascular disease. We launched Ablavar in January 2010. In 2013, 2012 and 2011, Ablavar represented approximately 0.9%, 0.9% and 0.5%, respectively, of our total revenues.

For revenue and other financial information for our U.S. and International segments, see Note 18, "Segment Information" to our consolidated financial statements.

Distribution, Marketing and Sales

In the United States, we sell DEFINITY through our sales team of approximately 77, mostly long-tenured employees that call on healthcare providers in the echocardiography space, as well as group purchasing organizations and integrated delivery networks. For the year ended December 31, 2013, sales by our direct sales force represented approximately 28% of our total revenue.

Our radiopharmaceutical products are sold in the United States through a small nuclear products sales team, primarily to radiopharmacies. In 2013, we transitioned the sales and marketing efforts for Ablavar from our direct sales force to our customer service team in order to allow our direct sales force to focus on driving our DEFINITY sales growth.

We sell a majority of our radiopharmaceutical products in the United States to radiopharmacies that are controlled by or associated with Cardinal, UPPI, GE Healthcare, and Triad Isotopes Inc., or Triad:

- Cardinal maintains approximately 135 radiopharmacies that are typically located in large, densely populated urban areas in the United States. We estimate that Cardinal's radiopharmacies distributed approximately 45% of the aggregate U.S. SPECT doses sold in the first half of 2013 (the latest information currently available to us). We currently have two agreements with Cardinal, one for TechneLite generators, Gallium, Xenon, Thallium and Neurolite (the TechneLite Agreement) and the other for Cardiolite products (the Cardiolite Agreement), both of which require Cardinal to purchase minimum amounts of each of the products from us. The agreements contain provisions allowing for early termination by either party. The TechneLite Agreement allows for termination upon the occurrence of specified events, including a material breach by either party and force majeure events. The Cardiolite Agreement allows for termination upon the occurrence of specified events, including a material breach by either party, Cardinal's termination of its business operations in the nuclear medicine industry and force majeure events. The TechneLite and Cardiolite agreements both expire on December 31, 2014.

- UPPI is a cooperative purchasing group (roughly analogous to a group purchasing organization) of over 80 independently owned or smaller chain radiopharmacies located in the United States. UPPI's radiopharmacies are typically broadly dispersed geographically, with some urban presence and a substantial number of radiopharmacies located in suburban and rural areas of the country. We estimate that these independent radiopharmacies, together with an additional 41 unofficial, independent radiopharmacies, distributed more than 25% of the aggregate U.S. SPECT doses sold in the first half of 2013. We currently have an agreement with UPPI for the distribution of both Cardiolite and TechneLite products to radiopharmacies or families of radiopharmacies within the UPPI cooperative purchasing group. The agreement contains specified pricing levels based upon specified purchase amounts for UPPI. We are entitled to terminate the UPPI agreement upon 60 days written notice. The UPPI agreement expires on December 31, 2016.

- GE Healthcare maintains 31 radiopharmacies in the United States that purchase our TechneLite generators. These radiopharmacies primarily distribute GE Healthcare's Myoview, a technetium-labeled MPI agent. We estimate that GE Healthcare distributed approximately 11% of the aggregate U.S. SPECT doses sold in the first half of 2013. We currently have one agreement with GE Healthcare for the distribution of TechneLite and other products. The agreement provides that GE Healthcare will purchase a minimum percentage of TechneLite generators as well as certain other products in the United States or Canada from us. Our agreement, which expires on December 31, 2017, may be terminated by eitherparty on (i) two years' written notice relating to TechneLite on and after December 31, 2013 and (ii) six months' written notice relating to the other products. Our agreement also allows for termination upon the occurrence of specified events including a material breach by either party, bankruptcy by either party and force majeure events.

In addition to the distribution arrangements for our radiopharmaceutical products described above, we also sell our radiopharmaceutical products directly to hospitals and clinics that maintain in-house radiopharmaceutical capabilities and operations, although this represents a small percentage of overall sales, because the majority of hospitals and clinics do not maintain these in-house capabilities.

In the rest of the world, including Europe, Asia Pacific and Latin America, we utilize third party distributor relationships to market, distribute and sell our products, either on a country-by-country basis or on a multi-country regional basis. In October 2013, we entered into a new supply and distribution agreement for Cardiolite and Neurolite in certain European countries with Mallinckrodt AG. In March 2012, we entered into a new development and distribution arrangement for DEFINITY in China, Hong

Kong S.A.R. and Macau S.A.R. with Double-Crane. Double-Crane is currently pursuing the Chinese regulatory approval required to commence the necessary confirmatory clinical trials. We believe that international markets, particularly China, represent significant growth opportunities for our products. These distribution agreements did not have a significant impact on our revenue during 2013.

We sell our products (and others) directly to end users through the five radiopharmacies we own in Canada and the two radiopharmacies we own in each of Australia and Puerto Rico. We also maintain our own direct sales forces in these markets so we can control the marketing, distribution and sale of our imaging agents in these regions.

Customers

For the year ended December 31, 2013, our largest customers were Cardinal, GE Healthcare and UPPI accounting for approximately 19%, 10%, and 10%, respectively, of our global net sales.

Competition

We believe that our key product characteristics, such as proven efficacy, reliability and safety, coupled with our core competencies, such as our efficient manufacturing processes, our established distribution network, our long-tenured field sales organization and our customer service focus, are important factors that distinguish us from our competitors.

The market for diagnostic medical imaging agents is highly competitive and continually evolving. Our principal competitors in existing diagnostic modalities include large, global companies that are more diversified than we are and that have substantial financial, manufacturing, sales and marketing, distribution and other resources. These competitors include Mallinckrodt, GE Healthcare, Bayer Schering Pharma AG, or Bayer, Bracco Diagnostics Inc., or Bracco, and DRAXIS Specialty Pharmaceuticals Inc. (an affiliate of JHS), or Draxis, as well as other competitors. We cannot anticipate their competitive actions, such as price reductions on products that are comparable to our own, development of new products that are more cost-effective or have superior performance than our current products, the introduction of generic versions after our proprietary products lose their patent protection. Our current or future products could be rendered obsolete or uneconomical as a result of this competition.

Generic competition has substantially eroded our market share for Cardiolite, beginning in September 2008 when the first generic product was launched. We are currently aware of four separate, third-party generic offerings of sestamibi. We also sell our own generic version of sestamibi. See "Item 1A—Risk Factors—Generic competition has significantly eroded our market share of the MPI segment for Cardiolite products and will likely continue to do so."

Raw Materials and Supply Relationships

We rely on certain raw materials and supplies to produce our products. Due to the specialized nature of our products and the limited and sometimes intermittent supply of raw materials available in the market, we have established relationships with several key suppliers. Our most important and widely used raw material is Moly. For the year ended December 31, 2013, our largest supplier of raw materials and supplies was Nordion, accounting for approximately 19% of our total purchases.

Molybdenum-99

TechneLite, Cardiolite and Neurolite all rely on Moly, the radioisotope which is produced by bombarding Uranium-235 with neutrons in research reactors. Moly is the most common radioisotope used for medical diagnostic imaging purposes. With a 66 hour half-life, Moly degrades into Technetium,

another radioisotope with a half-life of six hours that is the isotope that is attached to radiopharmaceuticals, including Cardiolite, Neurolite, during the radiolabeling process.

We currently purchase finished Moly from four of the five main processing sites in the world, namely, Nordion, formerly known as MDS Nordion, in Canada; NTP Radioisotopes, or NTP, in South Africa; Institute for Radioelements, or IRE, in Belgium; and ANSTO in Australia.

These processing sites are, in turn, supplied by seven of the eight main Moly-producing reactors in the world, namely, NRU located in Canada; SAFARI located in South Africa; OPAL located in Australia; BR2 located in Belgium; OSIRIS located in France; LVR-10 located in the Czech Republic; and High Flux Reactor, or HFR, located in The Netherlands.

Historically, our largest supplier of Moly has been Nordion, which relies on the NRU reactor for its supply of Moly. In addition, because Xenon is a by-product of the Moly production process and is currently captured only by Nordion, we are currently reliant on Nordion as our sole supplier of Xenon to meet our customer demand. Our agreement with Nordion contains minimum percentage purchase requirements for Moly. The agreement allows for termination upon the occurrence of certain events. Nordion can terminate if we fail to purchase a minimum percentage of Moly or Nordion incurs certain cost increases, but in the latter case termination can occur no earlier than October 1, 2014. Either party may terminate if the other party fails to comply with material obligations, is bankrupt or experiences a force majeure event subject to a waiting period. The agreement expires on December 31, 2015.

Our agreement with NTP includes their consortium partner, ANSTO. The agreement contains minimum percentage volume requirements and provides for the increased supply of Moly derived from LEU targets from NTP and ANSTO. The agreement allows for termination upon the occurrence of certain events, including failure by NTP to provide our required amount of Moly, material breach of any provision by either party, bankruptcy by either party and force majeure events. Additionally, we have the ability to terminate the agreement with six months' written notice prior to the expiration of the agreement. The agreement expires on December 31, 2017.

In March 2013, we entered into a similar agreement with IRE, or the IRE Agreement. IRE previously supplied us as a subcontractor under the agreement with NTP. Similar to the agreement with NTP, the IRE Agreement contains minimum percentage volume requirements. The IRE Agreement also requires IRE to provide certain increased quantities of Moly during periods of supply shortage or failure. The IRE Agreement also provides for an increased supply of Moly derived from LEU targets upon IRE's completion of its ongoing conversion program to modify its facilities and processes in accordance with Belgian nuclear security commitments. The IRE Agreement allows for termination upon the occurrence of certain events, including failure by IRE to provide our required amount of Moly, material breach of any provision by either party, bankruptcy by either party and force majeure events. The IRE Agreement expires on December 31, 2017.

To further augment and diversify our current supply, we are pursuing additional sources of Moly and Xenon from potential new producers around the world that seek to produce Moly and Xenon with existing or new reactors or technologies.

Other Materials

We have additional supply arrangements for active pharmaceutical ingredients, or APIs, excipients, packaging materials and other materials and components, none of which are exclusive, but a number of which are sole source, and all of which we believe are either in good standing or easily replaceable without any material disruption to our business.

Manufacturing

We maintain manufacturing operations at our North Billerica, Massachusetts facility. We manufacture TechneLite on a highly-automated production line and also manufacture Thallium and Gallium at this site using our cyclotron technology. We manufacture, finish and distribute our radiopharmaceutical products on a just-in-time basis, and supply our customers with these products either by next day delivery services or by either ground or air custom logistics.

In addition to our in-house manufacturing capabilities, a substantial portion of our products are manufactured by third-party contract manufacturing organizations, and in certain instances, we rely on them for sole source manufacturing. To ensure the quality of the products that are manufactured by third parties, all raw materials used in those products are first sent to our North Billerica facility, where we test them prior to the third party manufacturing the final product. After the final products are manufactured, they are sent back to us for final quality control testing and then we ship them to our customers. We have expertise in the design, development and validation of complex manufacturing systems and processes, and our strong execution and quality control culture supports the just-in-time manufacturing model at our North Billerica facility.

BVL and Technology Transfer

We have undertaken technology transfers in response to supply challenges at our primary third party contract manufacturer. Historically, we had relied on Ben Venue Laboratories, Inc., or BVL, as our sole manufacturer of DEFINITY and Neurolite and as one of our two manufacturers of Cardiolite. Following extended operational and regulatory challenges at BVL's Bedford, Ohio facility, in March 2012, we entered into a Settlement and Mutual Release Agreement, or a Settlement Agreement, under which we and BVL agreed to a broad mutual waiver and release for all matters that occurred prior to the date of the Settlement Agreement, a covenant not to sue and a settlement payment to us in the amount of $30.0 million. We also entered into (i) a transition services agreement, or a Transition Services Agreement, under which BVL manufactured for us certain products and made payments to us in the aggregate amount of $5.0 million; and (ii) a new Manufacturing and Service Contract, or a Manufacturing Agreement, under which BVL manufactured for us certain products following the initial supply provided under the Transition Services Agreement.

BVL continued to face supply challenges and, in October 2013, it announced that it would cease to manufacture further new batches of our products in its Bedford, Ohio facility. On November 12, 2013, in connection with the termination of the Manufacturing Agreement, we and BVL entered into a second Settlement and Release Agreement, or the Second Settlement Agreement. Pursuant to the Second Settlement Agreement, we and BVL agreed to a broad mutual waiver and release for all matters that occurred prior to the date of the Second Settlement Agreement, a covenant not to sue and settlement payments to us in the aggregate amount of $8.9 million. In addition, the Second Settlement Agreement provided that the Manufacturing Agreement terminated as of November 15, 2013, subject to BVL's obligations to use commercially reasonable efforts to finalize specific batches of DEFINITY, Cardiolite and saline manufactured and not yet released by the BVL quality function for commercial distribution. BVL has since released for commercial distribution all of our remaining manufactured product that was awaiting quality approval.

Contemporaneous with the BVL supply challenges, we expedited a number of technology transfer programs to secure and qualify production of our BVL-manufactured products from alternate contract manufacturer sites.

- *DEFINITY*—We entered into a Manufacturing and Supply Agreement, effective as of February 1, 2012, with JHS, for the manufacture of DEFINITY. Under the agreement, JHS manufactures DEFINITY for us for an initial term of five years. We have the right to extend the agreement for an additional five-year period, with automatic renewals for additional one year

periods thereafter. The agreement allows for termination upon the occurrence of certain events such as a material breach or default by either party, or bankruptcy by either party. The agreement also requires us to place orders for a minimum percentage of our requirements for DEFINITY with JHS.

On November 12, 2013, we entered into a Manufacturing and Supply Agreement with Pharmalucence, Inc. ("Pharmalucence") to manufacture and supply DEFINITY. There are no minimum purchase requirements under this agreement, which has an initial term of five years from the effective date and is renewable at our option for an additional five years. The Manufacturing Agreement allows for termination upon the occurrence of certain events, including material breach or bankruptcy by either party. During the optional five year term, either party may terminate upon thirty months' advance notice.

- *Cardiolite*—We currently have one manufacturer for our Cardiolite supply. We also entered into a Manufacturing and Supply Agreement, effective as of May 3, 2012, with JHS for the manufacture of Cardiolite products. Under the agreement, JHS has agreed to manufacture product for an initial term of five years. We have the right to extend the agreement for an additional five-year period, with automatic renewals for additional one year periods thereafter. The agreement allows for termination upon the occurrence of specified events, including material breach or bankruptcy by either party. The agreement requires us to place orders for a minimum percentage of our requirements for Cardiolite with JHS during such term. We are currently considering our product volume requirements and need for additional contract manufactures for Cardiolite.

- *Neurolite*—We entered into a Manufacturing and Supply Agreement, effective as of May 3, 2012, with JHS for the manufacture of Neurolite. Under the agreement, JHS has agreed to manufacture product for an initial term of five years. We have the right to extend the agreement for an additional five-year period, with automatic renewals for additional one year periods thereafter. The agreement allows for termination upon the occurrence of specified events, including material breach or bankruptcy by either party. The agreement also requires us to place orders for a minimum percentage of our requirements for Neurolite with JHS during such term. We are also considering additional contract manufacturers for Neurolite.

Based on our current projections, we believe that we will have sufficient supply of DEFINITY from JHS to meet expected demand and sufficient Cardiolite product supply from our current supplier to meet expected demand. We also currently anticipate JHS-manufactured Neurolite to be available by the second half of 2014 when technology transfer and regulatory approval at JHS are completed. We are pursuing new manufacturing relationships to establish and secure additional long-term or alternative suppliers as described above, but we are uncertain of the timing as to when these arrangements could provide meaningful quantities of product. See "Item 1A—Risk Factors—Our dependence upon third parties for the manufacture and supply of substantial portion of our products could prevent us from delivering our products to our customers in the required quantities, within the required timeframes, or at all, which could result in order cancellations and decreased revenues," "Item 1A—Risk Factors—Challenges with product quality o product performance, including defects, caused by us or our suppliers could result in a decrease in customers and sales, unexpected expenses and loss of market share" and "Risk Factors—Our business and industry are subject to complex and costly regulations. If governmentegulations are interpreted or enforced in a manner adverse to us or our business, we may be subject to enforcement actions, penalties, exclusion and other material limitations on our operations."

Mallinckrodt

We rely on sole source manufacturing for Ablavar at Mallinckrodt. The agreement requires us to purchase a minimum amount of Ablavar and can be amended or terminated by mutual written agreement at any time. See "Item 1A—Risk Factors—Our business depends on our ability to successfull introduce new products and adapt to a changing technology and diagnostic landscape." The agreement also allows for termination upon the occurrence of certain events such as a material breach or default by either party, or bankruptcy by either party. Currently, the agreement runs until September 30, 2014, although we do not foresee the need to order any additional API or finished drug product under this agreement other than our outstanding purchase commitment. At December 31, 2013, the remaining purchase commitment under the amended agreement was approximately $1.8 million and should be satisfied by the second quarter of 2014. See "Item 1A—Risk Factors—Our dependence upon third parties for the manufacture and supply a substantial portion of our products could prevent us from delivering our products to our customers in the required quantities within the required timeframe, or at all, which could result in order cancellations and decreased revenues."

PET Manufacturing Facilities

If flurpiridaz F 18 is ultimately successful in clinical trials (see "Research and Development—Flurpiridaz F 18 Phase 3 Program" below), a new manufacturing model will have to be implemented where chemical ingredients of the imaging agent are provided to PET radiopharmacies that have fluorine-18 radioisotope-producing cyclotrons on premises. The ingredients will be combined with fluorine-18 manufactured in these radiopharmacies in specially designed chemistry synthesis boxes to generate the final radiopharmaceutical imaging agent, flurpiridaz F 18. Radiopharmacists will be able to prepare and dispense patient-specific doses from the final product. However, because each of these PET radiopharmacies will be deemed by the FDA to be a separate manufacturing site for flurpiridaz F 18, each will have to be included in the agent's New Drug Application, or NDA, and subsequent FDA filings. As a result, there will be quality and oversight responsibility for these PET radiopharmacies associated with the NDA, unlike the current relationship we have with our nuclear imaging agent distributors that operate radiopharmacies. Depending upon the nature and scope of any strategic partnership we enter into for flurpiridaz F18, such responsibilities could eventually require us to commit additional financial and human resources, and will potentially expose us to additional liability.

Research and Development

For the years ended December 31, 2013, 2012 and 2011, we invested $30.5 million, $40.6 million and $40.9 million, respectively, in research and development. Our research and development team includes our medical affairs and medical information functions, which educate physicians on the scientific aspects of our commercial products and the approved indications, labeling and the receipt of reports relating to product quality or adverse events. We have developed a pipeline of three potential cardiovascular imaging agents which were discovered and developed in-house and are protected by patents and patent applications we own in the United States and numerous foreign jurisdictions. In March 2013, we began to implement a strategic shift in how we will fund our important R&D programs. We will reduce over time our internal R&D resources while at the same time we seek to engage strategic partners to assist us in the further development and commercialization of these agents, including flurpiridaz F 18, 18F LMI 1195 and LMI 1174. See "Item 1A—Risk Factors—We will not be able to develop or commercialize our development candidates without successful strategic partners."

Flurpiridaz F 18—PET Perfusion Agent—Myocardial Perfusion

We have developed flurpiridaz F 18, an internally discovered small molecule radiolabeled with fluorine-18, as an imaging agent used in PET MPI to assess blood flow to the heart. Today, most MPI

procedures use SPECT technology. Although this imaging provides substantial clinical value, there is growing interest in the medical community to utilize technology such as PET that can provide meaningful advantages. PET is an imaging technology that when used in combination with an appropriate radiopharmaceutical imaging agent can provide important insights into physiologic and metabolic processes in the body and be useful in evaluating a variety of conditions including neurological disease, heart disease and cancer. PET imaging has demonstrated broad utility for diagnosis, prognosis, disease staging and therapeutic response. Images generated with PET technology typically exhibit very high image resolution because of substantially higher signal to noise efficiency, a measure of the efficiency by which energy can be captured to create an image.

Although SPECT imaging used in conjunction with a radiopharmaceutical imaging agent, such as Cardiolite, is most commonly used for MPI studies, PET imaging has gained considerable support in the field of cardiovascular imaging as it offers many advantages to SPECT imaging, including: higher image quality, increased diagnostic certainty, more accurate risk stratification and reduced patient radiation exposure. In addition, PET MPI imaging could be particularly useful in difficult to image patients, including women and obese patients. The use of PET technology in MPI tests represents a broad emerging application for a technology more commonly associated with oncology and neurology. We anticipate that the adoption of PET technology in MPI tests will increase significantly in the future.

Flurpiridaz F 18 Clinical Overview

We submitted an Investigational New Drug Application, or IND, for flurpiridaz F 18 to the FDA in August 2006. Our clinical program to date has consisted of three Phase 1 studies, a Phase 2 clinical trial, conducted from 2007 to 2010, involving a total of 208 subjects who received PET MPI performed with flurpiridaz F 18 and a Phase 3 clinical trial conducted from 2011 to 2013 involving 920 subjects who received PET MPI procedures with flurpiridaz F 18.

Flurpiridaz F 18 Phase 2 Trial

We evaluated flurpiridaz F 18 in a Phase 2 trial consisting of 176 subjects from 21 centers. These subjects underwent rest and stress flurpiridaz F 18 and SPECT MPI, both of which were evaluated for safety. 86 subjects underwent coronary angiography, the current standard clinical method for diagnosing coronary artery disease. Coronary angiography is an invasive procedure using fluoroscopy performed in a cardiac catheterization lab while the subject is under mild sedation. These 86 subjects formed the population for evaluating diagnostic performance. PET MPI was performed with flurpiridaz F 18 at rest and at stress utilizing pharmacological coronary vasodilation or treadmill exercise. Unlike currently available PET imaging agents for MPI with half-lives measured in seconds, flurpiridaz F 18 can be used in conjunction with treadmill exercise given its substantially longer 110 minute half-life.

The Phase 2 trial results showed the following:

- a significantly higher percentage of images were rated as either excellent or good quality with PET imaging, compared to SPECT imaging for stress images (98.8% vs. 84.9%, $p<0.01$) and rest images (95.3% vs. 69.8%, $p<0.01$);
- diagnostic certainty of interpretation, the percentage of cases with definitely abnormal or definitely normal interpretation, was significantly higher for flurpiridaz F 18 compared to SPECT (90.7% vs. 75.6%, $p<0.01$);
- the area under the ROC curve (the relative operating characteristic curve comparing the true positive rate to the false positive rate for coronary artery disease diagnosis) was significantly higher for flurpiridaz F 18 than SPECT (0.82 ± 0.05 vs. 0.70 ± 0.05, $p<0.05$), indicating higher diagnostic performance;

- sensitivity with flurpiridaz F 18 imaging was significantly higher than SPECT (78.8% vs. 61.5%, p=0.02);
- a trend toward higher specificity was noted, although the advantage was not statistically significant in the study; and
- no drug-related serious adverse events were observed, demonstrating a positive safety profile for PET MPI imaging with flurpiridaz F 18.

Flurpiridaz F 18 Phase 3 Program

Our Phase 3 program for flurpiridaz F 18 includes a 301 trial and a 302 trial, which are each open-label, multicenter trials to assess the diagnostic efficacy of flurpiridaz F 18 PET MPI as compared with SPECT MPI in the detection of significant coronary artery disease. Coronary angiography is the truth standard for all subjects. The clinical development program includes hypotheses for superiority for sensitivity (identifying disease) and non-inferiority for specificity (ruling out disease) with an adequate sample size to demonstrate superior specificity if present.

In March 2011, we obtained agreement from the FDA on a Special Protocol Assessment for our 301 trial and in April 2012, we received a Special Protocol Assessment for our 302 trial.

During the third quarter of 2013 we completed patient enrollment in the 301 trial. In the fourth quarter of 2013, we announced preliminary results from the 301 trial. Flurpiridaz F 18 appeared to be well-tolerated from a safety perspective and outperformed SPECT in a highly statistically significant manner (p<.001) in sensitivity. In addition, flurpiridaz F 18 showed statistically significant improvements (p<.001) in image quality and diagnostic certainty in comparison to SPECT. However, flurpiridaz F 18 did not meet the non-inferiority criterion for identifying subjects without disease.

We have initiated discussions about potential next steps in the development process with the FDA, and we are seeking strategic partners to further develop and, if approved, commercialize flurpiridaz F 18.

18F LMI 1195—Cardiac Neuronal Activity Imaging Agent

We have developed 18F LMI 1195, also an internally discovered small molecule that is a fluorine-18-based radiopharmaceutical imaging agent, designed to assess cardiac sympathetic nerve function with PET. Sympathetic nerve activation increases the heart rate, constricts blood vessels and raises blood pressure by releasing a neurotransmitter called norepinephrine throughout the heart. Changes in the cardiac sympathetic nervous system have been associated with heart failure progression and fatal arrhythmias.

Heart failure is a major public health problem in North America, associated with high morbidity and mortality, frequent hospitalizations and a major cost burden on the community. In the U.S. alone, there are over 5 million patients living with congestive heart failure, and over a half million new diagnoses each year. Mortality for this condition is around 50% within 5 years of diagnosis. Expensive therapies for heart failure are often utilized without effective predictors of patient response. Costly device therapies (for example, implantable cardiac defibrillators, or ICDs, and cardiac resynchronization therapy) are often used, although they sometimes do not provide any benefits or are activated in only a minority of recipients. Conversely, heart failure clinical practice guidelines currently preclude the use of device therapy in many patients who might benefit. Thus, a key opportunity is to better match patients to treatment based on the identification of the underlying molecular status of disease progression.

18F LMI 1195 is taken up by the transporter that regulates norepinephrine released by the sympathetic nervous system at multiple nerve endings of the heart. PET imaging using 18F LMI 1195 could allow for the identification of patients at risk of sudden death, potentially improving clinical

decision-making, including who could benefit from certain drug therapies or the implantation of certain anti-arrhythmia devices such as ICDs.

We have completed a Phase 1 study of 18F LMI 1195 using PET imaging. Twelve normal subjects were injected intravenously with approximately 6 millicuries of 18F LMI 1195, imaged sequentially for a period of approximately 5 hours and monitored closely to observe any potential adverse events. Excellent quality images were obtained and the radiation dose to the subjects was found to be well within acceptable limits. Blood radioactivity cleared quickly and lung activity was low throughout the study. The agent appeared to have a favorable safety profile. We are seeking to engage strategic partners to assist us with the ongoing development activities relating to this agent.

LMI 1174—Vascular Remodeling

We have developed LMI 1174, an internally discovered gadolinium-based MRI agent targeted to elastin in the arterial walls and atherosclerotic plaque. We believe that this agent could allow non-invasive assessment of plaque location, burden, type of arterial wall remodeling and therefore the potential for a vascular event, which, in turn, could lead to heart attack or stroke.

Atherosclerosis is the leading cause of heart attacks, strokes, and peripheral vascular disease. Elastin plays a key role in the structure of the arterial wall and in biological signaling functions. Several pathological stimuli may be responsible for triggering elastogenesis in atherosclerosis, leading to a marked increase in elastin content during plaque development. In addition to the increase in elastin seen in autopsy samples from patients with carotid atherosclerosis, there is also an increase of elastin in aortic aneurysm samples. As a result, an elastin-specific imaging agent may facilitate noninvasive detection of remodeling of the arterial walls.

The majority of the assessments of atherosclerosis are currently obtained using angiography or MPI. MRI using LMI 1174 could allow for the identification, on a non-invasive basis without radiation exposure, of the presence and characteristics of atherosclerosis, potentially improving clinical decision-making to reduce the risks of cardiovascular events.

In our preclinical work, we have identified a series of low molecular weight molecules that bind to elastin and final optimization is ongoing. Our lead molecule, LMI 1174, has been used to demonstrate utility in a number of different animal models. We are seeking to engage strategic partners to assist us with the ongoing development activities relating to this agent.

Intellectual Property

Patents, trademarks and other intellectual property rights are very important to our business. We also rely on trade secrets, manufacturing know-how, technological innovations and licensing agreements to maintain and improve our competitive position. We review third-party proprietary rights, including patents and patent applications, as available, in an effort to develop an effective intellectual property strategy, avoid infringement of third-party proprietary rights, identify licensing opportunities and monitor the intellectual property owned by others. Our ability to enforce and protect our intellectual property rights may be limited in certain countries outside the United States, which could make it easier for competitors to capture market position in such countries by utilizing technologies that are similar to those developed or licensed by us. Competitors also may harm our sales by designing products that mirror the capabilities of our products or technology without infringing our intellectual property rights. If we do not obtain sufficient protection for our intellectual property, or if we are unable to effectively enforce our intellectual property rights, our competitiveness could be impaired, which would limit our growth and future revenue.

Trademarks, Service Marks and Trade Names

We own various trademarks, service marks and trade names, including DEFINITY, TechneLite, Cardiolite, Neurolite, Ablavar, Vialmix, Quadramet (U.S. only) and Lantheus Medical Imaging. We have registered these trademarks, as well as others, in the United States and numerous foreign jurisdictions.

Patents

We actively seek to protect the proprietary technology that we consider important to our business, including chemical species, compositions and formulations, their methods of use and processes for their manufacture, as new intellectual property is developed. In addition to seeking patent protection in the United States, we file patent applications in numerous foreign countries in order to further protect the inventions that we consider important to the development of our foreign business. We also rely upon trade secrets and contracts to protect our proprietary information. As of February 28, 2014, our patent portfolio included a total of 42 issued U.S. patents, 256 issued foreign patents, 27 pending patent applications in the United States and 144 pending foreign applications, including claims covering the composition of matter and methods of use for all of our preclinical and clinical stage candidates.

Our patents cover many of our commercial products, and our patent protection is generally in the United States, Canada, Mexico, most of Western Europe and Scandinavia (including Austria, Belgium, Denmark, Finland, France, Germany, Great Britain, Italy, Luxembourg, Netherlands, Norway, Spain, Switzerland and Sweden), and markets in Asia (including China, Hong Kong, Japan, Singapore and South Korea) and Latin America (including Chile and Brazil). For DEFINITY, we hold a number of different compositions of matter, use, formulation and manufacturing patents, with U.S. patent protection until 2021 and patent or regulatory extension protection in Canada, Europe and parts of Asia until 2019. For Ablavar, we hold a number of different compositions of matter, use, formulation and manufacturing patents, with the last U.S. patent not expiring until 2020 with regulatory extension and a manufacturing patent application, which if granted, will expire in 2034 in the absence of any patent term adjustment or regulatory extension. Neither Cardiolite nor Neurolite is covered any longer by patent protection in either the United States or the rest of the world and we are not currently aware of any proposed generic competitors to Neurolite. TechneLite currently has patent protection in the U.S. and various foreign countries on certain component technology expiring in 2029. In addition, given the significant know-how and trade secrets associated with the methods of manufacturing and assembling the TechneLite generator, we believe we have a substantial amount of valuable and defensible proprietary intellectual property associated with the product. Thallium, Gallium and Xenon are all generic radiopharmaceuticals.

We have patents and patent applications in numerous jurisdictions covering composition, use, formulation and manufacturing of flurpiridaz F 18, one of which, if granted, will expire in 2033 and in the United States a composition patent expiring in 2026 and a method of use patent expiring in 2028 in the absence of any regulatory extension. We also have patents and patent applications in numerous jurisdictions covering composition, use, and synthesis of our cardiac neuronal imaging agent candidate, some of which, if granted, will expire in 2027 and some in 2031 in the absence of any patent term adjustment or regulatory extensions, in the United States a composition patent expiring in 2030 in the absence of any regulatory extension, and in Europe a composition patent expiring in 2027 in the absence of any regulatory extension. Additionally, we have patent applications in numerous jurisdictions covering composition, use and synthesis of our vascular remodeling compound, some of which if granted, will expire in 2029 and some in 2030 in the absence of any patent term adjustment or regulatory extensions and in the United States a composition and method of use patent expiring in 2031 in the absence of any regulatory extension.

In addition to patents, we rely where necessary upon unpatented trade secrets and know-how, proprietary information, and continuing technological innovation to develop and maintain our competitive position. We seek to protect our proprietary information, in part, using confidentiality agreements with our collaborators, employees, consultants and other third parties and invention assignment agreements with our employees. These confidentiality agreements may not prevent unauthorized disclosure of trade secrets and other proprietary information, and we cannot assure you that an employee or an outside party will not make an unauthorized disclosure of our trade secrets, other technical know-how or proprietary information. We may not have adequate remedies for any unauthorized disclosure. This might happen intentionally or inadvertently. It is possible that a competitor will make use of such information, and that our competitive position will be compromised, in spite of any legal action we might take against persons making such unauthorized disclosures. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. To the extent that our collaborators, employees and consultants use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

In addition, we license a limited number of third-party technologies and other intellectual property rights that are incorporated into some elements of our drug discovery and development efforts. These licenses are not material to our business, and the technologies can be obtained from multiple sources. We are currently party to separate royalty-free, non-exclusive, cross-licenses with each of Bracco, GE Healthcare and Imcor Pharmaceutical Company which give us freedom to operate in connection with contrast-enhanced ultrasound imaging technology. We also in-license certain freedom to operate rights for Ablavar from, among others, Bayer.

Regulatory Matters

Food and Drug Laws

The development, manufacture, sale and distribution of our products are subject to comprehensive governmental regulation both within and outside the United States. A number of factors substantially increase the time, difficulty and costs incurred in obtaining and maintaining the approval to market newly developed and existing products. These factors include governmental regulation, such as detailed inspection of and controls over research and laboratory procedures, clinical investigations, manufacturing, narcotic licensing, marketing, sampling, distribution, import and export, record keeping and storage and disposal practices, together with various post-marketing requirements. Governmental regulatory actions can result in the seizure or recall of products, suspension or revocation of the authority necessary for their production and sale as well as other civil or criminal sanctions.

Our activities in the development, manufacture, packaging or repackaging of our pharmaceutical and medical device products subjects us to a wide variety of laws and regulations. We are required to register for permits and/or licenses with, seek approvals from and comply with operating and security standards of the FDA, the U.S. Nuclear Regulatory Commission ("NRC"), the U.S. Department of Health and Human Services ("HHS"), Health Canada, the European Medicines Agency ("EMA"), and various state and provincial boards of pharmacy, state and provincial controlled substance agencies, state and provincial health departments and/or comparable state and provincial agencies as well as foreign agencies, and certain accrediting bodies depending upon the type of operations and location of product distribution, manufacturing and sale.

The FDA and various state regulatory authorities regulate the research, testing, manufacture, safety, labeling, storage, recordkeeping, premarket approval, marketing, advertising and promotion, import and export and sales and distribution of pharmaceutical products in the United States. Prior to marketing a pharmaceutical product, we must first receive FDA approval. Specifically, in the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FDCA, and the

Public Health Service Act, and implementing regulations. The process of obtaining regulatory approvals and compliance with appropriate federal, state, local, and foreign statutes and regulations require the expenditure of substantial time and financial resources. The process required by the FDA before a drug product may be marketed in the United States generally involves the following:

- completion of preclinical laboratory tests, animal studies and formulation studies according to Good Laboratory Practices regulations;
- submission to the FDA of an IND which must become effective before human clinical studies may begin;
- performance of adequate and well-controlled human clinical studies according to Good Clinical Practices and other requirements, to establish the safety and efficacy of the proposed drug product for its intended use;
- submission to the FDA of a New Drug Application, or NDA, for a new drug;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the drug product is produced to assess compliance with current Good Manufacturing Practices, or cGMP, regulations; and
- FDA review and approval of the NDA.

The testing and approval process requires substantial time, effort, and financial resources, and we cannot be certain that any approvals for our product candidates will be granted on a timely basis, if at all. Once a pharmaceutical product candidate is identified for development, it enters the preclinical testing stage. Preclinical tests include laboratory evaluations of product chemistry, toxicity, formulation, and stability, as well as animal studies to assess its potential safety and efficacy. This testing culminates in the submission of the IND to the FDA. Once the IND becomes effective, the clinical trial program may begin. Each new clinical trial must be submitted to the FDA before the study may begin. Human clinical studies are typically conducted in three sequential phases that may overlap or be combined:

Phase 1. The product is initially introduced into healthy human subjects and tested for safety, dosage tolerance, absorption, metabolism, distribution and excretion. In the case of some products for severe or life-threatening diseases, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing is often conducted in patients.

Phase 2. Involves studies in a limited patient population to identify possible adverse effects and safety risks, to evaluate preliminarily the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage and schedule.

Phase 3. Clinical studies are undertaken to further evaluate dosage, clinical efficacy and safety in an expanded patient population at geographically dispersed clinical study sites. These studies are intended to collect sufficient safety and effectiveness data to support the NDA for FDA approval.

Sponsors may request a special protocol assessment from the FDA. The FDA's special protocol assessment process creates a written agreement between the sponsoring company and the FDA regarding the clinical trial design and other clinical trial issues that can be used to support approval of a candidate product. The special protocol assessment is intended to provide assurance that if the agreed-upon clinical trial protocols are followed and the trial endpoints are achieved, the data may serve as the primary basis for an efficacy claim in support of an NDA. However, the special protocol assessment agreement is not a guarantee of an approval of a product or any permissible claims about the product. In particular, the special protocol assessment is not binding on the FDA if public health concerns become evident that are unrecognized at the time that the special protocol assessment

agreement is entered into, other new scientific concerns regarding product safety or efficacy arise, or if the sponsor company fails to comply with the agreed upon trial protocols.

Progress reports detailing the results of the clinical studies must be submitted at least annually to the FDA and safety reports must be submitted to the FDA and the investigators for serious and unexpected adverse events. Submissions must also be made to inform the FDA of certain changes to the clinical trial protocol. Federal law also requires the sponsor to register the trials on public databases when they are initiated, and to disclose the results of the trials on public databases upon completion. Phase 1, Phase 2 and Phase 3 testing may not be completed successfully within any specified period, if at all. The FDA or the sponsor may suspend or terminate a clinical study at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an institutional review board, or IRB, can suspend or terminate approval of a clinical study at its institution if the clinical study is not being conducted in accordance with the IRB's requirements or if the drug product has been associated with unexpected serious harm to patients. Failure to register a trial or disclose study results within the required time periods could result in penalties, including civil monetary penalties.

Concurrent with clinical studies, companies usually complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the product and finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, the manufacturer must develop methods for testing the identity, strength, quality, and purity of the final product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the product candidate does not undergo unacceptable deterioration over its shelf life.

The results of product development, preclinical studies, and clinical studies, along with descriptions of the manufacturing process, analytical tests conducted on the drug product, proposed labeling, and other relevant information, are submitted to the FDA as part of an NDA for a new drug, requesting approval to market the product. The submission of an NDA is subject to the payment of a substantial user fee, pursuant to the Prescription Drug User Fee Act ("PDUFA"), which was first enacted in 1992 to provide the FDA with additional resources to speed the review of important new medicines. A waiver of such fee may be obtained under certain limited circumstances. PDUFA expires every five years and must be reauthorized by Congress. PDUFA IV expired on September 30, 2012, and was renewed as Title I of the FDA Safety and Innovation Act. PDUFA V reauthorization reflected an agreement reached after months of discussion between FDA, industry and other stakeholders. The current PDUFA V agreement focuses on improving the efficiency and predictability of the review process, strengthening the agency regulatory science base and enhancing benefit-risk assessment and post-approval safety surveillance.

The approval process is lengthy and difficult and the FDA may refuse to approve an NDA if the applicable regulatory criteria are not satisfied. The FDA has substantial discretion in the product approval process, and it is impossible to predict with any certainty whether and when the FDA will grant marketing approval. The FDA may on occasion require the sponsor of an NDA to conduct additional clinical studies or to provide other scientific or technical information about the product, and these additional requirements may lead to unanticipated delay or expense. Even if such data and information is submitted, the FDA may ultimately decide that the NDA does not satisfy the criteria for approval. Data obtained from clinical studies are not always conclusive, and the FDA may interpret data differently than we interpret the same data.

If a product receives regulatory approval, the approval may be significantly limited to specific diseases and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. Further, the FDA may require that certain contraindications,

warnings or precautions be included in the product labeling. In addition, the FDA may require Phase 4 testing which involves clinical studies designed to further assess a drug product's safety and effectiveness after NDA approval. The FDA also may impose a risk evaluation and mitigation strategy, or REMS, to ensure that the benefits of a product outweigh its risks. A REMS could add training requirements for healthcare professionals, safety communications efforts, and limits on channels of distribution, among other things. The sponsor would be required to evaluate and monitor the various REMS activities and adjust them if need be. Whether a REMS would be imposed on any of our products and any resulting financial impact is uncertain at this time.

Any drug products for which we receive FDA approvals are subject to continuing regulation by the FDA, including, among other things, record-keeping requirements, reporting of adverse experiences with the product, providing the FDA with updated safety and efficacy information, product sampling and distribution requirements, complying with certain electronic records and signature requirements, and complying with FDA promotion and advertising requirements. The FDA strictly regulates labeling, advertising, promotion, and other types of information on products that are placed on the market. Drugs may be promoted only for the approved indications and in accordance with the provisions of the approved label and promotional claims must be appropriately balanced with important safety information and otherwise be adequately substantiated. Further, manufacturers of drugs must continue to comply with cGMP requirements, which are extensive and require considerable time, resources, and ongoing investment to ensure compliance. In addition, changes to the manufacturing process generally require prior FDA approval before being implemented, and other types of changes to the approved product, such as adding new indications and additional labeling claims, are also subject to further FDA review and approval.

Drug product manufacturers and other entities involved in the manufacturing and distribution of approved drugs products are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain other agencies for compliance with cGMP and other laws. The cGMP requirements apply to all stages of the manufacturing process, including the production, processing, sterilization, packaging, labeling, storage and shipment of the drug product. Manufacturers must establish validated systems to ensure that products meet specifications and regulatory standards, and test each product batch or lot prior to its release. In addition, manufacturers of commercial PET products, including radiopharmacies, hospitals and academic medical centers, are required to submit either an NDA or Abbreviated New Drug Application, or ANDA, in order to produce PET drugs for clinical use, or produce the drugs under an IND.

The FDA also regulates the preclinical and clinical testing, design, manufacture, safety, efficacy, labeling, storage, record keeping, sales and distribution, postmarket adverse event reporting, import/export and advertising and promotion of any medical devices that we distribute pursuant to the FDCA and FDA's implementing regulations. The Federal Trade Commission shares jurisdiction with the FDA over the promotion and advertising of certain medical devices. The FDA can also impose restrictions on the sale, distribution or use of devices at the time of their clearance or approval, or subsequent to marketing. Currently, two medical devices, both of which are manufactured by third parties who hold the product clearances, comprise only a small portion of our total revenue.

The FDA may withdraw a pharmaceutical or medical device product approval if compliance with regulatory standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product may result in restrictions on the product or even complete withdrawal of the product from the market. Further, the failure to maintain compliance with regulatory requirements may result in administrative or judicial actions, such as fines, warning letters, holds on clinical studies, product recalls or seizures, product detention or refusal to permit the import or export of products, refusal to approve pending applications or supplements, restrictions on marketing or manufacturing, injunctions, or civil or criminal penalties.

Because our operations include nuclear pharmacies and related businesses, such as cyclotron facilities used to produce PET products used in diagnostic medical imaging, we are subject to regulation by the NRC or the departments of health of each state in which we operate and the applicable state boards of pharmacy. In addition, the FDA is also involved in the regulation of cyclotron facilities where PET products are produced and compliance with cGMP requirements and United States Pharmacopeia requirements for PET drug compounding.

Drug laws also are in effect in many of the non-U.S. markets in which we conduct business. These laws range from comprehensive drug approval requirements to requests for product data or certifications. In addition, inspection of and controls over manufacturing, as well as monitoring of adverse events, are components of most of these regulatory systems. Most of our business is subject to varying degrees of governmental regulation in the countries in which we operate, and the general trend is toward increasingly stringent regulation. The exercise of broad regulatory powers by the FDA continues to result in increases in the amount of testing and documentation required for approval or clearance of new drugs and devices, all of which add to the expense of product introduction. Similar trends also are evident in major non-U.S. markets, including Canada, the European Union, Australia and Japan.

To assess and facilitate compliance with applicable FDA, NRC and other state, federal and foreign regulatory requirements, we regularly review our quality systems to assess their effectiveness and identify areas for improvement. As part of our quality review, we perform assessments of our suppliers of the raw materials that are incorporated into products and conduct quality management reviews designed to inform management of key issues that may affect the quality of our products. From time to time, we may determine that products we manufactured or marketed do not meet our specifications, published standards, such as those issued by the International Standards Organization, or regulatory requirements. When a quality or regulatory issue is identified, we investigate the issue and take appropriate corrective action, such as withdrawal of the product from the market, correction of the product at the customer location, notice to the customer of revised labeling and other actions.

Drug Price Competition and Patent Term Restoration Act of 1984

The Drug Price Competition and Patent Term Restoration Act of 1984, known as the Hatch-Waxman Act, added two additional routes to approval of new drugs, in addition to the full NDA, known as the Section 505(b)(1) NDA. Specifically, the Hatch-Waxman Act permits the FDA to approve ANDAs for generic versions of drugs if the ANDA applicant demonstrates that its product is bioequivalent to the innovator product and provides relevant chemistry, manufacturing and product data. The Hatch Waxman Act also instituted a third type of drug application that requires the same information as a full NDA, including full reports of clinical and preclinical studies, except that some of the information from the reports required for marketing approval comes from studies which the applicant does not own or have a legal right of reference. This type of application, a Section 505(b)(2) NDA, permits a manufacturer to obtain marketing approval for a drug without needing to conduct or obtain a right of reference for all of the required studies. The Hatch-Waxman Act also provides for: (1) restoration of a portion of a product's patent term that was lost during clinical development and application review by the FDA; and (2) statutory protection, known as exclusivity, against the FDA's acceptance or approval of certain competitor applications.

Patent term extension can compensate for time lost during product development and the regulatory review process by returning up to five years of patent life for a patent that covers a new product or its use. This period is generally one-half the time between the effective date of an IND and the submission date of an NDA, plus the time between the submission date of an NDA and the approval of that application. Patent term extensions, however, are subject to a maximum extension of five years, and the patent term extension cannot extend the remaining term of a patent beyond a total

of 14 years. The application for patent term extension is subject to approval by the U.S. Patent and Trademark Office in conjunction with the FDA.

The Hatch-Waxman Act also provides for a period of statutory protection for new drugs that receive NDA approval from the FDA. If the FDA approves a Section 505(b)(1) NDA for a new drug that is a new chemical entity, meaning that the FDA has not previously approved any other new drug containing the same active moiety, then the Hatch-Waxman Act prohibits the submission or approval of an abbreviated application by a generic competitor or a Section 505(b)(2) NDA, for a period of five years from the date of approval of the NDA, except that in some cases the FDA may accept an application for review after four years. The Hatch-Waxman Act will not prevent the filing or approval of a full NDA, as opposed to an abbreviated application or Section 505(b)(2) NDA, for any drug, but the competitor would be required to conduct its own clinical trials, and any use of the drug for which marketing approval is sought could not violate another NDA holder's patent claims. If FDA approves an NDA for a new drug containing an active ingredient that was previously approved by the FDA, but the NDA is for a drug that includes new clinical data (other than bioavailability and bioequivalence studies) to support an innovation over the previously approved drug and such studies were conducted or sponsored by the applicant and were essential to approval of the application, then the Hatch-Waxman statutory exclusivity period is only three years from the date of the NDA approval that covers the innovation. This three year exclusivity period does not prohibit the FDA from accepting an application from a third party for that same innovation, but it does prohibit the FDA from approving such application for the three year period. The three year exclusivity does not prohibit the FDA, with limited exceptions, from approving generic drugs containing the same active ingredient but without the new innovation.

Healthcare Reform Act and Related Laws

The Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act, (collectively, the "Healthcare Reform Act") substantially changes the way in which healthcare is financed by both governmental and private insurers and has a significant impact on the pharmaceutical industry. The Healthcare Reform Act contains a number of provisions that affect coverage and reimbursement of drug products and the medical imaging procedures in which our drug products are used. Key provisions include the following:

- increasing the presumed utilization rate 50% to 75% for imaging equipment costing $1 million or more in the physician office and free-standing imaging facility setting for dates of service on or after January 1, 2011. Under the American Taxpayer Relief Act of 2012, or ATRA, the presumed utilization rate was further increased to 90%, effective January 1, 2014, which reduces the Medicare per procedure medical imaging reimbursement;

- increasing the minimum rebate percentage of the average manufacturer price for Medicaid rebates payable by manufacturers of brand-name drugs (such as us) from 15.1% to the higher of 23.1% of the average manufacturer price or the difference between the average manufacturer price and the best price;

- extending Medicaid rebates payable by manufacturers of brand-name drugs to drugs paid by Medicaid managed care organizations;

- expanding eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals and by adding new mandatory eligibility categories for certain individuals with income at or below 133% of the federal poverty level, thereby potentially increasing a manufacturer's Medicaid rebate liability;

- expanding access to commercial health insurance coverage through new state-based health insurance marketplaces, or exchanges;

- imposing a non-deductible annual fee on pharmaceutical manufacturers or importers who sell brand name prescription drugs to specified federal government programs; and

- imposing an annual excise tax on an entity that manufactures or imports medical devices offered for sale in the United States.

The Healthcare Reform Act also establishes an Independent Payment Advisory Board, or IPAB, to reduce the per capita rate of growth in Medicare spending. The IPAB is mandated to propose changes in Medicare payments if it is determined that the rate of growth of Medicare expenditures exceeds target growth rates or the projected percentage increase for the medical expenditures portion of the Consumer Price Index is greater than the projected percentage increase in the Consumer Price Index for all items. A proposal made by the IPAB must be implemented by CMS, unless Congress adopts a proposal that achieves the necessary savings. Although under the Healthcare Reform Act, the IPAB proposals may impact payments for physician and free-standing imaging services beginning in 2015 and for hospital services beginning in 2020, the threshold for triggering IPAB proposals was not reached for 2015 so no adjustments will be made under the IPAB in 2015.

The Healthcare Reform Act also amended the federal self-referral laws, requiring referring physicians to inform patients under certain circumstances that the patients may obtain services, including MRI, computed tomography, PET, and certain other diagnostic imaging services, from a provider other than that physician, his or her group practice, another physician in his or her group practice, or another individual under direct supervision of the physician or another physician in the group practice. The referring physician must provide each patient with a written list of other suppliers who furnish such services in the area in which the patient resides. These new requirements could have the effect of shifting where certain diagnostic medical imaging procedures are performed.

In addition, the Budget Control Act of 2011, as amended by the ATRA imposed across-the-board cuts ("sequestrations") to mandatory and discretionary spending. Medicare (but not Medicaid) reimbursement rates were reduced by 2% beginning in April 2013. As a result of the Bipartisan Budget Act of 2013, reductions now apply to Medicare reimbursement rates an additional two years through 2023. The ATRA also, among other things, further reduced Medicare payments to several providers, including hospitals and imaging centers.

The Healthcare Reform Act has been subject to political and judicial challenges. In 2012, the Supreme Court considered the constitutionality of certain provisions of the law. The Court upheld as constitutional the mandate for individuals to obtain health insurance, but held the provision allowing the federal government to withhold certain Medicaid funds to states that do not expand state Medicaid programs unconstitutional. Therefore, not all states have expanded their Medicaid programs under the Healthcare Reform Act. Political and judicial challenges to the law may continue in the wake of the Court's ruling.

Healthcare Fraud and Abuse Laws

We are subject to various federal, state and local laws targeting fraud and abuse in the healthcare industry, including anti-kickback and false claims laws. The Federal Anti-Kickback Statute prohibits persons from knowingly and willfully soliciting, offering, receiving or providing essentially anything of value, directly or indirectly, in order to generate business, including the purchase or prescription of a drug, that is reimbursable by federal healthcare programs such as Medicare or Medicaid. The scope of the Federal Anti-Kickback Statute is broad. Regulatory "safe harbors" protect certain arrangements within the scope of the statute that meet the specific requirements of the safe harbor. Arrangements outside of the safe harbor may be subject to scrutiny by government enforcement agencies and prosecuted if the arrangement is considered abusive. Moreover, recent healthcare reform legislation has strengthened these laws. For example, the Healthcare Reform Act, among other things, amended the intent requirement of the Federal Anti-Kickback and criminal healthcare fraud statutes that prohibit executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters. A person or entity no longer needs to have actual knowledge of these statutes or specific intent to violate them. In addition, the Healthcare Reform Act provides that the government may assert that a claim including items or services resulting from a violation of the Federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act. Many states have

adopted laws similar to the Federal Anti-Kickback Statute. The scope of these state prohibitions vary and may prohibit proposed or actual financial interactions involving business reimbursed under private health insurance as well as under government healthcare programs. At the federal and state level, there may not be regulations, guidance or court decisions that apply the laws to specific industry practices. There is therefore a possibility that our practices might be challenged under the anti-kickback laws.

Federal and state false claims laws generally prohibit anyone from knowingly and willingly submitting, or causing the submission of, false or fraudulent claims for payment to third party payors (including Medicare and Medicaid). The Federal Civil False Claims Act, or False Claims Act, applies to false claims involving federal healthcare programs and permits a private individual acting as a "whistleblower" to bring actions on behalf of the federal government alleging violations of the False Claims Act and to share in any monetary recovery. State false claims acts may apply where a claim is submitted to any third party payor (whether private health insurance or a government healthcare program). Government enforcement agencies and private whistleblowers have asserted liability under false claims acts for claims submitted involving improper promotion of off-label uses (i.e., uses not expressly approved by the FDA in a drug's label), mis-reporting of drug prices to federal agencies, medically unnecessary services or misrepresentations of services rendered. The Healthcare Reform Act revised the False Claims Act to provide that a claim arising from a violation of the Federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act. Our future activities may be subject to scrutiny under these laws, including activities related to the reporting of discount and rebate information and other information affecting federal, state and private third-party reimbursement of our products and to the sale and marketing of our products.

Laws and regulations have been enacted by the federal government and various states to regulate the sales and marketing practices of pharmaceutical manufacturers. The laws and regulations generally limit financial interactions between manufacturers and healthcare providers or require disclosure to the government and public of such interactions. The laws include federal "sunshine" provisions enacted in 2010 as part of the Healthcare Reform Act. The federal sunshine provisions apply to certain manufacturers, such as us, with prescription drug, biologic or medical device products reimbursed under Medicare, Medicaid, and the Children's Health Insurance Program. Manufacturers subject to the provisions must disclose annually to CMS (for re-disclosure to the public) certain payments or transfers of value made to teaching hospitals, physicians and their immediate family members, and ownership and investment held by physicians and their immediate family members. Manufacturers must report data for the period from August to December 2013 in the first half of 2014, and CMS will then release the data later in the year. Separately, the Healthcare Reform Act requires manufacturers to submit information on the identity and quantity of drug samples requested and distributed during each year. The first report (for 2011) was to be submitted by April 1, 2012. The FDA indicated its intent to exercise enforcement discretion through October 1, 2012, and stated that the agency would issue notice to industry prior to beginning enforcement of this section. At this time, no such notice has been issued, and the FDA anticipates issuing additional guidance to the industry in calendar year 2014. State laws may also require disclosure of pharmaceutical pricing information and marketing expenditures. Many of these laws and regulations contain ambiguous requirements. Given the lack of clarity in laws and their implementation, our reporting actions could be subject to the penalty provisions of the pertinent federal and state laws and regulations.

Federal and state authorities are paying increased attention to enforcement of fraud and abuse laws within the pharmaceutical industry and private individuals have been active in alleging violations of the laws and bringing suits on behalf of the government under the False Claims Act. We are unable to predict whether we would be subject to actions under fraud and abuse laws or the impact of such actions. If we were subject to allegations concerning, or were convicted of violating, these laws, our business could be harmed. Violations of federal and state laws related to fraud and abuse are punishable by criminal or civil sanctions, including substantial fines, imprisonment and exclusion from

participation in healthcare programs such as Medicare and Medicaid. Even the costs of defending such claims could adversely affect our financial performance. Violations of international fraud and abuse laws could result in similar penalties, including exclusion from participation in health programs outside the United States.

Other Healthcare Laws

Our operations may be affected by the Health Insurance Portability and Accountability Act of 1996, or HIPAA, and its implementing regulations, which established standards for certain "covered entities" (healthcare providers, health plans and healthcare clearinghouses) governing the conduct of certain electronic healthcare transactions and protecting the security and privacy of protected health information. The Health Information Technology for Economic and Clinical Health Act, or HITECH, enacted in 2009, expands HIPAA's privacy and security standards. HITECH became effective on February 17, 2010, and implementing regulations generally became effective in September 2013. Among other things, HITECH makes certain HIPAA privacy and security standards directly applicable to "business associates", independent contractors of covered entities that receive or obtain protected health information in connection with providing a service on behalf of covered entities. HITECH also increased the civil and criminal penalties that may be imposed and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney fees and costs associated with pursuing federal civil actions. Although we believe that we are neither a "covered entity" nor a "business associate" under the legislation, a business associate relationship may be imputed from facts and circumstances even in the absence of an actual business associate agreement. In addition, HIPAA and HITECH may affect our interactions with customers who are covered entities or their business associates.

Laws Relating to Foreign Trade

We are subject to various federal and foreign laws that govern our international business practices with respect to payments to government officials. Those laws include the U.S. Foreign Corrupt Practices Act, or FCPA, which prohibits U.S. companies and their representatives from paying, offering to pay, promising, or authorizing the payment of anything of value to any foreign government official, government staff member, political party, or political candidate for the purpose of obtaining or retaining business or to otherwise obtain favorable treatment or influence a person working in an official capacity. In many countries, the healthcare professionals we regularly interact with may meet the FCPA's definition of a foreign government official. The FCPA also requires public companies to make and keep books and records that accurately and fairly reflect their transactions and to devise and maintain an adequate system of internal accounting controls.

Those laws also include the U.K. Bribery Act of 2010, or Bribery Act, which proscribes giving and receiving bribes in the public and private sectors, bribing a foreign public official, and failing to have adequate procedures to prevent employees and other agents from giving bribes. U.S. companies that conduct business in the United Kingdom generally will be subject to the Bribery Act. Penalties under the Bribery Act include potentially unlimited fines for companies and criminal sanctions for corporate officers under certain circumstances.

Our policies mandate compliance with these anti-bribery laws. Our operations reach many parts of the world that have experienced governmental corruption to some degree, and in certain circumstances strict compliance with anti-bribery laws may conflict with local customs and practices. Despite our training and compliance programs, our internal control policies and procedures may not always protect us from reckless or criminal acts committed by our employees or agents.

Health and Safety Laws

We are also subject to various federal, state and local laws, regulations and recommendations, both in the United States and abroad, relating to safe working conditions, laboratory and manufacturing practices and the use, transportation and disposal of hazardous or potentially hazardous substances.

Environmental Matters

We are subject to various federal, state and local laws and regulations relating to the protection of the environment, human health and safety in the United States and in other jurisdictions in which we operate. Our operations, like those of other medical product companies, involve the transport, use, handling, storage, exposure to and disposal of materials and wastes regulated under environmental laws, including hazardous and radioactive materials and wastes. We cannot assure you that we have been or will be in compliance with environmental and health and safety laws at all times. If we violate these laws and regulations, we could be fined, criminally charged or otherwise sanctioned by regulators. We believe that our operations currently comply in all material respects with applicable environmental laws and regulations.

Certain environmental laws and regulations assess liability on current or previous owners or operators of real property for the cost of investigation, removal or remediation of hazardous materials or wastes at such formerly owned or operated properties or at third-party properties at which they have disposed of hazardous materials or wastes. In addition to cleanup actions brought by governmental authorities, private parties could bring personal injury, property damage or other claims due to the presence of, or exposure to, hazardous materials or wastes. We currently are not party to any claims or any obligations to investigate or remediate contamination at any of our facilities.

We are required to maintain a number of environmental permits and nuclear licenses for our North Billerica facility, which is our primary manufacturing, packaging and distribution facility. In particular, we must maintain a nuclear byproducts materials license issued by the Commonwealth of Massachusetts. This license requires that we provide financial assurance demonstrating our ability to cover the cost of decommissioning and decontaminating, or D&D, the Billerica site at the end of its use as a nuclear facility. We currently estimate the D&D cost at the Billerica site to be approximately $24.3 million. As of December 31, 2013 and 2012, we have a liability recorded associated with the fair value of the asset retirement obligations of approximately $6.4 million and $5.4 million, respectively. We have recorded accretion expense of $0.6 million, $0.6 million and $0.5 million during the years ended December 31, 2013, 2012 and 2011, respectively. We currently provide this financial assurance in the form of surety bonds. We generally contract with third parties for the disposal of wastes generated by our operations. Prior to disposal, we store any low level radioactive waste at our facilities until the materials are no longer considered radioactive, as allowed by our licenses and permits.

Environmental laws and regulations are complex, change frequently and have become more stringent over time. While we have budgeted for future capital and operating expenditures to maintain compliance with these laws and regulations, we cannot assure you that our costs of complying with current or future environmental protection, health and safety laws and regulations will not exceed our estimates or adversely affect our results of operations and financial condition. Further, we cannot assure you that we will not be subject to additional environmental claims for personal injury or cleanup in the future based on our past, present or future business activities. While it is not feasible to predict the future costs of ongoing environmental compliance, it is reasonably probable that there will be a need for future provisions for environmental costs that, in management's opinion, are not likely to have a material effect on our financial condition, but could be material to the results of operations in any one accounting period.

Employees

As of December 31, 2013, we had 519 employees, of which 396 were located in the United States and 123 were locatedinternationally, and approximately 82 contractors. None of our employees are represented by a collective bargaining unit, and we believe that our relationship with our employees is good.

In 2013, we initiated a reduction in the number of our employees and contractors in connection with the strategic shift in our R&D program.

Corporate History

Founded in 1956 as New England Nuclear Corporation, we were purchased by E. I. du Pont de Nemours and Company in 1981. Bristol-Myers Squibb Company, or BMS, subsequently acquired the diagnostic medical imaging business as part of its acquisition of DuPont Pharmaceuticals in 2001. Avista Capital Partners, L.P. and its affiliates, or collectively, Avista, acquired the medical imaging business from BMS in January 2008.

Our Sponsor

Avista is a leading private equity firm with over $5 billion under management and offices in New York, NY, Houston, TX and London, UK. Founded in 2005 as a spin-out from the former DLJ Merchant Banking Partners, or DLJMB, franchise, Avista makes controlling or influential minority investments primarily in growth-oriented energy, healthcare, communications & media, industrial and consumer businesses. Through its team of seasoned investment professionals and industry experts, Avista seeks to partner with exceptional management teams to invest in and add value to well-positioned businesses.

Item 1A. Risk Factors

You should carefully consider the following risks. These risks could materially affect our business, results of operations or financial condition, cause the trading price of our outstanding notes to decline materially or cause our actual results to differ materially from those expected or those expressed in any forward-looking statements made by us or on our behalf. See "Cautionary Note Regarding Forward-Looking Statements" and the risks of our businesses described elsewhere in this annual report.

Our dependence upon third parties for the manufacture and supply of a substantial portion of our products could prevent us from delivering our products to our customers in the required quantities, within the required timeframes, or at all, which could result in order cancellations and decreased revenues.

We obtain a substantial portion of our products from third party suppliers. Historically, we relied on BVL as our sole manufacturer of DEFINITY and Neurolite and one of two manufacturers of our Cardiolite product supply. Following extended operational and regulatory challenges at its Bedford, Ohio facility, BVL ceased manufacturing any DEFINITY, Cardiolite or Neurolite for us as of November 15, 2013. BVL has subsequently released for commercial distribution all of our remaining manufactured product that was awaiting their quality approval in November 2013.

Following extensive technology transfer activities, we currently rely on JHS as our sole source manufacturer of DEFINITY. We have additional ongoing technology transfer activities at JHS for our Neurolite and Cardiolite product supply, but we can give no assurances as to when that technology transfer will be completed and when we will actually receive supply of Neurolite and Cardiolite products from JHS. In the meantime, we have no other currently active supplier of Neurolite, and our Cardiolite product supply is currently manufactured by a single manufacturer. In addition, Mallinckrodt is our sole manufacturer for Ablavar.

Based on our current projections, we believe that we will have sufficient supply of DEFINITY from JHS and remaining BVL inventory to meet expected demand, sufficient Cardiolite product supply from our current supplier to meet expected demand, and sufficient Ablavar product supply to meet expected demand. We also currently anticipate that we will have sufficient BVL-manufactured Neurolite supply for the U.S. market to last until Neurolite technology transfer and U.S. regulatory approval at JHS are completed. However, we can give no assurances that JHS or our other manufacturing partners will be able to manufacture and distribute our products in a high quality and timely manner and in sufficient quantities to allow us to avoid product stock-outs and shortfalls. Currently, the regulatory authorities in certain countries prohibit us from marketing products previously manufactured by BVL, and JHS has not yet obtained approval of such regulatory authorities that would permit us to market products manufactured by JHS. Accordingly, until such regulatory approvals have been obtained, our international business, results of operations, financial condition, and cash flows will continue to be adversely affected.

Our manufacturing agreement for Ablavar runs until 2014, although we do not foresee the need to order any additional API or finished drug product under this agreement other than our outstanding purchase commitment. We do not have any current plans to initiate technology transfer activities for Ablavar. If we do not engage in Ablavar technology transfer activities in the future and secure a new manufacturing partner for Ablavar, then our existing Ablavar inventory will expire in 2016 and we will have no further Ablavar inventory that we will be able to sell.

In addition to the products described above, for reasons of quality assurance or cost effectiveness, we purchase certain components and raw materials from sole suppliers (including, for example, the lead casing for our TechneLite generators). Because we do not control the actual production of many of the products we sell, we may be subject to delays caused by interruption in production based on conditions outside of our control. At our North Billerica, Massachusetts facility, we manufacture TechneLite on a relatively new, highly automated production line, as well as Thallium and Gallium using our older cyclotron technology. If we or one of our manufacturing partners experiences an event, including a labor dispute, natural disaster, fire, power outage, security problem, failure to meet regulatory requirements, product quality issue, technology transfer issue or other issue, we may be unable to manufacture the relevant products at previous levels or on the forecasted schedule, if at all. Due to the stringent regulations and requirements of the governing regulatory authorities regarding the manufacture of our products, we may not be able to quickly restart manufacturing at a third party or our own facility or establish additional or replacement sources for certain products, components or materials.

In addition to our existing manufacturing relationships, we are also pursuing new manufacturing relationships to establish and secure additional or alternative suppliers for our commercial products. For example, on November 12, 2013, we entered into a Manufacturing and Supply Agreement with Pharmalucence to manufacture and supply DEFINITY. We cannot assure you, however, that these supply diversification activities, will be successful, or that before such alternate manufacturers or sources of product are fully functional and qualified that we will be able to avoid or mitigate interim supply shortages. In addition, we cannot assure you that our existing suppliers or any new suppliers can adequately maintain either their financial health or regulatory compliance to allow continued production and supply. A reduction or interruption in manufacturing, or an inability to secure alternative sources of raw materials or components, could eventually have a material adverse effect on our business, results of operations, financial condition and cash flows.

Challenges with product quality or product performance, including defects, caused by us or our suppliers could result in a decrease in customers and sales, unexpected expenses and loss of market share.

The manufacture of our products is highly exacting and complex and must meet stringent quality requirements, due in part to strict regulatory requirements, including the FDA's cGMPs. Problems may

be identified or arise during manufacturing quality review, packaging or shipment for a variety of reasons, including equipment malfunction, failure to follow specific protocols and procedures, defective raw materials and environmental factors. Additionally, manufacturing flaws, component failures, design defects, off-label uses or inadequate disclosure of product-related information could result in an unsafe condition or the injury or death of a patient. Such events could lead to a recall of, or issuance of a safety alert relating to, our products. We also may undertake voluntarily to recall products or temporarily shutdown production lines based on internal safety and quality monitoring and testing data.

Quality, regulatory and recall challenges could cause us to incur significant costs, including costs to replace products, lost revenue, damage to customer relationships, time and expense spent investigating the cause and costs of any possible settlements or judgments related thereto and potentially cause similar losses with respect to other products. Such challenges could also divert the attention of our management and employees from operational, commercial or other business efforts. If we deliver products with defects, or if there is a perception that our products or the processes related thereto contain errors or defects, we could incur additional recall and product liability costs, and our credibility and the market acceptance and sales of our products could be materially adversely affected. Due to the strong name recognition of our brands, an adverse event involving one of our products could result in reduced market acceptance and demand for all products within that brand, and could harm our reputation and our ability to market our products in the future. In some circumstances, adverse events arising from or associated with the design, manufacture or marketing of our products could result in the suspension or delay of regulatory reviews of our applications for new product approvals. Such challenges could have a material adverse effect on our business, results of operations, financial condition and cash flows.

The global supply of Moly is fragile and not stable. Our dependence on a limited number of third-party suppliers for Moly could prevent us from delivering some of our products to our customers in the required quantities, within the required timeframe, or at all, which could result in order cancellations and decreased revenues.

A critical ingredient of TechneLite, historically our largest product by annual revenues, is Moly. We currently purchase finished Moly from four of the five main processing sites in the world, namely Nordion in Canada, NTP in South Africa, IRE in Belgium, and ANSTO in Australia. These processing sites are, in turn, supplied by seven of the eight main Moly-producing reactors in the world, namely, NRU in Canada, SAFARI in South Africa, OPAL in Australia, BR2 in Belgium, OSIRIS in France, LVR-10 in the Czech Republic, and HFR in The Netherlands. Historically, our largest supplier of Moly has been Nordion which has relied on the NRU reactor owned and operated by Atomic Energy of Canada Limited, or AECL, a Crown corporation of the Goverment of Canada, located in Chalk River, Ontario. This reactor was off-line from May 2009 until August 2010 due to a heavy water leak in the reactor vessel. The inability of the NRU reactor to produce Moly and Nordion to finish Moly during the shutdown period had a detrimental effect on our business, results of operations and cash flows. As a result of the NRU reactor shutdown, we experienced business interruption losses. We estimate the quantity of such losses to be, in the aggregate, more than $70 million, including increases in the cost of obtaining limited amounts of Moly from alternate, more distant, suppliers, and substantial decreases in revenue as a result of significantly curtailed manufacturing of TechneLite generators and our decreased ability to sell other Moly-based medical imaging products, including Cardiolite, in comparison to our forecasted results. The Government of Canada has stated publicly its intent to exit the isotope business when the NRU reactor's current license expires in October 2016.

As part of the conditions for the relicensing of the NRU reactor through October 2016, the Canadian government has asked AECL to shut down the reactor for at least four weeks at least once a year for inspection and maintenance. The next shutdown period is currently scheduled to run from mid-April 2014 until mid-May 2014. We currently believe that we will be able to source all of our

standing-order customer demand for Moly during this time period from our other suppliers. However, because Xenon is a by-product of the Moly production process and is currently captured only by NRU, during this shutdown period, we do not currently believe that we will be able to supply all of our standing-order customer demand for Xenon. There can be no assurance that such off-line periods will last for the stated time or that the NRU will not experience other unscheduled shutdowns in the future. Further prolonged scheduled or unscheduled shutdowns would limit the amount of Moly and Xenon available to us and limit the quantity of TechneLite that we could manufacture, distribute and sell and the amount of Xenon that we could distribute and sell, resulting in a further substantial negative effect on our business, results of operations, financial condition and cash flows.

In the face of the NRU reactor operating challenges and licensure risks, we entered into Moly supply agreements with NTP, ANSTO and IRE to augment our supply of Moly. While we believe this additional Moly supply now gives us the most balanced and diversified Moly supply chain in the industry, a prolonged disruption of service from one of our significant Moly suppliers could have a material adverse effect on our business, results of operations, financial condition and cash flows. We are also pursuing additional sources of Moly from potential new producers around the world to further augment our current supply, but we cannot assure you that these possible additional sources of Moly will result in commercial quantities of Moly for our business, or that these new suppliers together with our current suppliers will be able to deliver a sufficient quantity of Moly to meet our needs.

Although our agreements with NTP, ANSTO and IRE run until December 31, 2017, our agreement with Nordion runs only until December 31, 2015 and can be terminated by Nordion upon the occurrence of certain events, including if we fail to purchase a minimum percentage of Moly or Nordion incurs certain cost increases, and in the latter case, as soon as October 1, 2014.

U.S., Canadian and international governments have encouraged the development of a number of alternative Moly production projects with existing reactors and technologies as well as new technologies. However, the Moly produced from these projects will likely not become available until 2016 or later. As a result, there is a limited amount of Moly available which could limit the quantity of TechneLite that we could manufacture, distribute and sell, resulting in a further substantial negative effect on our business, results of operations, financial condition and cash flows.

The instability of the global supply of Moly and recent supply shortages have resulted in increases in the cost of Moly, which has negatively affected our margins, and more restrictive agreements with suppliers, which could further increase our costs.

With the general instability in the global supply of Moly and supply shortages during 2009 and 2010, we have faced substantial increases in the cost of Moly in comparison to historical costs. We are generally able to pass these Moly cost increases on to our customers in our customer contracts. If we are not able to do so in the future, our margins may decline further with respect to our TechneLite generators, which could have a material adverse effect on our business, results of operations, financial condition and cash flows.

The Moly supply shortage caused by the NRU reactor shutdown has had a negative effect on the demand for some of our products, which will likely continue in the future.

The Moly supply shortage also had a negative effect on the use of other technetium generator-based diagnostic medical imaging agents, including Cardiolite products. With less Moly, we manufactured fewer generators for radiopharmacies and hospitals to make up unit doses of Cardiolite products, resulting in decreased market share of Cardiolite products in favor of Thallium, an older medical isotope that does not require Moly, and other diagnostic modalities. With the return to service of the NRU reactor, we have seen increased sales of TechneLite. However, TechneLite unit volume has not returned to pre-shortage levels for, we believe, a number of reasons, including: (i) changing staffing

and utilization practices in radiopharmacies, which have resulted in an increased number of unit-doses of technetium-based radiopharmaceuticals being made from available amounts of technetium; (ii) shifts to alternative diagnostic imaging modalities during the Moly supply shortage, which have not returned to technetium-based procedures; and (iii) decreased amounts of technetium being used in unit-doses of technetium-based radiopharmaceuticals due to growing concerns about patient radiation dose exposure. We do not know if the staffing and utilization practices in radiopharmacies, the mix between technetium and non-technetium-based diagnostic procedures and the increased concerns about radiation exposure will allow technetium demand to ever return to pre-shortage levels, which could have a material adverse effect on our business, results of operations, financial condition and cash flows.

Our just-in-time manufacturing of radiopharmaceutical products relies on the timely receipt of radioactive raw materials and the timely shipment of finished goods, and any disruption of our supply or distribution networks could have a negative effect on our business.

Because a number of our radiopharmaceutical products, including our TechneLite generators, rely on radioisotopes with limited half-lives, we must manufacture, finish and distribute these products on a just-in-time basis because the underlying radioisotope is in a constant state of radio decay. For example, if we receive Moly in the morning of a manufacturing day for TechneLite generators, we will generally ship finished generators to customers by the end of the business day. Shipment of generators may be by next day delivery services or by either ground or air custom logistics. Any delay in us receiving radioisotopes from suppliers or being able to have finished products delivered to customers because of weather or other unforeseen transportation issues could have a negative effect on our business, results of operations, financial condition and cash flows.

The growth of our business is substantially dependent on increased market penetration for the appropriate use of DEFINITY in suboptimal echocardiograms.

The growth of our business is substantially dependent on increased market penetration for the appropriate use of DEFINITY in suboptimal echocardiograms. Of the nearly 28 million echocardiograms performed each year in the United States, it is estimated that 20%, or approximately six million echocardiograms, produce suboptimal images. Based on our estimates, we believe that DEFINITY is used in approximately 2.5% of all echocardiograms, or approximately 12% of all suboptimal echocardiograms. If we are not able to continue to grow DEFINITY sales through increased market penetration, we will not be able to grow the revenue and cash flow of the business or continue to fund our other growth initiatives at planned levels, which could have a negative effect on our prospects.

We face both potential supply and demand challenges for Xenon.

Currently, Nordion is our sole supplier, and we believe the sole supplier on a global basis, of Xenon, which is captured by the NRU reactor as a by-product of the Moly production process. If we are not able to secure a new producer of Xenon prior to the expiration of the NRU reactor's license in October 2016 and obtain regulatory approval to sell Xenon from that new producer, we will no longer be able to offer Xenon in our portfolio of commercial products, which would have a negative effect on our business, results of operations, financial condition and cash flows. For the year ended December 31, 2013, Xenon represented approximately 11% of our total revenues.

Currently, we are the only provider of packaged Xenon in the countries for which we have received regulatory approval to sell Xenon. If one or more other providers obtained regulatory approval and began to sell packaged Xenon in one or more of those countries without otherwise increasing market penetration for the agent, or if there is an increase in the use of other imaging modalities in place of using packaged Xenon, our current sales volumes would decrease, which could have a negative effect on our business, results of operations, financial condition and cash flows.

Xenon is frequently administered as part of a ventilation scan to evaluate pulmonary function prior to a perfusion scan with microaggregated albumin, or MAA, a technetium-based radiopharmaceutical used to evaluate blood flow to the lungs. Currently, Draxis is the sole supplier of MAA on a global basis. Recently, Draxis announced substantial price increases for MAA. If the increased price of MAA decreases the frequency that MAA is used for lung perfusion evaluation, which, in turn, decreases the frequency that Xenon is used for pulmonary function evaluation, the MAA price increase would have a negative effect on our business, results of operations, financial condition and cash flows.

In the United States, we are heavily dependent on a few large customers to generate a majority of our revenues for our nuclear imaging products. Outside of the United States, we rely on distributors to generate a substantial portion of our revenue.

In the United States, we rely on a limited number of radiopharmacy customers, primarily Cardinal, GE Healthcare and UPPI, to distribute our current largest volume nuclear imaging products and generate a majority of our revenues. These three customers accounted for approximately 39% of our total revenues in the fiscal year ended December 31, 2013, with Cardinal, GE Healthcare, and UPPI accounting for 19%, 10% and 10%, respectively. Among the existing radiopharmacies in the United States, continued consolidations, divestitures and reorganizations may have a negative effect on our business, results of operations, financial condition or cash flows. We generally have distribution arrangements with our major radiopharmacy customers pursuant to multi-year contracts, each of which is subject to renewal. Our current contract with Cardinal expires in December 2014. If these contracts are not in force through the balance of their term or are not renewed, or are renewed on terms that are less favorable to us, it could have a material adverse effect on our business, results of operations, financial condition and cash flows.

Outside of the United States, Canada, Australia and Puerto Rico, we have no radiopharmacies or sales force and therefore rely on third-party distributors, either on a country-by-country basis or on a multi-country, regional basis, to market, distribute and sell our products. These distributors accounted for approximately 13%, 16% and 19% of total non-U.S. revenues for the fiscal years ended December 31, 2013, 2012 and 2011, respectively. In certain circumstances, these distributors may also sell competing products to our own or products for competing diagnostic modalities. As a result, we cannot assure you that our international distributors will increase or maintain our current levels of unit sales or increase or maintain our current unit pricing, which, in turn, could have a material adverse effect on our business, results of operations, financial condition and cash flows.

We face significant competition in our business and may not be able to compete effectively.

The market for diagnostic medical imaging agents is highly competitive and continually evolving. Our principal competitors in existing diagnostic modalities include large, global companies with substantial financial, manufacturing, sales and marketing, and logistics resources that are more diversified than us, such as Mallinckrodt, GE Healthcare, Bayer, Bracco and Draxis, as well as other competitors. We cannot anticipate their competitive actions, such as price reductions on products that are comparable to our own, development or introduction of new products that are more cost-effective or have superior performance than our current products, the introduction of generic versions when our proprietary products lose their patent protection or the new entry into a generic market in which we are already a participant. Our current or future products could be rendered obsolete or uneconomical as a result of this competition. Our failure to compete effectively could cause us to lose market share to our competitors and have a material adverse effect on our business, results of operations, financial condition and cash flows.

For example, Bracco may be seeking FDA approval in the United States for its echocardiography agent, SonoVue, which is already approved for sale in Europe and certain Asian markets, including Japan and Korea. If Bracco receives U.S. regulatory approval, Bracco will have one of three FDA-approved echocardiography contrast agents in the United States, together with GE Healthcare's Optison and DEFINITY. If Bracco receives U.S. regulatory approval and successfully commercializes SonoVue in the United States without otherwise increasing the overall usage of ultrasound contrast agents, our current and future sales volume could suffer, which would have a material adverse effect on our business, results of operations, financial condition and cash flows.

Generic competition has significantly eroded our market share of the MPI segment for Cardiolite products and will likely continue to do so.

We are currently aware of four separate third-party generic offerings of sestamibi, the first of which launched in September 2008. Cardiolite products accounted for approximately 9%, 12% and 19% of our total revenues in the fiscal years ended December 31, 2013, 2012, and 2011, respectively. Included in Cardiolite is branded Cardiolite and generic sestamibi, some of which we produce and some of which we procure from third parties. With the advent of generic competition in September 2008, we have faced significant pricing and unit volume pressures on Cardiolite. To the extent generic competitors further reduce their prices, we may be forced to further reduce the price of our Cardiolite products as well as lose additional market share, which would have an adverse effect on our business, results of operations, financial condition and cash flows. See "Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations." In addition, because several of the products we manufacture became less available due to recent supply challenges, certain of our customers may have begun to favor a generic offering or a competing agent or diagnostic modality. If we experience continued pricing and unit volume pressures or such product or modality shift is sustained, it could have a material adverse effect on our business, results of operation, financial condition and cash flows.

Certain of our customers are highly dependent on payments from third-party payors, including government sponsored programs, particularly Medicare, in the United States and other countries in which we operate, and reductions in third-party coverage and reimbursement rates for our products could adversely affect our business and results of operations.

A substantial portion of our revenue depends, in part, on the extent to which the costs of our products purchased by our customers are reimbursed by third-party private and governmental payors, including Medicare, Medicaid, other U.S. government sponsored programs, non-U.S. governmental payors and private payors. These third-party payors exercise significant control over patient access and increasingly use their enhanced bargaining power to secure discounted rates and other requirements that may reduce demand for our products. Our potential customers' ability to obtain appropriate reimbursement for products and services from these third-party payors affects the selection of products they purchase and the prices they are willing to pay. If these third-party payors do not provide appropriate reimbursement for the costs of our products (or services provided using our products), deny the coverage of the products (or those services), or reduce current levels of reimbursement, healthcare professionals may not prescribe our products and providers and suppliers may not purchase our products. In addition, demand for new products may be limited unless we obtain favorable reimbursement policies (including coverage, coding and payment) from governmental and private third-party payors at the time of the product's introduction. Third-party payors continually review their coverage policies for existing and new therapies and can deny coverage for treatments that include the use of our products or revise payment policies such that payments do not adequately cover the cost of our products. Even if third-party payors make coverage and reimbursement available, such reimbursement may not be adequate or these payors' reimbursement policies may have an adverse effect on our business, results of operations, financial condition and cash flows.

Over the past several years, Medicare has implemented numerous changes to payment policies for imaging procedures in both the hospital setting and non-hospital settings (which include physician offices and freestanding imaging facilities). Some of these changes have had a negative impact on utilization of imaging services. Examples of these changes include:

- limiting payments for imaging services in physician offices and free-standing imaging facility settings based upon rates paid to hospital outpatient departments;
- reducing payments for certain imaging procedures when performed together with other imaging procedures in the same family of procedures on the same patient on the same day in the physician office and free-standing imaging facility setting;
- making significant revisions to the methodology for determining the practice expense component of the Medicare payment applicable to the physician office and free-standing imaging facility setting which results in a reduction in payment; and
- revising payment policies and reducing payment amounts for imaging procedures performed in the hospital outpatient setting.

For example, in 2013, although Medicare generally does not provide separate payment to hospitals for the use of diagnostic radiopharmaceuticals administered in an outpatient setting, CMS finalized a policy to make an additional payment to hospitals that utilize products with non-HEU, meaning the product is 95% derived from non-HEU sources. This payment policy continues in 2014. Although some of our TechneLite generators are manufactured using non-HEU, not all of our TechneLite generators meet CMS's definition of non-HEU, and therefore this payment will not be available for the latter category of TechneLite generators used by our customers. This payment as well as other changes to the Medicare Hospital Outpatient Prospective Payment System payment rates could influence the decisions by hospital outpatient physicians to perform procedures that involve our products.

We believe that Medicare changes to payment policies for imaging procedures will continue to result in certain physicians practices ceasing to provide these services and a further shifting of where certain medical imaging procedures are performed from the physician office and free-standing imaging facility settings to the hospital outpatient setting, which we believe may incrementally reduce the overall number of diagnostic medical imaging procedures performed. Changes applicable to Medicare payment in the hospital outpatient setting could influence the decisions by hospital outpatient physicians to perform procedures that involve our products. These changes overall could slow the acceptance and introduction of next-generation imaging equipment into the marketplace, which, in turn, could adversely impact the future market adoption of certain of our imaging agents already in the market or currently in clinical or preclinical development. We expect that there will continue to be proposals to reduce or limit Medicare and Medicaid payment for diagnostic services. More generally, to the extent that any changes have the effect of reducing the aggregate number of diagnostic medical imaging procedures performed in the United States, our business, results of operations, financial condition and cash flows would be adversely affected. See "Item 1—Business—Regulatory Matters.

Reforms to the United States healthcare system may adversely affect our business.

A significant portion of our patient volume is derived from U.S. government healthcare programs, principally Medicare, which are highly regulated and subject to frequent and substantial changes. For example, in March 2010, the President signed one of the most significant healthcare reform measures in decades, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or, collectively, the Healthcare Reform Act. The Healthcare Reform Act contains a number of provisions that affect coverage and reimbursement of drug products and medical imaging procedures in which our drug products are used. See "Item 1—Business—Regulatory Matters—Healthcare Reform Act and Related Laws." We cannot assure you that the Healthcare

Reform Act, as currently enacted or as amended in the future, will not adversely affect our business and financial results, and we cannot predict how future federal or state legislative or administrative changes relating to healthcare reform will affect our business.

In addition, other legislative changes have been proposed and adopted since the Healthcare Reform Act was enacted. The Budget Control Act of 2011 includes provisions to reduce the federal deficit. The Budget Control Act, as amended, resulted in the imposition of 2% reductions in Medicare payments to providers, which went into effect on April 1, 2013. Recent legislation extends reductions for an additional two years, through 2023. Any significant spending reductions affecting Medicare, Medicaid or other publicly funded or subsidized health programs that may be implemented, and/or any significant taxes or fees that may be imposed on us, as part of any broader deficit-reduction effort or legislative replacement to the Budget Control Act, could have an adverse impact on our results of operations.

In addition, federal spending is also subject to a statutory debt ceiling. If the federal debt reaches the statutory debt ceiling, Congress must enact legislation to suspend enforcement of, or increase, the statutory debt ceiling. If Congress fails to do so and, as a result, is unable to satisfy its financial obligations, including under Medicare, Medicaid and other publicly funded or subsidized health programs, our results of operations could be adversely impacted.

The full impact on our business of the Healthcare Reform Act and the other new laws is uncertain. Nor is it clear whether other legislative changes will be adopted or how such changes would affect our industry generally or our ability to successfully commercialize our products or the development of new products.

The Healthcare Reform Act could potentially reduce the number of diagnostic medical imaging procedures performed or could reduce the amount of reimbursements paid for such procedures.

The implementation of the Healthcare Reform Act could potentially reduce the aggregate number of diagnostic medical imaging procedures performed in the United States. Under the Healthcare Reform Act, referring physicians under the federal self-referral law must inform patients that they may obtain certain services, including MRI, computed tomography, PET, and certain other diagnostic imaging services from a provider other than that physician, another physician in his or her group practice, or another individual under the direct supervision of the physician or another physician in the group practice. The referring physician must provide each patient with a written list of other suppliers who furnish such services in the area in which the patient resides. These new requirements could have the effect of shifting where certain diagnostic medical imaging procedures are performed. In addition, they could potentially reduce the overall number of diagnostic medical imaging procedures performed. We cannot predict the full impact of the Healthcare Reform Act on our business. The reform law substantially changed the way healthcare is financed by both governmental and private insurers. Although certain provisions may negatively affect payment rates for certain imaging services, the Healthcare Reform Act also extended coverage to approximately 25 million previously uninsured people (based on May 2013 estimates from the Congressional Budget Office), which may result in an increase in the demand for our services, but we cannot be assured of a proportional, or any, increase in the use of our products.

Further, we expect that there will continue to be proposals to reduce or limit Medicare and Medicaid payment for services. Rates paid by some private third-party payors are based, in part, on established physician, clinic and hospital charges and are generally higher than Medicare payment rates. Reductions in the amount of reimbursement paid for diagnostic medical imaging procedures and changes in the mix of our patients between non-governmental payors and government sponsored healthcare programs and among different types of non-government payor sources, could have a material adverse effect on our business, results of operations, financial condition and cash flows.

Our business and industry are subject to complex and costly regulations. If government regulations are interpreted or enforced in a manner adverse to us or our business, we may be subject to enforcement actions, penalties, exclusion and other material limitations on our operations.

Both before and after the approval of our products and product candidates, we, our products, product candidates, operations, facilities, suppliers, distributors, contract manufacturers, contract research organizations and contract testing laboratories are subject to extensive regulation by federal, state and local government agencies in the United States as well as non-U.S. and transnational laws and regulations, with regulations differing from country to country. In the United States, the FDA regulates, among other things, the pre-clinical testing, clinical trials, manufacturing, safety, efficacy, potency, labeling, storage, record keeping, quality systems, advertising, promotion, sale, distribution, and import and export of drug products. We are required to register our business for permits and/or licenses with, and comply with the stringent requirements of the FDA, the NRC, the HHS, Health Canada, the EMA, state and provincial boards of pharmacy, state and provincial health departments and other federal, state and provincial agencies.

Under U.S. law, we are required to report certain adverse events and production problems, if any, to the FDA. Additionally, we must comply with requirements concerning advertising and promotion for our products, including the prohibition on the promotion of our products for indications that have not been approved by the FDA or a so-called "off-label use." If the FDA determines that our promotional materials constitute the unlawful promotion of an off-label use, it could request that we modify our promotional materials or subject us to regulatory or enforcement actions. Also, quality control and manufacturing procedures at our own facility and at third-party suppliers must conform to cGMP regulations and other applicable law after approval, and the FDA periodically inspects manufacturing facilities to assess compliance with cGMPs and other applicable law, and, from time to time, makes such cGMPs more stringent. Accordingly, we and others with whom we work must expend time, money, and effort in all areas of regulatory compliance, including manufacturing, production, and quality control. For example, we currently rely on JHS as our sole manufacturer of DEFINITY and, later in 2014, of Neurolite. JHS has recently received a warning letter from the FDA in connection with their manufacturing facility in Spokane, Washington where our products are, or will be, manufactured. If JHS cannot resolve the issues in their facility underlying the warning letter or the issues become worse, the FDA could take additional regulatory action which could limit or suspend the ability of JHS to manufacture our products and have any additional products approved at the Spokane facility for manufacture until the issues are remediated. Such a limitation or suspension could have a material adverse effect on our business, results of operations, financial condition and cash flows.

We are also subject to laws and regulations that govern financial and other arrangements between pharmaceutical manufacturers and healthcare providers, including federal and state anti-kickback statutes, federal and state false claims laws and regulations, and other fraud and abuse laws and regulations. For example, in 2010, we entered into a Medicaid Drug Rebate Agreement for certain of our products, which could subject us to potential liability under the False Claims Act, civil monetary penalties, or liability under other laws and regulations in connection with the covered products as well as the products not covered by the agreement. Determination of the rebate amount for our products under the Medicaid program, as well as determination of payment amounts under Medicare and certain other third-party payers, including government payers, depends upon information reported by us to the government. If we provide customers or government officials with inaccurate information about the products' pricing or eligibility for coverage, or the products fail to satisfy coverage requirements, we could be subject to potential liability under the False Claims Act or other laws and regulations or be subject to civil monetary penalties. See "Item 1—Business—Regulatory Matters—Healthcare Fraud and Abuse Laws."

Failure to comply with other requirements and restrictions placed upon us by laws and regulations can result in fines, civil and criminal penalties, exclusion from federal healthcare programs and debarment. Possible consequences of such actions could include:

- substantial modifications to our business practices and operations;
- significantly reduced demand for our products (if products become ineligible for reimbursement under federal healthcare programs);
- a total or partial shutdown of production in one or more of our facilities while we remediate the alleged violation;
- delays in or the inability to obtain future pre-market clearances or approvals; and
- withdrawals or suspensions of current products from the market.

Regulations are subject to change as a result of legislative, administrative or judicial action, which may also increase our costs or reduce sales. Violation of any of these regulatory schemes, individually or collectively, could disrupt our business and have a material adverse effect on our business, results of operations, financial condition and cash flows.

Our marketing and sales practices may contain risks that could result in significant liability, require us to change our business practices and restrict our operations in the future.

We are subject to domestic (federal, state and local) and foreign laws addressing fraud and abuse in the healthcare industry, including the False Claims Act and Federal Anti-Kickback Statute, the FCPA, the Bribery Act, the self-referral laws and restrictions on the promotion of off-label uses of our products. Violations of these laws are punishable by criminal or civil sanctions, including substantial fines, imprisonment and exclusion from participation in healthcare programs such as Medicare and Medicaid as well as health programs outside the United States or the imposition of corporate integrity agreements that could severely restrict or limit our business practices. These laws and regulations are complex and subject to changing interpretation and application, which could restrict our sales or marketing practices. Even minor and inadvertent irregularities could potentially give rise to a charge that the law has been violated. Although we believe we maintain an appropriate compliance program, we cannot be certain that the program will adequately detect or prevent violations and/or the relevant regulatory authorities may disagree with our interpretation. Additionally, if there is a change in law, regulation or administrative or judicial interpretations, we may have to change one or more of our business practices to be in compliance with these laws. Required changes could be costly and time consuming.

The Healthcare Reform Act, through its federal "sunshine" provisions, also imposes new requirements on certain device and drug manufacturers to report certain financial interactions with physicians and teaching hospitals as well as ownership and investment interests held by physicians or their immediate family members. The first report for financial interactions and ownership interests is due in 2014 (covering August 1, 2013 through December 31, 2013). A manufacturer may be subject to civil monetary penalties of up to $150,000 aggregate per year for failures to report required information and up to $1 million aggregate per year for "knowing" failures to report.

Separately, the Healthcare Reform Act requires manufacturers to submit information on the identity and quantity of drug samples requested and distributed by a manufacturer during each year. The first report (covering 2011) was to be submitted by April 1, 2012, but the FDA indicated that it would exercise enforcement discretion until October 1, 2012, and would issue a notice prior to its decision to begin enforcing this decision. At this time, FDA has not published a notice to begin enforcement of this provision, but the FDA has indicated its intent to publish guidance in calendar year 2014. State laws may also require disclosure of pharmaceutical pricing information and marketing

expenditures, compliance with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, and/or the tracking and reporting of gifts, compensation, and other remuneration to physicians and other healthcare providers. We believe we have developed appropriate protocols to implement these state requirements. Any irregularities or mistakes in our reporting, however, could result in a finding that we have been non-compliant with these requirements, which could subject us to the penalty provisions of applicable federal and state laws and regulations.

The Healthcare Reform Act also provides greater financial resources to be allocated to enforcement of the fraud and abuse laws and amends the intent requirements of the Federal Anti-Kickback Statute and criminal healthcare fraud statutes that prohibit executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters, which may increase overall compliance costs for industry participants, including us. A person or entity does not need to have actual knowledge of the statute or a specific intent to violate it. In addition, the Healthcare Reform Act revised the False Claims Act to provide that a claim arising from a violation of the Federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act. If our operations are found to be in violation of these laws or any other government regulations that apply to us, we may be subject to penalties, including, without limitation, civil and criminal penalties, damages, fines, imprisonment, the curtailment or restructuring of our operations, or exclusion from state and federal healthcare programs including Medicare and Medicaid, any of which could have a material adverse effect on our business, results of operations, financial condition and cash flows.

Ultrasound contrast agents may cause side effects which could limit our ability to sell DEFINITY.

DEFINITY is an ultrasound contrast agent based on perflutren lipid microspheres. In 2007, the FDA received reports of deaths and serious cardiopulmonary reactions following the administration of ultrasound micro-bubble contrast agents used in echocardiography. Four of the 11 reported deaths were caused by cardiac arrest occurring either during infusion or within 30 minutes following the administration of the contrast agent; most of the serious but non-fatal reactions also occurred in this time frame. As a result, in October 2007, the FDA requested that we and GE Healthcare, which distributes Optison, a competitor to DEFINITY, add a boxed warning to these products emphasizing the risk for serious cardiopulmonary reactions and that the use of these products was contraindicated in certain patients. In a strong reaction by the cardiology community to the FDA's new position, a letter was sent to the FDA, signed by 161 doctors, stating that the benefit of these ultrasound contrast agents outweighed the risks and urging that the boxed warning be removed. In May 2008, the FDA substantially modified the boxed warning. On May 2, 2011, the FDA held an advisory committee meeting to consider the status of ultrasound micro-bubble contrast agents and the boxed warning. In October 2011, we received FDA approval of further modifications to the DEFINITY label, including: further relaxing the boxed warning; eliminating the sentence in the Indication and Use section "The safety and efficacy of DEFINITY with exercise stress or pharmacologic stress testing have not been established" (previously added in October 2007 in connection with the imposition of the box warning); and including summary data from the post-approval CaRES (Contrast echocardiography Registry for Safety Surveillance) safety registry and the post-approval pulmonary hypertension study. If additional safety issues arise, this may result in further changes in labeling or result in restrictions on the approval of our product, including removal of the product from the market. Lingering safety concerns about DEFINITY among some healthcare providers or future unanticipated side effects or safety concerns associated with DEFINITY could limit expanded use of DEFINITY and have a material adverse effect on the unit sales of this product and our financial condition and results of operations.

Our business depends on our ability to successfully introduce new products and adapt to a changing technology and diagnostic landscape.

The healthcare industry is characterized by continuous technological development resulting in changing customer preferences and requirements. The success of new product development depends on many factors, including our ability to anticipate and satisfy customer needs, obtain regulatory approval on a timely basis based on performance of the clinical candidate versus its clinical study competitor, develop and manufacture products in a cost-effective and timely manner, maintain advantageous positions with respect to intellectual property and differentiate our products from our competitors. To compete successfully in the marketplace, we must make substantial investments in new product development whether internally or externally through licensing or acquisitions. Our failure to introduce new and innovative products in a timely manner would have an adverse effect on our business, results of operations, financial condition and cash flows.

Even if we are able to develop, manufacture and obtain regulatory approvals for our new products, the success of these products would depend upon market acceptance and adequate reimbursement. Levels of market acceptance for our new products could be affected by a number of factors, including:

- the availability of alternative products from our competitors, such as, in the case of DEFINITY, GE Healthcare's Optison, Bracco's SonoVue and other imaging modalities;
- the price of our products relative to those of our competitors;
- the timing of our market entry;
- our ability to market and distribute our products effectively;
- market acceptance of our products; and
- our ability to obtain adequate reimbursement.

The field of diagnostic medical imaging is dynamic, with new products, including equipment and agents, continually being developed and existing products continually being refined. Our own diagnostic imaging agents compete not only with other similarly administered imaging agents but also with imaging agents employed in different and often competing diagnostic modalities. New imaging agents in a given diagnostic modality may be developed that provide benefits superior to the then-dominant agent in that modality, resulting in commercial displacement. Similarly, changing perceptions about comparative efficacy and safety including, among other things, comparative radiation exposure, as well as changing availability of supply may favor one agent over another or one modality over another. To the extent there is technological obsolescence in any of our products that we manufacture, resulting in lower unit sales or decreased unit sales prices, we will have increased unit overhead allocable to the remaining market share, which could have a material adverse effect on our business, results of operations, financial condition and cash flows.

Our current portfolio of commercial products primarily focuses on heart disease and vascular disease. This particular focus, however, may not be in our long-term best interest if the incidence and prevalence of heart disease and vascular disease decrease over time. Despite the aging population in the affluent parts of the world where diagnostic medical imaging is most frequently used, government and private efforts to promote preventative cardiac care through exercise, diet and improved medications could decrease the overall demand for our products, which could have a material adverse effect on our business, results of operations, financial condition and cash flows.

Because market acceptance of Ablavar has been slower than we anticipated, we have had a series of asset write-downs.

Given the lower market demand for Ablavar than we initially anticipated and the magnitude of the required purchase minimums originally contained in the manufacturing agreement with Mallinckrodt, we entered into two separate amendments to the agreement in August 2010 and October 2011 to reduce the minimum purchase requirements. In the fourth quarter of 2010, we recorded an inventory write-down of approximately $10.9 million for Ablavar finished good product that had already been manufactured by Mallinckrodt that would likely expire prior to its sale to and use by customers. In the second quarter of 2011, we recorded an impairment charge of $23.5 million, the full remaining value of the product's intellectual property. In addition, in the second and fourth quarters of 2011, we recorded a further inventory write-down of approximately $13.5 million and $12.3 million, respectively, and a loss of $1.9 million and $3.7 million, respectively, for the portion of committed purchases of Ablavar that we did not believe we would be able to sell prior to product expiry. In the third quarter of 2012, we recorded an additional inventory write-down of approximately $10.6 million and a loss of $1.9 million for the portion of committed purchases of Ablavar that we do not believe we will be able to sell prior to product expiry. Finally, in the fourth quarter of 2013, we recorded an additional inventory write-down of approximately $1.6 million related to the API that the Company would not be able to convert or be able to sell prior to its expiration.

At December 31, 2013, we had a net Ablavar inventory balance of $1.5 million and the remaining purchase commitment under the agreement with Mallinckrodt was approximately $1.8 million, of which $1.3 million is recorded as an accrued contract loss. In 2013, we transitioned the sales and marketing efforts for Ablavar from our direct sales force to our customer service team in order to allow our direct sales force to drive our DEFINITY sales growth. If we do not meet our current sales goals or cannot sell the product we have committed to purchase prior to its expiration, we could incur additional inventory losses and/or losses on our purchase commitments.

The process of developing new drugs and obtaining regulatory approval is complex, time-consuming and costly, and the outcome is not certain.

In our portfolio of development candidates, we currently have three agents, two of which (flurpiridaz F 18 and 18F LMI 1195) are currently in clinical development, while a third (LMI 1174) is in pre-clinical development. To obtain regulatory approval for these product candidates, we must conduct extensive human tests, which are referred to as clinical trials, as well as meet other rigorous regulatory requirements. Satisfaction of all regulatory requirements typically takes many years and requires the expenditure of substantial resources. A number of other factors may cause significant delays in the completion of our clinical trials, including unexpected delays in the initiation of clinical sites, slower than projected enrollment, competition with ongoing clinical trials and scheduling conflicts with participating clinicians, regulatory requirements, limits on manufacturing capacity and failure of a product candidate to meet required standards for administration to humans. In addition, it may take longer than we project to achieve study endpoints and complete data analysis for a trial or we may decide to slow down the enrollment in a trial in order to conserve financial resources.

Our product candidates are also subject to the risks of failure inherent in drug development and testing. The results of preliminary studies do not necessarily predict clinical success, and larger and later-stage clinical trials may not produce the same results as earlier-stage trials. Sometimes, product candidates that have shown promising results in early clinical trials have subsequently suffered significant setbacks in later clinical trials. Product candidates in later-stage clinical trials may fail to show desired safety and efficacy traits, despite having progressed through initial clinical testing. Further, the data collected from clinical trials of our product candidates may not be sufficient to support regulatory approval, or regulators could interpret the data differently and less favorably than we do. Further, the design of a clinical trial can determine whether its results will support approval of a

product, and flaws in the design of a clinical trial may not become apparent until the clinical trial is well advanced. Clinical trials of potential products often reveal that it is not practical or feasible to continue development efforts. Regulatory authorities may require us or our partners to conduct additional clinical testing, in which case we would have to expend additional time and resources. The approval process may also be delayed by changes in government regulation, future legislation or administrative action or changes in regulatory policy that occur prior to or during regulatory review. The failure to provide clinical and preclinical data that are adequate to demonstrate to the satisfaction of the regulatory authorities that our product candidates are safe and effective for their proposed use will delay or preclude approval and will prevent us from marketing those products.

In our flurpiridaz F 18 Phase 3 program, in the fourth quarter of 2013 we announced preliminary results from the 301 trial, which is subject to a Special Protocol Assessment with the FDA. Although flurpiridaz F 18 appeared to be well-tolerated from a safety perspective and outperformed SPECT in a highly statistically significant manner in sensitivity, image quality and diagnostic certainty, the agent did not meet the non-inferiority criterion for identifying subjects without disease. We can give no assurances that our Special Protocol Assessment agreement will be deemed binding on the FDA or will result in any particular outcome from regulatory review of the study or the product candidate, that any of the data thus far generated in the 301 trial can be used for NDA approval, that a strategic partner will have to conduct only one additional clinical trial, the planned 302 trial, prior to filing an NDA, or that flurpiridaz F 18 will ever be approved as a PET MPI imaging agent by the FDA.

We are not permitted to market our product candidates in the United States or other countries until we have received requisite regulatory approvals. For example, securing FDA approval for a new drug requires the submission of an NDA to the FDA for our drug candidates. The NDA must include extensive nonclinical and clinical data and supporting information to establish the product candidate's safety and effectiveness for each indication. The NDA must also include significant information regarding the chemistry, manufacturing and controls for the product. The FDA review process can take many years to complete, and approval is never guaranteed. If a product is approved, the FDA may limit the indications for which the product may be marketed, require extensive warnings on the product labeling, impose restricted distribution programs, require expedited reporting of certain adverse events, or require costly ongoing requirements for post-marketing clinical studies and surveillance or other risk management measures to monitor the safety or efficacy of the product candidate. Markets outside of the United States also have requirements for approval of drug candidates with which we must comply prior to marketing. Obtaining regulatory approval for marketing of a product candidate in one country does not ensure we will be able to obtain regulatory approval in other countries, but a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory process in other countries. Also, any regulatory approval of any of our products or product candidates, once obtained, may be withdrawn. Approvals might not be granted on a timely basis, if at all.

Even if our development candidates proceed successfully through clinical trials and receive regulatory approval, there is no guarantee that an approved product can be manufactured in commercial quantities at a reasonable cost or that such a product will be successfully marketed. For example, flurpiridaz F 18 would require the creation of a complex, field-based manufacturing and distribution network involving PET cyclotrons located at radiopharmacies where the agent would be manufactured and distributed rapidly to end-users, given the agent's 110-minute half-life. In addition, in the case of flurpiridaz F 18, obtaining adequate reimbursement is critical, including not only coverage from Medicare, Medicaid, other government payors as well as private payors but also appropriate payment levels which adequately cover the substantially higher manufacturing and distribution costs associated with a PET MPI agent in comparison to, for example, sestamibi.

We will not be able to develop or commercialize our development candidates without successful strategic partners.

In March 2013, we implemented a strategic shift in how we fund our important R&D programs. We have reduced our internal R&D resources while at the same time we seek to engage strategic partners to further develop and commercialize our important product candidates, including flurpiridaz F 18, 18F LMI 1195 and LMI 1174.However, we may not be able to negotiate relationships with potential strategic partners on acceptable terms, or at all. If we are unable to establish or maintain such strategic partnerships, we will have to limit the size or scope of, or delay, our development programs. In addition, our dependence on strategic partnerships is subject to a number of risks, including:

- the inability to control the amount or timing of resources that our partners may devote to developing the product candidates;
- the possibility that we may be required to relinquish important rights, including intellectual property, marketing and distribution rights;
- the receipt of lower revenues than if we were to commercialize such products ourselves;
- our failure to receive future milestone payments or royalties if a partner fails to commercialize one of our product candidates successfully;
- the possibility that a partner could separately move forward with a competing product candidate developed either independently or in collaboration with others, including our competitors;
- the possibility that our strategic partners may experience financial difficulties;
- business combinations or significant changes in a partner's business strategy that may adversely affect that partner's willingness or ability to complete its obligations under any arrangement with us; and
- the possibility that our partners may operate in countries where their operations could be negatively impacted by changes in the local regulatory environment or by political unrest.

Any of these factors either alone or taken together could have a material adverse effect on our business, results of operations, financial condition and cash flows.

A heightened public or regulatory focus on the radiation risks of diagnostic imaging could have an adverse effect on our business.

We believe that there has been heightened public and regulatory focus on radiation exposure, including the concern that repeated doses of radiation used in diagnostic imaging procedures pose the potential risk of long-term cell damage, cancer and other diseases. For example, starting in January 2012, CMS required the accreditation of facilities providing the technical component of advanced imaging services, including CT, MRI, PET and nuclear medicine, in non-hospital free-standing settings. In August 2011, the Joint Commission (an independent, not-for-profit organization that accredits and certifies more than 19,000 healthcare organizations and programs in the United States) issued an alert on the radiation risks of diagnostic imaging and recommended specific actions of providing "the right test and the right dose through effective processes, safe technology and a culture of safety."

Heightened regulatory focus on risks caused by the radiation exposure received by diagnostic imaging patients could lead to increased regulation of radiopharmaceutical manufacturers or healthcare providers who perform procedures that use our imaging agents, which could make the procedures more costly, reduce the number of providers who perform procedures and/or decrease the demand for our products. In addition, heightened public focus on or fear of radiation exposure could lead to decreased demand for our products by patients or by healthcare providers who order the procedures in which our

agents are used. Although we believe that our diagnostic imaging agents when properly used do not expose patients and healthcare providers to unsafe levels of radiation, any of the foregoing risks could have an adverse effect on our business, results of operations, financial condition and cash flows.

In the ordinary course of business, we may be subject to product liability claims and lawsuits, including potential class actions, alleging that our products have resulted or could result in an unsafe condition or injury.

Any product liability claim brought against us, with or without merit, could be costly to defend and could result in an increase of our insurance premiums. Although we have not had any such claims to date, claims that could be brought against us might not be covered by our insurance policies. Furthermore, even where the claim is covered by our insurance, our insurance coverage might be inadequate and we would have to pay the amount of any settlement or judgment that is in excess of our policy limits, which we believe are consistent with other pharmaceutical companies in the diagnostic medical imaging industry. We may not be able to obtain insurance on terms acceptable to us or at all, since insurance varies in cost and can be difficult to obtain. Our failure to maintain adequate insurance coverage or successfully defend against product liability claims could have a material adverse effect on our business, results of operations, financial condition and cash flows.

We use hazardous materials in our business and must comply with environmental laws and regulations, which can be expensive.

Our operations use hazardous materials and produce hazardous wastes, including radioactive, chemical and, in certain circumstances, biological materials and wastes. We are subject to a variety of federal, state and local laws and regulations as well as non-U.S. laws and regulations relating to the transport, use, handling, storage, exposure to and disposal of these materials and wastes. Environmental laws and regulations are complex, change frequently and have become more stringent over time. We are required to obtain, maintain and renew various environmental permits and nuclear licenses. Although we believe that our safety procedures for transporting, using, handling, storing and disposing of, and limiting exposure to, these materials and wastes comply in all material respects with the standards prescribed by applicable laws and regulations, the risk of accidental contamination or injury cannot be eliminated. We place a high priority in these safety procedures and seek to limit any inherent risks. We generally contract with third parties for the disposal of wastes generated by our operations. Prior to disposal, we store any low level radioactive waste at our facilities until the materials are no longer considered radioactive. Although we believe we have complied in all material respects with all applicable environmental, health and safety laws and regulations, we cannot assure you that we have been or will be in compliance with all such laws at all times. If we violate these laws, we could be fined, criminally charged or otherwise sanctioned by regulators. We may be required to incur further costs to comply with current or future environmental and safety laws and regulations. In addition, in the event of accidental contamination or injury from these materials, we could be held liable for any damages that result and any such liability could exceed our resources.

While we have budgeted for current and future capital and operating expenditures to maintain compliance with these laws and regulations, we cannot assure you that our costs of complying with current or future environmental, health and safety laws and regulations will not exceed our estimates or adversely affect our results of operations and financial condition. Further, we cannot assure you that we will not be subject to additional environmental claims for personal injury, investigation or cleanup in the future based on our past, present or future business activities.

If we are unable to protect our intellectual property, our competitors could develop and market products with features similar to our products, and demand for our products may decline.

Our commercial success will depend in part on obtaining and maintaining patent protection and trade secret protection of our technologies and product candidates as well as successfully defending these patents and trade secrets against third-party challenges. We will only be able to protect our intellectual property from unauthorized use by third parties to the extent that valid and enforceable patents or trade secrets cover them.

The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. In addition, changes in either the patent laws or in interpretations of patent laws in the United States or other countries may diminish the value of our intellectual property. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents.

The degree of future protection for our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. For example:

- we might not have been the first to make the inventions covered by each of our pending patent applications and issued patents, and we could lose our patent rights as a result;
- we might not have been the first to file patent applications for these inventions or our patent applications may not have been timely filed, and we could lose our patent rights as a result;
- others may independently develop similar or alternative technologies or duplicate any of our technologies;
- it is possible that none of our pending patent applications will result in any further issued patents;
- our issued patents may not provide a basis for commercially viable drugs, may not provide us with any protection from unauthorized use of our intellectual property by third parties, and may not provide us with any competitive advantages;
- our patent applications or patents may be subject to interferences, oppositions, post-grant review, reexaminations or similar administrative proceedings;
- we may not develop additional proprietary technologies that are patentable; or
- the patents of others may have an adverse effect on our business.

Moreover, the issuance of a patent is not conclusive as to its validity or enforceability. A third party may challenge the validity or enforceability of a patent even after its issuance by the U.S. Patent and Trademark Office. It is also uncertain how much protection, if any, will be afforded by our patents if we attempt to enforce them and they are challenged in court or in other proceedings, which may be brought in U.S. or non-U.S. jurisdictions to challenge the validity of a patent.

The defense and prosecution of intellectual property suits, interferences, oppositions and related legal and administrative proceedings are costly, time consuming to pursue and result in diversion of resources. The outcome of these proceedings is uncertain and could significantly harm our business. If we are not able to defend the patents of our technologies and products, then we will not be able to exclude competitors from marketing products that directly compete with our products, which could have a material adverse effect on our business, results of operations, financial condition and cash flows.

We will also rely on trade secrets to protect our technology, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. We use reasonable efforts to protect our trade secrets, but our employees, consultants, contractors, outside

scientific partners and other advisors may unintentionally or willfully disclose our confidential information to competitors or other third parties. Enforcing a claim that a third party improperly obtained and is using our trade secrets is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how. We often rely on confidentiality agreements with our collaborators, employees, consultants and other third parties and invention assignment agreements with our employees to protect our trade secrets and other know-how and proprietary information concerning our business. These confidentiality agreements may not prevent unauthorized disclosure of trade secrets and other proprietary information, and there can be no guarantee that an employee or an outside party will not make an unauthorized disclosure of our trade secrets, other technical know-how or proprietary information. We may not have adequate remedies for any unauthorized disclosure. This might happen intentionally or inadvertently. It is possible that a competitor will make use of such information, and that our competitive position will be compromised, in spite of any legal action we might take against persons making such unauthorized disclosures, which could have a material adverse effect on our business, results of operations, financial condition and cash flows.

We rely on our trademarks, trade names, and brand names to distinguish our products from the products of our competitors, and have registered or applied to register many of these trademarks, including DEFINITY, Cardiolite, TechneLite, Ablavar, Neurolite, Quadramet and Lantheus Medical Imaging. We cannot assure you that any pending trademark applications will be approved. Third parties may also oppose our trademark applications, or otherwise challenge our use of the trademarks. If our trademarks are successfully challenged, we could be forced to rebrand our products, which could result in loss of brand recognition, and could require us to devote resources to advertising and marketing new brands. Further, we cannot assure you that competitors will not infringe our trademarks, or that we will have adequate resources to enforce our trademarks.

We may be subject to claims that we have infringed, misappropriated or otherwise violated the patent or other intellectual property rights of a third party. The outcome of any such claims is uncertain and any unfavorable result could adversely affect our business, financial condition and results of operations.

We may be subject to claims by third parties that we have infringed, misappropriated or otherwise violated their intellectual property rights. While we believe that the products that we currently manufacture using our proprietary technology do not infringe upon or otherwise violate proprietary rights of other parties or that meritorious defenses would exist with respect to any assertions to the contrary, we cannot assure you that we would not be found to infringe on or otherwise violate the proprietary rights of others.

We may be subject to litigation over infringement claims regarding the products we manufacture or distribute. This type of litigation can be costly and time consuming and could generate significant expenses, damage payments (potentially including treble damages) or restrictions or prohibitions on our use of our technology, which could adversely affect our results of operations. In addition, if we are found to be infringing on proprietary rights of others, we may be required to develop non-infringing technology, obtain a license (which may not be available on reasonable terms, or at all), make substantial one-time or ongoing royalty payments, or cease making, using and/or selling the infringing products, any of which could have a material adverse effect on our business, results of operations, financial condition and cash flows.

We may be adversely affected by the current economic environment.

Our ability to attract and retain customers, invest in and grow our business and meet our financial obligations depends on our operating and financial performance, which, in turn, is subject to numerous factors, including the prevailing economic conditions and financial, business and other factors beyond our control, such as the rate of unemployment, the number of uninsured persons in the United States and inflationary pressures. We cannot anticipate all the ways in which the current economic climate and financial market conditions could adversely impact our business.

We are exposed to risks associated with reduced profitability and the potential financial instability of our customers, many of which may be adversely affected by volatile conditions in the financial markets. For example, unemployment and underemployment, and the resultant loss of insurance, may decrease the demand for healthcare services and pharmaceuticals. If fewer patients are seeking medical care because they do not have insurance coverage, our customers may experience reductions in revenues, profitability and/or cash flow that could lead them to modify, delay or cancel orders for our products. If customers are not successful in generating sufficient revenue or are precluded from securing financing, they may not be able to pay, or may delay payment of, accounts receivable that are owed to us. This, in turn, could adversely affect our financial condition and liquidity. In addition, if economic challenges in the United States result in widespread and prolonged unemployment, either regionally or on a national basis, prior to the effectiveness of certain provisions of the Healthcare Reform Act, a substantial number of people may become uninsured or underinsured. In turn, this may lead to fewer individuals pursuing or being able to afford diagnostic medical imaging procedures. To the extent economic challenges result in fewer procedures being performed, our business, results of operations, financial condition and cash flows could be adversely affected.

Our business is subject to international economic, political and other risks that could negatively affect our results of operations or financial position.

For the years ended December 31, 2013, 2012 and 2011, 25%, 27% and 25%, respectively, of our total revenues were derived fromcountries outside the United States. We anticipate that revenue from non-U.S. operations will grow. Accordingly, our business is subject to risks associated with doing business internationally, including:

- less stable political and economic environments and changes in a specific country's or region's political or economic conditions;
- entering into or renewing commercial agreements with international governments or provincial authorities;
- international customers which are agencies or institutions of foreign governments,
- local business practices which may be in conflict with the FCPA and Bribery Act;
- currency fluctuations;
- potential negative consequences from changes in tax laws affecting our ability to repatriate profits;
- unfavorable labor regulations;
- greater difficulties in relying on non-U.S. courts to enforce either local or U.S. laws, particularly with respect to intellectual property;
- greater potential for intellectual property piracy;
- greater difficulties in managing and staffing non-U.S. operations;

- the need to ensure compliance with the numerous in-country and international regulatory and legal requirements applicable to our business in each of these jurisdictions and to maintain an effective compliance program to ensure compliance with these requirements;
- changes in public attitudes about the perceived safety of nuclear facilities;
- changes in trade policies, regulatory requirements and other barriers;
- civil unrest or other catastrophic events; and
- longer payment cycles of non-U.S. customers and difficulty collecting receivables in non-U.S. jurisdictions.

These factors are beyond our control. The realization of any of these or other risks associated with operating in non-U.S. countries could have a material adverse effect on our business, results of operations or financial condition. As our international exposure increases and as we execute our strategy of international expansion, these risks may intensify.

We face currency and other risks associated with international sales.

We generate significant revenue from export sales, as well as from operations conducted outside the United States. During the years ended December 31, 2013, 2012 and 2011, the net impact of foreign currency changes on transactions was a loss of $349,000, $579,000 and $156,000, respectively. Operations outside the United States expose us to risks including fluctuations in currency values, trade restrictions, tariff and trade regulations, U.S. export controls, non-U.S. tax laws, shipping delays, and economic and political instability. For example, violations of U.S. export controls, including those administered by the U.S. Treasury Department's Office of Foreign Assets Control, could result in fines, other civil or criminal penalties and the suspension or loss of export privileges which could have a material adverse effect on our business, results of operations, financial conditions and cash flows.

The functional currency of each of our non-U.S. operations is generally the local currency, although one non-U.S. operation's functional currency is the U.S. Dollar. Exchange rates between some of these currencies and U.S. Dollar have fluctuated significantly in recent years and may do so in the future. Historically, we have not used derivative financial instruments or other financial instruments to hedge such economic exposures. It is possible that fluctuations in exchange rates will have a negative effect on our results of operations.

U.S. credit markets may impact our ability to obtain financing or increase the cost of future financing, including, in the event we obtain financing with a variable interest rate, interest rate fluctuations based on macroeconomic conditions that are beyond our control.

As of December 31, 2013, we had approximately $408.0 million of total principal indebtedness consisting of $400.0 million of Notes issued May 10, 2010 and March 16, 2011 and due May 15, 2017 and a revolving line of credit, the Facility, with an outstanding balance of $8.0 million. The Facility currently has $25.7 million of remaining availability. In addition to the $8.0 million outstanding under the Facility there is an $8.8 million unfunded Standby Letter of Credit at December 31, 2013. During periods of volatility and disruption in the U.S., European, or global credit markets, obtaining additional or replacement financing may be more difficult and the cost of issuing new debt or replacing our Facility could be higher than under our current Facility. Higher cost of new debt may limit our ability to have cash on hand for working capital, capital expenditures and acquisitions on terms that are acceptable to us. Additionally, the Facility has a variable interest rate. By its nature, a variable interest rate will move up or down based on changes in the economy and other factors, all of which are beyond our control. If interest rates increase, our interest expense could increase, affecting earnings and reducing cash flows available for working capital, capital expenditures and acquisitions.

Many of our customer relationships outside of the United States are, either directly or indirectly, with governmental entities, and we could be adversely affected by violations of the U.S. Foreign Corrupt Practices Act and similar worldwide anti-bribery laws outside the United States.

The FCPA, the Bribery Act and similar worldwide anti-bribery laws in non-U.S. jurisdictions generally prohibit companies and their intermediaries from making improper payments to non-U.S. officials for the purpose of obtaining or retaining business.

The FCPA prohibits us from providing anything of value to foreign officials for the purposes of obtaining or retaining business or securing any improper business advantage. It also requires us to keep books and records that accurately and fairly reflect our transactions. Because of the predominance of government-sponsored healthcare systems around the world, many of our customer relationships outside of the United States are, either directly or indirectly, with governmental entities and are therefore subject to the FCPA and similar anti-bribery laws in non-U.S. jurisdictions. In addition, the Bribery Act has been enacted, and its provisions extend beyond bribery of foreign public officials and are more onerous than the FCPA in a number of other respects, including jurisdiction, non-exemption of facilitation payments and penalties.

Our policies mandate compliance with these anti-bribery laws. We operate in many parts of the world that have experienced governmental corruption to some degree, and in certain circumstances strict compliance with anti-bribery laws may conflict with local customs and practices. Despite our training and compliance programs, our internal control policies and procedures may not always protect us from reckless or criminal acts committed by our employees or agents. Violations of these laws, or allegations of such violations, could disrupt our business and result in a material adverse effect on our results of operations, financial condition and cash flows.

Our business depends on the continued effectiveness and availability of our information technology infrastructure, and failures of this infrastructure could harm our operations.

To remain competitive in our industry, we must employ information technologies to support manufacturing processes, quality processes, distribution, R&D and regulatory applications and that capture, manage and analyze the large streams of data generated in our clinical trials in compliance with applicable regulatory requirements. We rely extensively on technology to allow the concurrent conduct of work sharing around the world. As with all information technology, our infrastructure ages and becomes subject to increasing maintenance and repair and our systems generally are vulnerable to potential damage or interruptions from fires, blackouts, telecommunications failures and other unexpected events, as well as to break-ins, sabotage or intentional acts of vandalism. Given the extensive reliance of our business on technology, any substantial disruption or resulting loss of data that is not avoided or corrected by our backup measures could harm our business, operations and financial condition.

We may not be able to hire or retain the number of qualified personnel, particularly scientific, medical and sales personnel, required for our business, which would harm the development and sales of our products and limit our ability to grow.

Competition in our industry for highly skilled scientific, healthcare and sales personnel is intense. If we are unable to retain our existing personnel, or attract and train additional qualified personnel, either because of competition in our industry for such personnel or because of insufficient financial resources, our growth may be limited and it could have a material adverse effect on our business.

If we lose the services of our key personnel, our business could be adversely affected.

Our success is substantially dependent upon the performance, contributions and expertise of our chief executive officer, executive leadership and senior management team. Jeffrey Bailey, our Chief

Executive Officer and President, and other members of our executive leadership and senior management team play a significant role in generating new business and retaining existing customers. We have employment agreements with Mr. Bailey and a limited number of other individuals on our executive leadership team, although we cannot prevent them from terminating their employment with us. We do not maintain key man life insurance policies on any of our executive officers. Our inability to retain our existing executive leadership and senior management team, maintain an appropriate internal succession program or attract and retain additional qualified personnel could have a material adverse effect on our business.

Our future growth may depend on our ability to identify and in-license or acquire additional products, and if we do not successfully do so, or otherwise fail to integrate any new products into our operations, we may have limited growth opportunities and it could materially adversely affect our relationships with customers and/or result in significant impairment charges.

We are continuing to seek to acquire or in-license products, businesses or technologies that we believe are a strategic fit with our business strategy. Future in-licenses or acquisitions, however, may entail numerous operational and financial risks, including:

- exposure to unknown liabilities;
- disruption of our business, customer base and diversion of our management's time and attention to develop acquired products or technologies;
- a reduction of our current financial resources;
- difficulty or inability to secure financing to fund development activities for such acquired or in-licensed technologies;
- incurrence of substantial debt or dilutive issuances of securities to pay for acquisitions; and
- higher than expected acquisition and integration costs.

We may not have sufficient resources to identify and execute the acquisition or in-licensing of third-party products, businesses and technologies and integrate them into our current infrastructure. In particular, we may compete with larger pharmaceutical companies and other competitors in our efforts to establish new collaborations and in-licensing opportunities. These competitors likely will have access to greater financial resources than us and may have greater expertise in identifying and evaluating new opportunities. Furthermore, there may be overlap between our products or customers and the companies which we acquire that may create conflicts in relationships or other commitments detrimental to the integrated businesses. Additionally, the time between our expenditures to in-license or acquire new products, technologies or businesses and the subsequent generation of revenues from those acquired products, technologies or businesses (or the timing of revenue recognition related to licensing agreements and/or strategic collaborations) could cause fluctuations in our financial performance from period to period. Finally, if we devote resources to potential acquisitions or in-licensing opportunities that are never completed, or if we fail to realize the anticipated benefits of such efforts, we could incur significant impairment charges or other adverse financial consequences.

We have a substantial amount of indebtedness which may limit our financial and operating activities and may adversely affect our ability to incur additional debt to fund future needs.

As of December 31, 2013, we had approximately $408.0 million of total principal indebtedness consisting of $400.0 million of the Notes, which mature on May 15, 2017, and $8.0 million outstanding under the Facility. As of December 31, 2013, in addition to the $8.0 million outstanding under the

Facility, there is an $8.8 million unfunded Standby Letter of Credit. Our substantial indebtedness and any future indebtedness we incur could:

- require us to dedicate a substantial portion of cash flow from operations to the payment of interest on and principal of our indebtedness, thereby reducing the funds available for other purposes;
- make it more difficult for us to satisfy and comply with our obligations with respect to the Notes, namely the payment of interest and principal;
- subject us to increased sensitivity to interest rate increases;
- make us more vulnerable to economic downturns, adverse industry or company conditions or catastrophic external events;
- limit our ability to withstand competitive pressures;
- reduce our flexibility in planning for or responding to changing business, industry and economic conditions; and/or
- place us at a competitive disadvantage to competitors that have relatively less debt than we have.

In addition, our substantial level of indebtedness could limit our ability to obtain additional financing on acceptable terms, or at all, for working capital, capital expenditures and general corporate purposes. Our liquidity needs could vary significantly and may be affected by general economic conditions, industry trends, performance and many other factors not within our control.

We may not be able to generate sufficient cash flow to meet our debt service obligations.

Our ability to generate sufficient cash flow from operations to make scheduled payments on our debt obligations, which are currently $39.0 million of interest per year based on our $400.0 million in total principal indebtedness as of December 31, 2013 related to the Notes, which principal is due at maturity on May 15, 2017, will depend on our future financial performance, which will be affected by a range of economic, competitive and business factors, many of which are outside of our control. If we do not generate sufficient cash flow from operations to satisfy our debt obligations, including interest payments and the payment of principal at maturity, we may have to undertake alternative financing plans, such as refinancing or restructuring our debt, selling assets, entering into additional corporate collaborations or licensing arrangements for one or more of our products or product candidates, reducing or delaying capital investments or seeking to raise additional capital. We cannot assure you that any refinancing would be possible, that any assets could be sold, licensed or partnered, or, if sold, licensed or partnered, of the timing of the transactions and the amount of proceeds realized from those transactions, that additional financing could be obtained on acceptable terms, if at all, or that additional financing would be permitted under the terms of our various debt instruments then in effect. Furthermore, our ability to refinance would depend upon the condition of the financial and credit markets. Our inability to generate sufficient cash flow to satisfy our debt obligations, or to refinance our obligations on commercially reasonable terms or on a timely basis, would have an adverse effect on our business, results of operations and financial condition.

Despite our substantial indebtedness, we may incur more debt, which could exacerbate the risks described above.

We and our subsidiaries may be able to incur substantial additional indebtedness in the future subject to the limitations contained in the agreements governing our debt, including the Indenture (as defined below) governing the Notes. Although these agreements restrict us and our restricted subsidiaries from incurring additional indebtedness, these restrictions are subject to important exceptions and qualifications. For example, we are generally permitted to incur certain indebtedness,

including, indebtedness arising in the ordinary course of business, indebtedness among restricted subsidiaries and us and indebtedness relating to hedging obligations. We are also permitted to incur indebtedness under the Indenture governing the Notes so long as we comply with an interest coverage ratio of 2.0 to 1.0, determined on a pro forma basis for the most recently completed four fiscal quarters. See "Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—External Sources of Liquidity." If we or our subsidiaries incur additional debt, the risks that we and they now face as a result of our high leverage could intensify. In addition, the Indenture governing the Notes and the agreement governing the Facility will not prevent us from incurring obligations that do not constitute indebtedness under the agreements.

Our debt agreements contain restrictions that will limit our flexibility in operating our business.

The Indenture governing the Notes and the agreement governing the Facility contain various covenants that limit our ability to engage in specified types of transactions. These covenants limit our and our restricted subsidiaries' ability to, among other things:

- incur additional debt;
- pay dividends or make other distributions;
- redeem stock;
- issue stock of subsidiaries;
- make certain investments;
- create liens;
- enter into transactions with affiliates; and
- merge, consolidate or transfer all or substantially all of our assets.

A breach of any of these covenants could result in a default under the Indenture governing the Notes and the agreement governing the Facility. We may also be unable to take advantage of business opportunities that arise because of the limitations imposed on us by the restrictive covenants under our indebtedness.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our executive offices and primary manufacturing facilities are located at our North Billerica, Massachusetts facility, which we own. In addition, as of December 31, 2013, we lease 7 facilities in Canada, 2 in Australia and 2 in Puerto Rico. Our owned facilities consist of approximately 578,000 square feet of manufacturing, laboratory, mixed use and office space, and our leased facilities consist of approximately 67,766 square feet of manufacturing, laboratory, mixed use and office space. We believe all of these facilities are well-maintained and suitable for the office, radiopharmacy, manufacturing or warehouse operations conducted in them.

The following table summarizes information regarding our significant leased and owned properties, as of December 31, 2013:

Location	Square footage	Owned/Leased
United States		
North Billerica, Massachusetts	578,000	Owned
Canada		
Montreal	8,729	Leased
Mississauga	13,747	Leased
Dorval	13,079	Leased
Quebec	6,261	Leased
Hamilton	5,300	Leased
Vancouver	880	Leased
Australia		
Melbourne	4,634	Leased
Adelaide	4,306	Leased
Puerto Rico		
San Juan	9,550	Leased
Ponce	1,280	Leased

Item 3. Legal Proceedings

From time to time, we are a party to various legal proceedings arising in the ordinary course of business. In addition, we have in the past been, and may in the future be, subject to investigations by governmental and regulatory authorities, which exposes us to greater risks associated with litigation, regulatory or other proceedings, as a result of which we could be required to pay significant fines or penalties. The outcome of litigation, regulatory or other proceedings cannot be predicted with certainty, and some lawsuits, claims, actions or proceedings may be disposed of unfavorably to us. In addition, intellectual property disputes often have a risk of injunctive relief which, if imposed against us, could materially and adversely affect our financial condition or results of operations.

On December 16, 2010, we filed suit against one of our insurance carriers seeking to recover business interruption losses associated with the NRU reactor shutdown and the ensuing global Moly supply shortage (*Lantheus Medical Imaging, Inc., Plaintiff v. Zurich American Insurance Company, Defendant,* United States District Court, Southern District of New York, Case No. 10 Civ 9371). The claim is the result of the shutdown of the NRU reactor in Chalk River, Ontario. The NRU reactor was off-line from May 2009 until August 2010 due to a "heavy water" leak in the reactor vessel. The defendant answered the complaint on January 21, 2011, denying substantially all of the allegations, presenting certain defenses and requesting dismissal of the case with costs and disbursements. Discovery has commenced and is continuing. We cannot be certain what amount, if any, or when, if ever, we will be able to recover for business interruption losses related to this matter.

Item 4. Mine Safety Disclosures

Not applicable

PART II

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

Market and Dividend Information

Our outstanding common stock is privately held and there is no established public trading market for our common stock. There is one stockholder of record of our common stock as of December 31, 2013.

Unregistered Sales of Equity Securities

We sold no equity securities during the year ended December 31, 2013.

Securities Authorized for Issuance Under Equity Compensations Plans

See "Item 12—Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters—Securities Authorized for Issuance Under Equity Compensation Plans."

Item 6. Selected Financial Data

Basis of Financial Information

Following our purchase of the medical imaging business from Bristol-Myers Squibb Company, or BMS, with the financial sponsorship of Avista on January 8, 2008 (the "Acquisition"), our audited financial statements were prepared at the Lantheus Intermediate level rather than at the Lantheus level due to covenants in our financial arrangements undertaken in connection with the Acquisition.

Non-GAAP Financial Measures

EBITDA and Adjusted EBITDA and the ratios related thereto, or our EBITDA Measures, as defined below and presented in this annual report, are supplemental measures of our performance that are not required by, or presented in accordance with, generally accepted accounting principles in the United States, or GAAP. They are not measurements of our financial performance under GAAP and should not be considered as alternatives to net income (loss) or any other performance measures derived in accordance with GAAP or as alternatives to cash flow from operating activities as measures of our liquidity.

Our EBITDA Measures may not be comparable to similarly titled measures of other companies and are not measures of performance calculated in accordance with GAAP. We have included information concerning our EBITDA Measures in this annual report because we believe that such information is used by certain investors as one measure of a company's historical performance. Furthermore, certain financial ratios included in our debt covenants are based on EBITDA as defined in the debt agreements. See Note 10, "Financing Arrangements."

Our EBITDA Measures have limitations as analytical tools, and you should not consider them in isolation, or as a substitute for analysis of our operating results or cash flows as reported under GAAP. Some of these limitations are:

- they do not reflect our cash expenditures, or future requirements, for capital expenditures or contractual commitments;
- they do not reflect changes in, or cash requirements for, our working capital needs;
- they do not reflect the significant interest expense or the cash requirements necessary to service interest or principal payments on our debt;

- although depreciation is a non-cash charge, the assets being depreciated will often have to be replaced in the future, and our EBITDA Measures do not reflect any cash requirements for such replacements;

- they are not adjusted for all non-cash income or expense items that are reflected in our statements of cash flows; and

- other companies in our industry may calculate these measures differently than we do, limiting their usefulness as comparative measures.

Because of these limitations, our EBITDA Measures should not be considered as measures of discretionary cash available to us to invest in the growth of our business. We compensate for these limitations by relying primarily on our GAAP results and using our EBITDA Measures only for supplemental purposes. Please see the consolidated financial statements included elsewhere in this annual report for our GAAP results.

Selected Financial Data

The following table sets forth certain selected consolidated financial data for Lantheus Intermediate, our parent company and a guarantor of the Notes, as of and for the fiscal years ended December 31, 2013, 2012, 2011, 2010 and 2009, which have been derived from the audited consolidated financial statements of Lantheus Intermediate. See "—Basis of Financial Information."

The results indicated below and elsewhere in this annual report are not necessarily indicative of our future performance. You should read this information together with "Item 7—Management's

Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and related notes included in Item 8 of this annual report.

	Year Ended December 31,				
	2013	2012	2011	2010	2009
	(dollars in thousands)				
Statement of Comprehensive (Loss) Income Data:					
Total revenues	$ 283,672	$ 288,105	$ 356,292	$ 353,956	$ 360,211
Cost of goods sold	206,311	211,049	255,466	204,006	184,844
Loss on firm purchase commitment	—	1,859	5,610	—	—
General and administrative expenses	33,159	32,520	32,057	30,042	35,430
Sales and marketing expenses	35,227	37,437	38,689	45,384	42,337
Research and development expense	30,459	40,604	40,945	45,130	44,631
Proceeds from manufacturer	(8,876)	(34,614)	—	—	—
Impairment on land	6,406	—	—	—	—
Operating (loss) income	(19,014)	(750)	(16,475)	29,394	52,969
Interest expense	(42,915)	(42,014)	(37,658)	(20,395)	(13,458)
Loss on early extinguishment of debt	—	—	—	(3,057)	—
Interest income	104	252	333	179	73
Other income (expense), net	1,161	(44)	1,429	1,314	2,720
Income (loss) before income taxes	(60,664)	(42,556)	(52,371)	7,435	42,304
Provision (benefit) for income taxes	1,014	(555)	84,098	2,465	21,952
Net (loss) income	$ (61,678)	$ (42,001)	$ (136,469)	$ 4,970	$ 20,352
Statement of Cash Flows Data:					
Net cash flows provided by (used in):					
Operating activities	$ (15,678)	$ 523	$ 22,420	$ 26,317	$ 95,783
Investing activities	(3,483)	(8,145)	(7,694)	(8,550)	(38,351)
Financing activities	5,535	(2,039)	(6,991)	(17,550)	(49,102)
Other Financial Data:					
EBITDA(1)	$ 6,789	$ 26,815	$ 16,832	$ 62,037	$ 96,214
Adjusted EBITDA(1)	61,664	59,070	80,084	85,228	104,060
Capital expenditures	5,010	7,920	7,694	8,335	8,856
Balance Sheet Data (at period end):					
Cash and cash equivalents	$ 16,669	$ 31,595	$ 40,607	$ 33,006	$ 31,480
Total assets	259,385	322,926	358,804	495,881	492,543
Total liabilities	496,473	497,279	492,007	342,447	181,964
Current portion of long-term debt	—	—	—	—	30,000
Total long-term debt, net	399,037	398,822	398,629	250,000	63,649
Total stockholder's (deficit) equity	(237,088)	(174,353)	(133,203)	153,434	310,579

(1) EBITDA is defined as net (loss) income plus interest, income taxes, depreciation and amortization. EBITDA is a measure used by management to measure operating performance. Adjusted EBITDA is defined as EBITDA, further adjusted to exclude unusual items and other adjustments required or permitted in calculating Adjusted EBITDA under the indenture governing the Company's notes and the credit agreement for the Company's revolving credit facility. Adjusted EBITDA is also used by management to measure operating performance and by investors to measure a company's ability to service its debt and meet its other cash needs. Management believes that the inclusion of the adjustments to EBITDA applied in presenting Adjusted EBITDA are appropriate to provide additional information to investors about the Company's performance across reporting periods on

a consistent basis by excluding items that it does not believe are indicative of its core operating performance. See "—Non-GAAP Financial Measures."

The following table provides a reconciliation of our net (loss) income to EBITDA and Adjusted EBITDA for the periods presented:

	Year Ended December 31,				
	2013	2012	2011	2010	2009
	(dollars in thousands)				
Net (loss) income	$ (61,678)	$ (42,001)	$ (136,469)	$ 4,970	$ 20,352
Interest expense, net	42,811	41,762	37,325	20,216	13,385
Provision for income taxes(a)	(127)	(901)	82,718	1,215	20,392
Depreciation and amortization	25,783	27,955	33,258	35,636	42,085
EBITDA	6,789	26,815	16,832	62,037	96,214
Non-cash stock-based compensation	578	1,240	(969)	1,634	1,209
Loss on early extinguishment of debt	—	—	—	3,057	—
Legal fees(b)	660	1,455	2,017	—	—
Loss on firm purchase commitment(c)	—	1,859	5,610	—	—
Asset write-off(d)	28,349	13,095	52,973	14,084	4,125
Severance and recruiting costs(e)	5,239	1,761	1,995	1,001	—
Sponsor fee and other(f)	1,457	1,042	1,020	1,090	1,060
New manufacturer costs(g)	4,164	8,945	606	1,816	910
Ablavar launch costs(h)	—	—	—	509	542
Run-rate savings(i)	14,428	2,858	—	—	—
Adjusted EBITDA	$ 61,664	$ 59,070	$ 80,084	$ 85,228	$ 104,060

(a) Represents provision for income taxes, less tax indemnification associated with an agreement with BMS, and, in 2011, includes the establishment of a full valuation allowance against the U.S. deferred tax assets.

(b) Represents legal services incurred in connection with our business interruption claim associated with the NRU reactor shutdown in 2009 to 2010.

(c) Represents a loss associated with a portion of the committed purchases of Ablavar that we do not believe we will be able to sell prior to expiration.

(d) Represents non-cash losses incurred associated with the write-down of land, intangible assets, inventory and write-off of long-lived assets. The 2013 amount consists primarily of a $6.4 million write-down of land, a $15.4 million impairment charge on the Cardiolite trademark intangible asset, a $1.7 million impairment charge on a customer relationship intangible asset and a $1.6 million inventory write-down related to Ablavar. The 2012 amount consists primarily of a $10.6 million inventory write-down related to Ablavar. The 2011 amount consists primarily of a $25.8 million inventory write-down related to Ablavar and a $23.5 million impairment charge to adjust the carrying value of the Ablavar patent portfolio asset to its fair value of zero. The 2010 amount consists primarily of a $10.9 million inventory write-down related to Ablavar. The 2009 amount is primarily

related to the write-down of accessories related to our TechneLite product as a result of the global Moly shortage and Cardiolite inventory acquired from BMS.

(e) In 2013, 2012 and 2011, consists of severance and recruitment costs related to employees, executives and directors. In 2010, consists of severance costs relating to one of our executive officers and a work force reduction in the fourth quarter.

(f) Represents annual sponsor monitoring fee and related expenses, and certain non-recurring charges related to a customer relationship.

(g) Represents internal and external costs associated with establishing new manufacturing sources for our commercial and clinical candidate products.

(h) Represents costs associated with the launch of Ablavar.

(i) Represents run-rate cost savings, operating expense reductions and other expense and cost-saving synergies realized or expected to be taken (calculated on a pro forma basis).

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

The following discussion and analysis of our financial condition and results of operations should be read together with "Item 6—Selected Financial Data" and the consolidated financial statements and the related notes included in Item 8 of this annual report. This discussion contains forward- looking statements, based on current expectations and related to future events and our future financial performance, that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of many factors, including those set forth under "Item 1A—Risk Factors" and "Cautionary Note Regarding Forward-Looking Statements."

Overview

We are a global leader in developing, manufacturing and distributing innovative diagnostic medical imaging agents and products that primarily assist clinicians in the diagnosis of cardiovascular diseases. Our agents are routinely used to diagnose coronary artery disease, congestive heart failure and stroke, peripheral vascular disease and other diseases. Clinicians use our imaging agents and products across a range of imaging modalities, including nuclear imaging, echocardiography and magnetic resonance imaging, or MRI. We were founded in 1956 as New England Nuclear Corporation and purchased by E. I. du Pont de Nemours and Company in 1981. We were subsequently acquired by BMS, as part of its acquisition of DuPont Pharmaceuticals in 2001. On January 8, 2008, Avista purchased the medical imaging business from BMS for an aggregate purchase price of $518.7 million, and the medical imaging business is now known as LMI.

Our commercial products are used by nuclear physicians, cardiologists, radiologists, internal medicine physicians, technologists and sonographers working in a variety of clinical settings. We sell our products to radiopharmacies, hospitals, clinics, group practices, integrated delivery networks, group purchasing organizations and, in certain circumstances, wholesalers.

We market our products globally and have operations in the United States, Puerto Rico, Canada and Australia and distribution relationships in Europe, Asia Pacific and Latin America.

Our Products

Our principal products include the following:

DEFINITY is an ultrasound contrast agent used in ultrasound exams of the heart, also known as echocardiography exams. DEFINITY contains perflutren-containing lipid microspheres and is indicated in the United States for use in patients with suboptimal echocardiograms to assist in imaging the left

ventricular chamber and left endocardial border of the heart in ultrasound procedures. We launched DEFINITY in 2001, and its last patent in the United States will currently expire in 2021 and in numerous foreign jurisdictions in 2019.

TechneLite is a Technetium-based generator which provides the essential nuclear material used by radiopharmacies to radiolabel Cardiolite and other Technetium-based radiopharmaceuticals used in nuclear medicine procedures. TechneLite uses Moly as its main active ingredient.

Xenon is a radiopharmaceutical inhaled gas used to assess pulmonary function and also for imaging blood flow, particularly in the brain. Xenon is manufactured by a third party and packaged in-house.

Cardiolite is a technetium-based radiopharmaceutical imaging agent used in myocardial perfusion imaging ("MPI") procedures to detect coronary artery disease using SPECT. Cardiolite was approved by the FDA in 1990, and its market exclusivity expired in July 2008.

In the United States, our nuclear imaging products, including TechneLite and Cardiolite, are primarily distributed through over 350 radiopharmacies that are controlled by or associated with Cardinal, GE Healthcare, UPPI and Triad. A small portion of our nuclear imaging product sales in the United States are made through our direct sales force to hospitals and clinics that maintain their own in-house radiopharmaceutical capabilities. Sales of our contrast agent, DEFINITY, are made through our sales team of approximately 77 employees. Outside the United States, we own five radiopharmacies in Canada and two radiopharmacies in each of Puerto Rico and Australia. We also maintain a direct sales force in each of these countries. In the rest of the world, we rely on third-party distributors to market, distribute and sell our nuclear imaging and contrast agent products, either on a country-by-country basis or on a multi-country regional basis.

Over the last three years, we experienced a mix shift from historically strong products such as Cardiolite and TechneLite to DEFINITY and Xenon, which generate higher gross margins. We expect this trend to continue in the near term.

The following table sets forth our revenue derived from our principal products:

	Year Ended December 31,					
(dollars in thousands)	2013	%	2012	%	2011	%
DEFINITY	$ 78,094	27.5	$ 51,431	17.9	$ 68,503	19.2
TechneLite	92,195	32.5	114,249	39.7	131,241	36.9
Xenon	32,125	11.3	30,075	10.4	26,761	7.5
Cardiolite	26,137	9.2	34,995	12.1	66,127	18.6
Other	43,258	15.3	46,604	16.2	53,130	14.9
Net product revenues	271,809	95.8	277,354	96.3	345,762	97.1
License and other revenues	11,863	4.2	10,751	3.7	10,530	2.9
Total revenues	$ 283,672	100.0	$ 288,105	100.0	$ 356,292	100.0

Included in Cardiolite revenue are sales of branded Cardiolite and generic sestamibi, some of which we produce and some of which we procure from third parties.

Key Factors Affecting Our Results

Our business and financial performance have been, and continue to be, affected by the following:

Inventory Supply

We obtain a substantial portion of our products from third party suppliers. Historically, we relied on BVL as our sole manufacturer of DEFINITY and Neurolite and one of two manufacturers of our Cardiolite product supply. Following extended operational and regulatory challenges at its Bedford, Ohio facility, as of November 15, 2013, BVL ceased manufacturing for us any DEFINITY, Cardiolite or Neurolite. BVL has since released for commercial distribution all of our remaining manufactured product that was awaiting BVL quality approval.

Following extensive technology transfer activities, we currently rely on JHS as our sole source manufacturer of DEFINITY. We have additional ongoing technology transfer activities at JHS for our Neurolite and Cardiolite product supply. In the meantime, we have no other currently active supplier of Neurolite, and our Cardiolite product supply is manufactured by a single manufacturer. Based on our current projections, we believe that we will have sufficient supply of DEFINITY from JHS to meet expected demand and sufficient Cardiolite product supply from our current supplier to meet expected demand. We also currently anticipate that we will have sufficient BVL-manufactured Neurolite supply for the U.S. market to last until Neurolite technology transfer and U.S. regulatory approval at JHS are completed. Currently, some regulatory authorities prohibit us from marketing products previously manufactured by BVL, and JHS has not yet obtained approval of such regulatory authorities that would permit us to market products manufactured by JHS. Accordingly, until such regulatory approvals have been obtained, our international business, results of operations, financial condition, and cash flows will continue to be adversely affected.

We are also currently working to secure additional alternative suppliers for our key products as part of our ongoing supply chain diversification strategy. For example, on November 12, 2013, we entered into a Manufacturing and Supply Agreement with Pharmalucence to manufacture and supply DEFINITY. However, we are uncertain about the timing of the completion of the technology transfer contemplated by the Pharmalucence agreement and whether the Pharmalucence arrangement or any other arrangements could provide meaningful quantities of product. See "Item 1A—Risk Factors —Our dependence upon third parties for the manufacture and supply of a substantial portion of our products could prevent us from delivering our products to our customers in the required quantities, within the required timeframe, or at all, which could result in order cancellations and decreased revenues."

Growth of DEFINITY

We believe the market opportunity for our contrast agent, DEFINITY, remains significant. As we better educate the physician and healthcare provider community about the benefits and risks of this product, we believe we will experience further penetration of suboptimal echocardiograms. Prior to the supply issues with BVL in 2012, sales of DEFINITY continually increased year over year since June 2008, when we were able to have the boxed warning on DEFINITY modified. Unit sales of DEFINITY had decreased substantially in late 2007 and early 2008 as a result of an FDA request in October 2007 that all manufacturers of ultrasound contrast agents add a boxed warning to their products to notify physicians and patients about potentially serious safety concerns or risks posed by the products. However, in May 2008, the boxed warning was modified by the FDA in response to the substantial advocacy efforts of prescribing physicians. In October 2011, we received FDA approval of further modifications to the DEFINITY label, including: further relaxing the boxed warning; eliminating the sentence in the Indication and Use section "The safety and efficacy of DEFINITY with exercise stress or pharmacologic stress testing have not been established" (previously added in October 2007 in connection with the imposition of the box warning); and including summary data from the

post-approval CaRES (Contrast echocardiography Registry for Safety Surveillance) safety registry and the post-approval pulmonary hypertension study. However, as discussed above under "InventorySupply", the future growth of our DEFINITY sales will be dependent on the ability of JHS to continue to manufacture and release DEFINITY on a timely and consistent basis and our ability to continue to increase segment penetration for DEFINITY in suboptimal echocardiograms. See "Item 1A—Risk Factors—The growth of our business is substantially dependent on increased segment penetration for DEFINITY in suboptimal echocardiograms."

Global Moly Supply

Historically, our largest supplier of Moly, our highest volume raw material, has been Nordion, which has relied on the NRU reactor in Chalk River, Ontario. This reactor was off-line from May 2009 until August 2010 due to a heavy water leak in the reactor vessel. As part of the conditions for the relicensing of the NRU reactor through October 2016, the Canadian government has asked AECL to shut down the reactor for at least four weeks at least once a year for inspection and maintenance. The 2014 shutdown period is currently scheduled to run from mid-April 2014 to mid-May 2014. We currently believe that we will be able to source all of our standing order customer demand for Moly during this time period from our other suppliers. However, because Xenon is a by-product of the Moly production process and is currently captured only by NRU, during this shutdown period, we do not currently believe that we will be able to supply all of our standing order customer demand for Xenon during the outage. We currently have a supply agreement with Nordion that runs through December 31, 2015, subject to certain early termination provisions (that cannot be effective prior to October 1, 2014) and supply agreements with NTP of South Africa, ANSTO of Australia, and IRE of Belgium, each running through December 31, 2017.

During the 2009 to 2010 period when the NRU reactor was off-line, instability in the global supply of Moly and supply shortages resulted in substantial volatility in the cost of Moly in comparison to historical costs. We were able to pass some of these Moly cost increases on to our customers through our customer contracts. With less Moly, we manufactured fewer TechneLite generators for radiopharmacies and hospitals to make up unit doses of Cardiolite, resulting in decreased sales of TechneLite and Cardiolite in favor of other diagnostic modalities that did not use Moly during the 2009 to 2010 period when the NRU reactor was off-line.

Demand for TechneLite

Since the global Moly supply shortage in 2009 to 2010, we have experienced reduced demand for TechneLite generators from pre-shortage levels even though volume has increased in absolute terms from shortage levels following the return of our normal Moly supply in August 2010. We are generally able to pass these Moly cost increases on to our customers pursuant to our customer contracts. However, we do not know if overall industry demand for technetium will ever return to pre-shortage levels.

We believe that TechneLite unit volume has not returned to pre-shortage levels for a number of reasons, including: (i) changing staffing and utilization practices in radiopharmacies, which have resulted in increased efficiencies in the preparation of unit doses of Technetium-based radiopharmaceuticals; (ii) shifts to alternative diagnostic imaging modalities during the 2009 to 2010 Moly supply shortage, which have not returned toTechnetium-based procedures; and (iii) decreased amounts of technetium being used in unit-doses of Technetium-based radiopharmaceuticals due to increased concerns about patient radiation dose exposure. We also believe that there has been an overall decline in the MPI study market because of decreased levels of patient studies during the Moly shortage period that have not returned to pre-shortage levels and industry-wide cost-containment initiatives that have resulted in a transition of where imaging procedures are performed from free

standing imaging centers to the hospital setting. We expect these factors will continue to affect technetium demand in the future.

In November 2013, the Centers for Medicare and Medicaid Services, or CMS, announced the 2014 final Medicare payment rules for hospital outpatient settings and physician offices. Under the final rules, CMS is again reimbursing an incremental $10 for each technetium dose produced from a generator for a diagnostic procedure in a hospital outpatient setting that is reimbursed by Medicare if such technetium dose is produced from a generator containing Moly sourced from at least 95 percent low enriched uranium, or LEU. We currently understand that CMS expects to continue this incentive program for the foreseeable future. In January 2013, we began to offer a TechneLite generator which contains Moly sourced from at least 95 percent LEU and which satisfies the requirements for reimbursement under this incentive program. Although demand for LEU generators appears to be growing, it is too early to tell whether this incremental reimbursement for LEU Moly generators will result in a material increase in our generator sales.

Cardiolite Competitive Pressures

Cardiolite's market exclusivity expired in July 2008. In September 2008, the first of several competing generic products to Cardiolite was launched. With continued pricing and unit volume pressures from generic competitors, we also sell our Cardiolite product in the form of a generic sestamibi at the same time as we continue to sell branded Cardiolite throughout the MPI segment. We believe this strategy of selling branded as well as generic sestamibi has slowed our market share loss by having multiple sestamibi offerings that are attractive in terms of brand, as well as price.

In addition to pricing and unit volume pressures due to generics, our Cardiolite products have also faced a volume decline in the MPI segment due to a change in professional society appropriateness guidelines, ongoing reimbursement pressures, the limited availability of Moly during the NRU reactor shutdown, the limited availability of Cardiolite products to us during the BVL outage, and the increase in use of other diagnostic modalities as a result of a shift to more available imaging agents and modalities. We believe the continuing effects from the BVL outage and continued generic competition will result in further market share and margin erosion for our Cardiolite products.

These factors have impacted the carrying value of our Cardiolite trademark intangible asset as further described in "Gross Profit".

Research and Development Expenses

To remain competitive in the marketplace, we have historically made substantial investments in new product development. As a result, the positive contributions of those internally funded research and development programs have been a key factor in our historical results and success. In March 2013, we began to implement a strategic shift in how we fund our important R&D programs. We have reduced our internal R&D resources while at the same time we are seeking to engage strategic partners to assist us in the further development and commercialization of our important development candidates, including flurpiridaz F 18, 18F LMI 1195 and LMI 1174. As a result of this shift, we are seeking strategic partners to assist us with the further development and possible commercialization of flurpiridaz F18. For our other two important development candidates, 18F LMI 1195 and LMI 1174, we will also seek to engage strategic partners to assist us with the ongoing development activities relating to these agents.

Ablavar

The Ablavar product was commercially launched in January 2010. The revenues for this product through December 31, 2013 have notbeen significant. In October 2011, we entered into Amendment No. 2 to the Supply Agreement dated as of April 6, 2009 between Mallinckrodt and us. The Ablavar

agreement provided for the manufacture and supply by Mallinckrodt of Ablavar API and finished drug product for us. Among other things, Amendment No. 2 (i) extended the term of the Ablavar agreement from September 30, 2012 until September 30, 2014, (ii) reduced the amount of API Mallinckrodt is obligated to supply to us and we are obligated to purchase from Mallinckrodt over the term of the Ablavar agreement and (iii) increased the amount of finished drug product Mallinckrodt is obligated to supply to us and we are obligated to purchase from Mallinckrodt over the term of the Ablavar agreement. As a result of Amendment No. 2, our aggregate future purchase obligations of LMI under the Ablavar agreement were reduced from approximately $33.8 million in the aggregate to approximately $20.9 million.

During 2011, we recorded an inventory write-down to cost of goods sold of $25.8 million, which represented the cost of Ablavar finished good product and API that we did not believe we would be able to sell prior to its expiration. We completed updated sales forecasts for Ablavar based on actual sales in consideration of our supply agreement for API and finished good product. Based on the updated sales forecasts, coupled with the aggregate six-year shelf life of API and finished goods, we also recorded in cost of goods sold a loss of $5.6 million for the loss associated with the portion of the committed purchases of Ablavar product that we did not believe we would be able to sell prior to its expiration. Additionally, we determined that the write-down of Ablavar inventory during 2011 represented an event that warranted assessment of the intellectual property associated with Ablavar for its recoverability and concluded that the intellectual property was not recoverable and in 2011, recorded in cost of goods sold an impairment of this intangible asset of $23.5 million.

During 2012, we implemented a reduction in the sales force dedicated to Ablavar. We performed an analysis of expected future sales of our Ablavar product, based on an updated sales forecast reflecting the reduction in sales force personnel dedicated to Ablavar, and recorded to cost of goods sold an additional inventory write-down of $10.6 million and a reserve of $1.9 million associated with the portion of the committed purchases of Ablavar product that we did not believe we would sell prior to expiry.

During the fourth quarter of 2013, we updated our strategic plan, which had a significant impact on the Ablavar sales forecast. We performed an inventory reserve analysis using expected future Ablavar sales and recorded an additional write-down of $1.6 million related to the API that we would not be able to convert or be able to sell prior to its expiry as of December 31, 2013.

After giving effect to these adjustments, as of December 31, 2013 and 2012, we have a total of $1.5 million and $2.8 million, respectively, of Ablavar inventory on hand. At December 31, 2013 and 2012, we had approximately $1.8 million and $9.4 million, respectively, of remaining committed Ablavar purchase obligations, of which $1.3 million and $7.5 million, respectively, is included in our accrued contract loss. In 2013, we have transitioned the sales and marketing efforts for Ablavar from our direct sales force to our customer service team in order to allow our direct sales force to drive our DEFINITY sale growth. If we do not meet our current sales goals or cannot sell the product we have committed to purchase prior to its expiration, we could incur additional inventory write-downs and/or losses on our purchase commitments.

Segments

We report our results of operations in two segments: United States and International.

Operating Results

The following have been included in our results as of and for the year ended December 31, 2013:

- increased revenues and segment penetration for DEFINITY in the suboptimal echocardiogram segment as a result of sustained availability of product supply from BVL and JHS;

- decreased revenues due to limited supply of Neurolite product inventory as a result of the BVL production challenges, and a higher cost of goods sold for Cardiolite because of more expensive sourcing from our current manufacturer of Cardiolite and from our third party manufacturers of generic sestamibi;
- decreased revenues for TechneLite due to a contract that took effect at the beginning of 2013 with a significant customer that reduced unit pricing;
- decreased revenues resulting from continued generic competition to Cardiolite;
- under-absorption of manufacturing overhead due to lower production and low lot yields resulting from the continued supply challenges with BVL during 2013;
- the impact of certain cost saving actions taken in March 2013 as we continue to implement a strategic shift in how we fund our research and development ("R&D") programs;
- lower material costs incurred for the production of TechneLite;
- an impairment charge on certain excess land held for sale;
- an impairment charge on the Cardiolite trademark intangible asset;
- an impairment charge on customer relationship intangible assets; and
- a total of $8.9 million received from BVL to compensate us for business losses.

During the year ended December 31, 2013, we incurred a net loss of $61.7 million and an operating loss of $19.0 million. We have developed plans and taken steps that we believe will enable us to strengthen our operations and meet our operating and financing requirements. In March 2013, we began to implement a strategic shift in how we fund our important R&D programs. We have reduced our internal R&D resources while at the same time seeking to engage strategic partners to assist us in the further development and commercialization of our important development candidates, including flurpiridaz F 18, 18F LMI 1195 and LMI 1174.

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Years Ended December 31, 2013, 2012 and 2011

(dollars in thousands)	December 31, 2013	2012	2011	2013 compared to 2012 Change $	Change %	2012 compared to 2011 Change $	Change %
Revenues							
Net product revenues	$271,809	$277,354	$ 345,762	$ (5,545)	(2.0)%	$(68,408)	(19.8)%
License and other revenues	11,863	10,751	10,530	1,112	10.3	221	2.1
Total revenues	283,672	288,105	356,292	(4,433)	(1.5)	(68,187)	(19.1)
Cost of goods sold	206,311	211,049	255,466	(4,738)	(2.2)	(44,417)	(17.4)
Loss on firm purchase commitment	—	1,859	5,610	(1,859)	(100.0)	(3,751)	(66.9)
Total cost of goods sold	206,311	212,908	261,076	(6,597)	(3.1)	(48,168)	(18.4)
Gross profit	77,361	75,197	95,216	2,164	2.9	(20,019)	(21.0)
Operating expenses							
General and administrative expenses	33,159	32,520	32,057	639	2.0	463	1.4
Sales and marketing expenses	35,227	37,437	38,689	(2,210)	(5.9)	(1,252)	(3.2)
Research and development expenses	30,459	40,604	40,945	(10,145)	(25.0)	(341)	(0.8)
Proceeds from manufacturer	(8,876)	(34,614)	—	25,738	(74.4)	(34,614)	(100.0)
Impairment on land	6,406	—	—	6,406	100.0	—	—
Total operating expenses	96,375	75,947	111,691	20,428	26.9	(35,744)	(32.0)
Operating loss	(19,014)	(750)	(16,475)	(18,264)	2,435.2	15,725	95.4
Interest expense	(42,915)	(42,014)	(37,658)	(901)	2.1	(4,356)	11.6
Interest income	104	252	333	(148)	(58.7)	(81)	(24.3)
Other income (expense), net	1,161	(44)	1,429	1,205	2,738.6	(1,473)	(103.1)
Loss before income taxes	(60,664)	(42,556)	(52,371)	(18,108)	42.6	9,815	18.7
Provision (benefit) for income taxes	1,014	(555)	84,098	1,569	282.7	(84,653)	(100.7)
Net loss	(61,678)	(42,001)	(136,469)	(19,677)	46.8	94,468	69.2
Foreign currency translation, net of taxes	(1,729)	964	(337)	(2,693)	(279.4)	1,301	386.1
Total							

comprehensive loss	$ (63,407)	$ (41,037)	$(136,806)	$(22,370)	54.5%	$ 95,769	70.0%

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Comparison of the Years Ended December 31, 2013, 2012, and 2011

Revenues

Revenues are summarized as follows:

(dollars in thousands)	December 31, 2013	2012	2011	2013 compared to 2012 Change $	Change %	2012 compared to 2011 Change $	Change %
United States							
DEFINITY	$ 76,539	$ 50,377	$ 67,442	$ 26,162	51.9%	$(17,065)	(25.3)%
TechneLite	80,609	101,049	114,833	(20,440)	(20.2)	(13,784)	(12.0)
Cardiolite	8,612	13,851	39,214	(5,239)	(37.8)	(25,363)	(64.7)
Xenon	32,086	30,048	26,728	2,038	6.8	3,320	12.4
Other currently marketed products	3,930	3,935	9,618	(5)	(0.1)	(5,683)	(59.1)
Total U.S. net product revenues	201,776	199,260	257,835	2,516	1.3	(58,575)	(22.7)
License and other revenues	11,863	10,751	10,530	1,112	10.3	221	2.1
Total U.S. revenues	$213,639	$210,011	$268,365	$ 3,628	1.7%	$(58,354)	(21.7)%
International							
DEFINITY	$ 1,555	$ 1,054	$ 1,061	$ 501	47.5%	$ (7)	(0.7)%
TechneLite	11,586	13,200	16,408	(1,614)	(12.2)	(3,208)	(19.6)
Cardiolite	17,525	21,144	26,913	(3,619)	(17.1)	(5,769)	(21.4)
Xenon	39	27	33	12	44.4	(6)	(18.2)
Other currently marketed products	39,328	42,669	43,512	(3,341)	(7.8)	(843)	(1.9)
Total International net product revenues	$ 70,033	$ 78,094	$ 87,927	$ (8,061)	(10.3)	$ (9,833)	(11.2)
Net product revenues	$271,809	$277,354	$345,762	$ (5,545)	(2.0)%	$(68,408)	(19.8)%
License and other revenues	11,863	10,751	10,530	1,112	10.3	221	2.1
Total revenues	$283,672	$288,105	$356,292	$ (4,433)	(1.5)%	$(68,187)	(19.1)%

2013 v. 2012

Total revenues decreased $4.4 million, or 1.5%, to $283.7 million in the year ended December 31, 2013, as compared to $288.1 million in the year ended December 31, 2012. U.S. segment revenue increased $3.6 million, or 1.7%, to $213.6 million in the same period, as compared to $210.0 million in the prior year. The increase of $3.6 million in U.S. segment revenue during the year ended December 31, 2013, as compared to the prior year period is primarily driven by a $26.2 million increase in DEFINITY revenue given product supply shortages that impacted the prior year period. Offsetting this increase was a decrease in TechneLite revenues of $20.4 million over the prior year period as a result of: (i) a contract that took effect at the beginning of 2013 with a significant customer that reduced unit pricing, resulting in lower revenues of $16.9 million as compared to the prior year period; (ii) a decline in a significant customer's market share which lowered its share of product purchases from us and decreased revenues by $5.7 million; and (iii) loss of a customer resulting in lower revenue of $1.3 million. Offsetting these decreases in TechneLite revenues was a higher share volume with a

group of customers resulting in a $3.3 million increase in sales over the prior year period. Additionally, Cardiolite revenues were $5.2 million lower than the prior year period as a result of a contract with a significant customer that reduced unit pricing and volume commitments.

The International segment revenues decreased $8.1 million, or 10.3%, to $70.0 million in the year ended December 31, 2013, as compared to $78.1 million in the year ended December 31, 2012. The

decrease of $8.1 million in the International segment revenue during the year ended December 31, 2013, as compared to the prior year period, is due in part to a $3.3 million decrease in other marketed products. This decrease is the result of a new contract with an existing customer, which altered the timing of shipments and reflected a lower selling price, as well as an unfavorable foreign exchange impact in the amount $1.9 million for the year ended December 31, 2013 versus the prior year. In addition, Cardiolite sales decreased by $3.6 million mainly due to competitive pressures in international markets, as well as $0.7 million in unfavorable foreign exchange. TechneLite sales decreased by $1.6 million due to reduced selling prices in Canada, lower sales volume in the Latin America and Asia Pacific markets as well as $0.3 million in unfavorable foreign exchange. Overall, total unfavorable foreign exchange totaled $2.9 million when compared to the prior period.

2012 v. 2011

Total revenues decreased $68.2 million, or 19.1%, to $288.1 million in the year ended December 31, 2012, ascompared to $356.3 million in the year ended December 31, 2011. U.S. segment revenue decreased $58.4 million, or 21.7%, to $210.0 million in the same period, as compared to $268.4 million in the prior year. The decrease in the U.S. segment over the prior year is primarily due to the BVL production challenges impacting our supply of DEFINITY, Cardiolite, and Neurolite, which represented $35.5 million of unit volume revenue decreases. We also experienced lower pricing on Cardiolite and DEFINITY products in 2012, which represented $11.1 million of the decrease in U.S. segment revenues. We experienced lower TechneLite revenues due to the loss of a significant customer during the second quarter of 2012, resulting in lower revenues of $8.0 million. A decline in a significant customer's market share resulted in lower revenues of $4.1 million in 2012. Offsetting these decreases were increases in revenue for the U.S. segment of Xenon, with price increases of $5.1 million offset in part by lower unit volumes of $1.8 million.

The International segment revenues decreased $9.8 million, or 11.2%, to $78.1 million in the year ended December 31, 2012, as compared to $87.9 million in the year ended December 31, 2011. The decrease was primarily due to the BVL production challenges impacting our supply of Cardiolite and Neurolite in the international markets and TechneLite decreases due to lower unit volume and pricing in certain markets.

Rebates and Allowances

Estimates for rebates and allowances represent our estimated obligations under contractual arrangements with third parties. Rebate accruals and allowances are recorded in the same period the related revenue is recognized, resulting in a reduction to product revenue and the establishment of a liability which is included in accrued expenses. These rebates result from performance-based offers that are primarily based on attaining contractually specified sales volumes and growth, Medicaid rebate programs for certain products, administration fees of group purchasing organizations and certain distributor related commissions. The calculation of the accrual for these rebates and allowances is based on an estimate of the third party's buying patterns and the resulting applicable contractual rebate or commission rate(s) to be earned over a contractual period.

An analysis of the amount of, and change in, reserves is summarized as follows:

(in thousands)	Rebates	Allowances	Total
Balance, as of January 1, 2011	$ 910	$ 101	$ 1,011
Current provisions relating to revenues in current year	3,672	474	4,146
Adjustments relating to prior years' estimate	(116)	—	(116)
Payments/credits relating to revenues in current year	(2,617)	(441)	(3,058)
Payments/credits relating to revenues in prior years	(493)	(101)	(594)
Balance, as of December 31, 2011	1,356	33	1,389
Current provisions relating to revenues in current year	3,224	291	3,515
Adjustments relating to prior years' estimate	(145)	—	(145)
Payments/credits relating to revenues in current year	(2,232)	(223)	(2,455)
Payments/credits relating to revenues in prior years	(661)	(35)	(696)
Balance, as of December 31, 2012	1,542	66	1,608
Current provisions relating to revenues in current year	4,696	243	4,939
Adjustments relating to prior years' estimate	(21)	—	(21)
Payments/credits relating to revenues in current year	(3,438)	(220)	(3,658)
Payments/credits relating to revenues in prior years	(1,040)	(69)	(1,109)
Balance, as of December 31, 2013	$ 1,739	$ 20	$ 1,759

Sales rebates accrued were approximately $1.7 million and $1.5 million at December 31, 2013 and December 31, 2012, respectively. The increase in rebate provisions as compared to 2012 and 2011 is primarily related to the increase in DEFINITY revenues. In October 2010, we entered into a Medicaid Drug Rebate Agreement for certain of our products, which did not have a material impact on our results of operations in 2011, 2012 or 2013. If the demand for these products through the Medicaid program increases in the future, our rebates associated with this program could increase and could have a material impact on future results of operations.

Cost of Goods Sold

Cost of goods sold consists of manufacturing, distribution, intangible asset amortization and other costs related to our commercial products. In addition, it includes the write-off of excess and obsolete inventory.

Cost of goods sold is summarized as follows:

	December 31,			2013 compared to 2012		2012 compared to 2011	
(dollars in thousands)	2013	2012	2011	Change $	Change %	Change $	Change %
United States	$149,018	$156,098	$206,450	$(7,080)	(4.5)%	$(50,352)	(24.4)%
International	57,293	56,810	54,626	483	0.9	2,184	4.0
Total Cost of Goods Sold	$206,311	$212,908	$261,076	$(6,597)	(3.1)%	$(48,168)	(18.4)%

2013 v. 2012

Total cost of goods sold decreased $6.6 million, or 3.1%, to $206.3 million in the year ended December 31, 2013, as compared to $212.9 million in the year ended December 31, 2012. U.S. segment cost of goods sold decreased approximately $7.1 million, or 4.5%, to $149.0 million in same period, as compared to $156.1 million in the prior year period. The decrease in the U.S. segment cost of goods sold for the year ended December 31, 2013 over the prior year period is primarily due to $10.9 million of lower write-off as compared to the prior year related to the Ablavar product line. We also incurred lower cost of goods sold of $9.3 million for TechneLite over the prior period primarily due to lower material cost and lower unit volumes. Technology transfer costs decreased by $4.0 million related to JHS becoming an approved manufacturing site for DEFINITY by the FDA in the first quarter of 2013. Lower sales volume of Cardiolite contributed to lower cost of goods sold by $2.6 million. Offsetting these decreases was an increase in DEFINITY cost of goods sold of approximately $4.7 million primarily driven by an increase in units sold, an impairment charge of $15.4 million related to the Cardiolite trademark intangible asset and an increase of $2.1 million related to Neurolite technology transfer.

For the year ended December 31, 2013, the International segment cost of goods sold increased $0.5 million, or 0.9%, to $57.3 million, as compared to $56.8 million in the prior year period. The increase in the International segment was primarily due to an impairment charge on customer relationship intangible assets in Europe totaling $1.7 million, which was partially offset by favorable foreign exchange impact of $1.0 million, lower volume and lower cost of goods sold for certain products.

2012 v. 2011

Total cost of goods sold decreased $48.2 million, or 18.4%, to $212.9 million in the year ended December 31, 2012, as compared to $261.1 million in the year ended December 31, 2011. U.S. segment cost of goods sold decreased approximately $50.4 million, or 24.4%, to $156.1 million in same period, as compared to $206.5 million in the prior year period. The primary contributing factor to the decrease in the U.S. segment cost of goods sold was the prior period write-off for Ablavar intangible assets of $23.5 million and the decrease of $18.9 million in amounts recorded for Ablavar inventory write-down and contract loss reserves associated with Ablavar inventory purchase commitments. We also incurred lower TechneLite material costs of $12.6 million due to lower unit volumes and lower cost with our primary supplier beginning in November 2012. These decreases were partially offset by higher DEFINITY technology transfer costs of $4.9 million, take or pay losses of $4.3 million on purchase commitments for Moly (prior to a Moly supply contract amendment which changed purchase requirements from unit volume to percentage) and higher Cardiolite manufacturing costs of $1.5 million due to increased material expenses as a result of sourcing material from an alternate higher cost manufacturer due to the BVL outage.

For the year ended December 31, 2012, the International segment cost of goods sold increased $2.2 million, or 4.0%, to $56.8 million, as compared to $54.6 million in the prior year period. Cost of goods sold in our International segment increased primarily due to temporary increases in costs for third party sestamibi and a substitute product for Neurolite. These increases were partially offset by lower Cardiolite, Neurolite and TechneLite unit volumes in certain markets.

Gross Profit

(dollars in thousands)	December 31, 2013	2012	2011	2013 compared to 2012 Change $	Change %	2012 compared to 2011 Change $	Change %
United States	$64,621	$53,913	$61,915	$10,708	19.9%	$ (8,002)	(12.9)%
International	12,740	21,284	33,301	(8,544)	(40.1)	(12,017)	(36.1)
Total Gross Profit	$77,361	$75,197	$95,216	$ 2,164	2.9%	$(20,019)	(21.0)%

2013 v. 2012

Total gross profit increased $2.2 million, or 2.9%, to $77.4 million in the year ended December 31, 2013, as compared to $75.2 million in the year ended December 31, 2012. U.S. segment gross profit increased $10.7 million, or 19.9%, to $64.6 million, as compared to $53.9 million in the prior year period. The increase in the U.S. segment gross profit for the year ended December 31, 2013 over the prior year period is primarily due to an ongoing shift in mix among products, specifically a higher DEFINITY gross profit of approximately $25.3 million primarily due to an increase in sales volume and $4.0 million due to lower technology transfer cost related to JHS becoming an approved manufacturing site for DEFINITY by the FDA. In addition, gross profit improved due to a $10.9 million decrease in write-offs related to Ablavar. Offsetting these increases was a decrease in TechneLite gross margin of approximately $11.1 million over the prior period driven primarily by lower selling price and lower gross profit on Cardiolite due to an impairment charge of $15.4 million related to the Cardiolite trademark intangible asset and lower selling prices.

For the year ended December 31, 2013, the International segment gross profit decreased $8.5 million, or 40.1%, to $12.7 million, as compared to $21.3 million in the prior year period. Gross profit in our International segment decreased due to a new contract with an existing customer, which altered the timing of shipments and reflected a lower selling price, unfavorable changes in foreign exchange rates, lower sales due to competitive pressures in all markets and a $1.7 million impairment charge on customer relationship intangible assets.

2012 v. 2011

Total gross profit decreased $20.0 million, or 21.0%, to $75.2 million in the year ended December 31, 2012, as compared to $95.2 million in the year ended December 31, 2011. U.S. segment gross profit decreased $8.0 million, or 12.9%, to $53.9 million, as compared to $61.9 million in the prior year period. Gross profit in the U.S. segment decreased primarily due to lower profits of $40.9 million from Cardiolite, DEFINITY, and Neurolite caused by supply issues resulting from the BVL production challenges. We also experienced decreased profits of $5.5 million from TechneLite, driven by $4.3 million of take or pay losses on purchase commitments for Moly, $4.1 million in lower margins from lower unit sales, offset by $2.9 million in higher selling price given the customer mix. Additionally, we incurred increased DEFINITY technology transfer costs of $4.9 million and higher Cardiolite manufacturing costs of $1.5 million in 2012 due to increased material expenses as a result of sourcing material from an alternate higher cost manufacturer due to the BVL production challenges, contributing to a lower gross profit in comparison to the prior period. These decreases were partially offset by the prior period write-off for Ablavar intangible assets of $23.5 million and the decrease of $18.9 million in amounts recorded for Ablavar inventory write-down and contract loss reserves associated with Ablavar inventory purchase commitments and higher Xenon gross profit due to price increases of $5.1 million offset by lower unit volumes reducing gross profit by $2.0 million.

For the year ended December 31, 2012, the International segment gross profit decreased $12.0 million, or 36.1%, to $21.3 million, as compared to $33.3 million in the prior year period. Gross

profit in our International segment decreased due to lower Cardiolite and Neurolite unit sales volumes related to the product shortage issues resulting from the BVL production challenges, higher material expenses as we sourced material from alternate higher cost manufacturers and lower units sales volumes given competitive pressures in certain markets. These decreases were partially offset by higher profits from sales of Neurolite ligand, which was unaffected by the BVL production challenges.

General and Administrative

	December 31,			2013 compared to 2012		2012 compared to 2011	
(dollars in thousands)	2013	2012	2011	Change $	Change %	Change $	Change %
United States	$ 30,865	$ 30,192	$ 29,415	$ 673	2.2%	$ 777	2.6%
International	2,294	2,328	2,642	(34)	(1.5)	(314)	(11.9)
Total General and Administrative	$ 33,159	$ 32,520	$ 32,057	$ 639	2.0%	$ 463	1.4%

General and administrative expenses consist of salaries and other related costs for personnel in executive, finance, legal, information technology and human resource functions. Other costs included in general and administrative expenses are professional fees for information technology services, external legal fees, consulting and accounting services as well as bad debt expense, certain facility and insurance costs, including director and officer liability insurance.

2013 v. 2012

Total general and administrative expenses increased approximately $0.6 million, or 2.0%, to $33.2 million in the year ended December 31, 2013, as compared to $32.5 million in the year ended December 31, 2012. In the U.S. segment, general and administrative expenses increased $0.7 million, or 2.2%, to $30.9 million, as compared to $30.2 million in the prior year period. The increase was primarily due to additional variable compensation in the current period and severance expense from a reduction in workforce in the first quarter of 2013. Offsetting these increases were cost savings over the prior period through the renegotiation of certain information technology related contracts as support provided by certain vendors was reduced and reduced legal expense. In addition, compensation for performance-based awards was lower in the current period due to adjustments made based on the probability of achievement.

For the year ended December 31, 2013, general and administrative expenses in the International segment was consistent with the prior year period at $2.3 million as lower salaries and employee related expenses, which were driven by lower headcount, were offset by increased bad debt expense and increased recruiting fees.

2012 v. 2011

Total general and administrative expenses increased approximately $0.5 million, or 1.4%, to $32.5 million in the year ended December 31, 2012, as compared to $32.1 million in the year ended December 31, 2011. In the U.S. segment, general and administrative expenses increased $0.8 million, or 2.6%, to $30.2 million, as compared to $29.4 million in the prior year period. The increase was primarily due to a $0.9 million increase in stock compensation driven by the reversal of stock-based compensation expense in 2011 relating to the determination that the achievement of certain performance targets was no longer probable and current year modifications to stock option agreements. In addition, depreciation expense increased approximately $0.3 million over the prior year as a result of certain capital spending projects occurring in late 2011 and early 2012 related primarily to information technology improvements. Offsetting this increase was an overall reduction in costs associated with external support primarily related to information technology.

For the year ended December 31, 2012, general and administrative expenses in the International segment decreased $0.3 million or 11.9%, to $2.3 million as compared to $2.6 million in the prior year period. This decrease was primarily due to a recovery of previously reserved accounts receivable during 2012 and reduced headcount in 2012 as compared to 2011.

Sales and Marketing

	December 31,			2013 compared to 2012		2012 compared to 2011	
(dollars in thousands)	2013	2012	2011	Change $	Change %	Change $	Change %
United States	$31,024	$33,638	$34,040	$(2,614)	(7.8)%	$ (402)	(1.2)%
International	4,203	3,799	4,649	404	10.6	(850)	(18.3)
Total Sales and Marketing	$35,227	$37,437	$38,689	$(2,210)	(5.9)%	$(1,252)	(3.2)%

Sales and marketing expenses consist primarily of salaries and other related costs for personnel in field sales, marketing, business development and customer service functions. Other costs in sales and marketing expenses include the development and printing of advertising and promotional material, professional services, market research and sales meetings.

2013 v. 2012

Total sales and marketing expenses decreased $2.2 million, or 5.9%, to $35.2 million in the year ended December 31, 2013, as compared to $37.4 million in the year ended December 31, 2012. In the U.S. segment, sales and marketing expense decreased $2.6 million, or 7.8%, to $31.0 million in the same period, as compared to $33.6 million in the prior year. The decrease in the U.S. segment was primarily due to lower headcount and employee related expenses, including contractors, due to a reduction in workforce and reduced marketing expenses related to Ablavar. Offsetting the decreases were increases in variable compensation and marketing expenses related to DEFINITY. As a percentage of total U.S. revenues, sales and marketing expenses in the U.S. segment were 14.5%, 16.0% and 12.7% for the years ended December 31, 2013, 2012 and 2011, respectively.

For the year ended December 31, 2013, the International segment sales and marketing expense increased $0.4 million, or 10.6%, to $4.2 million as compared to $3.8 million in the prior year period due to increased headcount and higher variable compensation. Offsetting the increases was a decrease in professional services. As a percentage of total International revenues, sales and marketing expenses in the International segment were 6.0%, 4.9% and 5.3% for the years ended December 31, 2013, 2012 and 2011, respectively.

2012 v. 2011

Total sales and marketing expenses decreased $1.3 million, or 3.2%, to $37.4 million in the year ended December 31, 2012, as compared to $38.7 million in the year ended December 31, 2011. In the U.S. segment, sales and marketing expense decreased $0.4 million, or 1.2%, to $33.6 million in the same period, as compared to $34.0 million in the prior year. Overall, there were lower expenses on sales and marketing activities as a result of $1.6 million of reductions in discretionary spending due to the prolonged BVL outage. Additionally, salary and other personnel costs in 2012 were $1.3 million lower primarily due to the workforce reductions during the second quarter of 2011 and March 2012. These decreases were offset by a $1.1 million reversal of stock-based compensation expense in the first quarter of 2011 and $1.4 million of increased sales incentive compensation related to the return of DEFINITY product to the market in June 2012.

For the year ended December 31, 2012, the International segment sales and marketing expense decreased $0.9 million or 18.3%, to $3.8 million as compared to $4.6 million in the prior year period. The decrease in sales and marketing expenses in the International segment was primarily due to lower headcount and expenses on sales and marketing activities as a result of reductions in discretionary spending due to the prolonged BVL outage.

Research and Development

	December 31,			2013 compared to 2012		2012 compared to 2011	
(dollars in thousands)	2013	2012	2011	Change $	Change %	Change $	Change %
United States	$30,138	$40,457	$40,387	$(10,319)	(25.5)%	$ 70	0.2%
International	321	147	558	174	118.4	(411)	(73.7)
Total Research and Development	$30,459	$40,604	$40,945	$(10,145)	(25.0)%	$ (341)	(0.8)%

Research and development expenses relate primarily to the development of new products to add to our portfolio and costs related to its medical affairs, medical information and regulatory functions.

2013 v. 2012

Total research and development expense decreased $10.1 million, or 25.0%, to $30.5 million for the year ended December 31, 2013, as compared to $40.6 million in the year ended December 31, 2012. In the U.S. segment, research and development expense decreased approximately $10.3 million, or 25.5%, to $30.1 million, as compared to $40.4 million in the prior year period. The decrease in the U.S. segment research and development expenses for the year ended December 31, 2013 over the prior year period is driven by a decline in external expense associated with the Phase 3 clinical trial for flurpiridaz F 18, as we completed patient enrollment during the third quarter of 2013. There were decreases in employee related costs as a result of the reduction in workforce from a strategic shift to use fewer internal resources and lower external expense as we expect to seek one or more strategic partners to assist in the future development and commercialization of our development candidates. Offsetting these decreases, in part, was an increase in severance expense and variable compensation.

For the year ended December 31, 2013, the International segment research and development expenses increased approximately $0.2 million, or 118.4%, to $0.3 million, as compared to $0.1 million in the prior year period. The increase in research and development expenses for the International segment was primarily due to depreciation expense since we shifted the primary utilization of certain assets to support research and development functions.

2012 v. 2011

Total research and development expense decreased $0.3 million, or 0.8%, to $40.6 million for the year ended December 31, 2012, as compared to $40.9 million in the year ended December 31, 2011. In the U.S. segment, research and development expense increased approximately $0.1 million, or 0.2%, to $40.4 million, as compared to $40.3 million in the prior year period. Research and development expense in the U.S. segment remained relatively flat from 2011 to 2012. We continued to actively enroll patients and activate sites for our flurpiridaz F 18 Phase 3 program. In the first half of 2011, we were primarily in the planning and preparation stage for our flurpiridaz F 18 Phase 3 program. We enrolled our first patient in this Phase 3 program during the second quarter of 2011. The resulting increase in clinical activity in 2012 were related to our clinical research organization, investigator expenses, drug products, lab supplies, and consultants by $5.3 million. These increases were offset by a reduction in workforce in the second quarter of 2011 by $4.4 million and the decrease in depreciation expense of $0.9 million.

For the year ended December 31, 2012, the International segment research and development expenses decreased approximately $0.4 million, or 73.7%, to $0.1 million, as compared to $0.6 million in the prior year period. The decrease in research and development expenses for the International segment was primarily due to a reduction in workforce in the second quarter of 2011.

Impairment of Land

During the third quarter of 2013, we committed to a plan to sell certain of our excess land, which had a carrying value of $7.5 million. This event qualified for held for sale accounting and the excess land was written down to its fair value, less costs to sell. The fair value was estimated utilizing Level 3 inputs and using a market approach, based on available data for transactions in the region as well as the asking price of comparable properties in our principal market. This resulted in a loss of $6.4 million, which is included within operating loss as impairment of land in the accompanying consolidated statement of comprehensive loss. During the fourth quarter of 2013, we sold the excess land for net proceeds of $1.1 million.

Proceeds from Manufacturer

For the year ended December 31, 2013, as compared to the same period in 2012, proceeds from manufacturer decreased by $25.7 million as a result of the receipt of the $30.0 million from BVL in 2012 to compensate us for business losses and an additional $5.0 million under the Transition Services Agreement compared to proceeds of $8.9 million from BVL under a 2013 Settlement and Release Agreement.

During the fourth quarter of 2013, BVL and LMI entered into a Settlement and Release Agreement. Pursuant to the Settlement and Release Agreement, BVL and LMI agreed to a broad mutual waiver and release for all matters that occurred prior to the date of the Settlement Agreement, a covenant not to sue and settlement payments to us in the aggregate amount of $8.9 million. In addition, the Settlement and Release Agreement provides that the Manufacturing and Service Contract terminates as of November 15, 2013, subject to BVL's obligations to use commercially reasonable efforts to finalize specific batches of DEFINITY, Cardiolite product and saline manufactured and not yet released by the BVL quality function for commercial distribution. BVL has now released for commercial distribution all of our remaining manufactured product.

Other Income (Expense), Net

				2013 compared to 2012		2012 compared to 2011	
	December 31,			Change	Change	Change	Change
(dollars in thousands)	2013	2012	2011	$	%	$	%
Interest expense	$(42,915)	$(42,014)	$(37,658)	$ (901)	2.1%	$(4,356)	11.6%
Interest income	104	252	333	(148)	(58.7)	(81)	(24.3)
Other income (expense), net	1,161	(44)	1,429	1,205	2,738.6	(1,473)	(103.1)
Total Other Expense, net	$(41,650)	$(41,806)	$(35,896)	$ 156	(0.4)%	$(5,910)	16.5%

Interest Expense

For the year ended December 31, 2013 compared to the same period in 2012, interest expense increased by 2.1% to $42.9 million from $42.0 million, as a result of increased amortization related to the capitalization of additional deferred financing costs in connection with our new line of credit and the write off of the existing unamortized deferred financing costs related to our old facility.

For the year ended December 31, 2012 compared to the same period in 2011, interest expense increased by 11.6% to $42.0 million from $37.7 million, as a result of the issuance of $150.0 million of New Notes in the first quarter of 2011. See Note 10, "Financing Arrangements" in our accompanying consolidated financial statements.

Interest Income

For the year ended December 31, 2013 compared to the same period in 2012, interest income decreased by 58.7% to $104,000 from $252,000, primarily as a result of the change in balances in interest bearing accounts.

For the year ended December 31, 2012 compared to the same period in 2011, interest income decreased by 24.3% to $252,000 from $333,000, primarily as a result of a decrease in cash in interest bearing accounts.

Other Income (Expense), net

For the year ended December 31, 2013 compared to the same period in 2012, other income (expense), net increased by $1.2 million from $(44,000) primarily due to a $0.8 million increase as a result of the closing of the statute of limitations relating to a federal research credit matter in 2012, which decreased the tax indemnification assets in the prior year. In addition, we received $0.4 million in consideration from the extinguishment of our membership interests in a mutual insurance company.

For the year ended December 31, 2012, compared to the same period in 2011, other income (expense), net decreased by 103.1% to $(44,000) from $1.4 million primarily due to a decrease in the tax indemnification asset and changes in foreign currency exchange rates.

Provision (Benefit) for Income Taxes

				2013 compared to 2012		2012 compared to 2011	
	December 31,			Change	Change	Change	Change
(dollars in thousands)	2013	2012	2011	$	%	$	%
Provision (benefit) for income taxes	$ 1,014	$ (555)	$ 84,098	$ 1,569	282.7%	$ (84,653)	(100.7)%

For the year ended December 31, 2013 compared to the same period in 2012, provision (benefit) for income taxes increased by 282.7% to $1.0 million from $(0.6) million due primarily to lower credits associated with settlements and lapse of statute of limitations of uncertain tax positions in the current year.

For the year ended December 31, 2012 compared to the same period in 2011, provision (benefit) for income taxes decreased by 100.7% to $(0.6) million from $84.1 million due primarily to the valuation allowance that was recorded in 2011 and the release of prior year's uncertain tax positions due to the lapse of statutes in 2012.

We have generated domestic pre-tax losses for the past three years. This loss history demonstrates negative evidence concerning our ability to utilize our gross deferred tax assets. In order to overcome the presumption of recording a valuation allowance against our net deferred tax assets, we must have sufficient positive evidence that we can generate sufficient taxable income to utilize these deferred tax assets within the carryover or forecast period. Although we have no history of expiring net operating losses or other tax attributes, based on our pre-tax loss of $60.7 million in 2013, and the cumulative domestic loss incurred over the three-year period ended December 31, 2013, management has determined that all of the net U.S. deferred tax assets are not more-likely-than-not recoverable. As a result of this analysis, we have recorded an additional valuation allowance in the amount of $25.6 million in 2013.

Our effective tax rates for the years ended December 31, 2013, 2012, and 2011 were, (1.7)%, 1.3%, and (160.7)%, respectively. Our tax rate is affected by recurring items, such as tax rates in foreign jurisdictions, which we expect to be fairly consistent in the near term. It is also affected by discrete events that may not occur in any given year, but are not consistent from year to year. The following items had the most significant impact on the difference between our statutory U.S. federal income tax rate of 35% and our effective tax rate during the years ended:

December 31, 2013

- A $25.6 million increase to our valuation allowance against net domestic deferred tax assets.
- A $1.4 million reduction relating primarily to prior year uncertain tax positions for a closed tax year.
- A $1.8 million reduction primarily relating to a state income tax benefit related to state NOL's.

December 31, 2012

- A $20.2 million increase to our valuation allowance against net domestic deferred tax assets.
- A $2.3 million reduction relating to prior year uncertain tax positions for a closed tax year.
- A $1.8 million reduction relating to a state income tax benefit consisting of $1.1 million related to state NOL's, $0.3 million related to research credits, and $0.4 million to other changes to state deferred taxes.

December 31, 2011

- A $102.7 million increase to our valuation allowance against net domestic deferred tax assets.
- A $1.1 million increase in our uncertain tax positions relating to state tax nexus and transfer pricing.
- A $2.6 million increase relating to the establishment of a deferred tax liability for foreign subsidiary earnings that are no longer considered permanently reinvested.
- A $1.8 million reduction relating to a state income tax benefit associated with changes to deferred taxes.

Liquidity and Capital Resources

Cash Flows

The following table provides information regarding our cash flows:

	Year Ended December 31,			% Change	
	2013	2012	2011	2013 Compared to 2012	2012 Compared to 2011
	(dollars in thousands)				
Cash provided by (used in):					
Operating activities	$ (15,678)	$ 523	$ 22,420	(3,097.7)%	(97.7)%
Investing activities	(3,483)	(8,145)	(7,694)	(57.2)%	5.9%
Financing activities	5,535	(2,039)	(6,991)	371.5%	(70.8)%

Net Cash Provided by (Used in) Operating Activities

Cash provided by operating activities is primarily driven by our earnings and changes in working capital. The decrease in cash provided by operating activities for the year ended December 31, 2013 as compared to 2012 was primarily driven by the receipt of $35.0 million from the BVL settlement in 2012 as compared to the receipt of $8.9 million from the BVL settlement in 2013. Offsetting this was an increase in gross profit and fewer expenditures related to research and development in 2013.

The decrease in cash provided by operating activities for the year ended December 31, 2012 as compared to 2011 was primarily driven by the impact of decreased unit sales due to the BVL production challenges. These decreases were offset by: (1) the receipt of the $35.0 million BVL settlement in 2012; (2) an amended purchase agreement for one of our products of which $1.7 million of required purchases were made during the year ended December 31, 2012, versus $24.8 million for the year ended December 31, 2011; and(3) the timing of payments made to vendors.

Net Cash Used in Investing Activities

Our primary uses of cash in investing activities are for the purchase of property and equipment. Net cash used in investing activities in 2013, 2012 and 2011 reflected the purchase of property and equipment for $5.0 million, $7.9 million and $7.7 million, respectively.

Net Cash Used in Financing Activities

Net cash provided by financing activities during 2013 was associated with an $8.0 million draw against our outstanding line of credit. On March 21, 2011, we issued $150.0 million of our Notes and paid associated financing costs. Net cash used in 2012 and 2011 primarily represented the results of these activities as well as the draw down and repayment in 2011 of $10.0 million on our line of credit.

Our primary source of cash flows from financing activities is draws against our outstanding line of credit. Going forward, we expect our primary source of cash flows from financing activities to be similar draws against our line of credit, issuances of securities or other financing arrangements into which we may enter. Our primary historical uses of cash in financing activities are principal payments on our term loan and line of credit as well as dividends to Holdings, our parent. See "—External Sources of Liquidity."

External Sources of Liquidity

On May 10, 2010, we issued $250.0 million in aggregate principal amount of 9.750% Senior Notes due in 2017, or the Restricted Notes, at face value, net of issuance costs of $10.1 million, under the indenture, dated as of May 10, 2010. On February 2, 2011, we consummated an exchange offer where we exchanged $250.0 million aggregate principal amount of our Restricted Notes for an equal principal amount of 9.750% Senior Notes due 2017, or the Exchange Notes, that were registered under the Securities Act, with substantially identical terms in all respects.

On March 21, 2011, we issued an additional $150.0 million in aggregate principal amount of New Restricted Notes, net of issuance costs of $4.9 million, under the indenture, dated as of May 10, 2010, as supplemented by the First Supplemental Indenture, dated as of March 14, 2011, and the Second Supplemental Indenture, dated as of March 21, 2011, or together, the Indenture. The net proceeds were used to fund a $150.0 million dividend to Holdings. Holdings utilized the dividend to repurchase all of the remaining Holdings' Series A Preferred Stock at the accreted value of approximately $44.0 million and to issue an approximate $106.0 million dividend to our common securityholders. On May 10, 2011, we consummated an exchange offer where we exchanged $150.0 million aggregate principal amount of New Restricted Notes for an equal principal amount of 9.750% Senior Notes due

2017, or the New Exchange Notes, registered under the Securities Act, with substantially identical terms in all respects.

The Exchange Notes and the New Exchange Notes, or together, the Notes, mature on May 15, 2017. Interest on the Notes accrues at a rate of 9.750% per year and is payable semiannually in arrears on May 15 and November 15 commencing on November 15, 2010 for the Notes issued on May 10, 2010 and May 15, 2011 for the Notes issued onMarch 21, 2011. Our annual interest expense increased from $24.4 million to $39.0 million as a result of the March 21, 2011 issuance of Notes.

In connection with the Restricted Notes issuance, we entered into a revolving facility (the "Old Facility") for total borrowings up to $42.5 million. During 2012, we entered into an unfunded Standby Letter of Credit for up to $8.8 million to support a surety bond related to a statutory decommissioning obligation we have in connection with our Billerica facility. The letter of credit decreased the borrowing availability under the Old Facility by $8.8 million.

On July 3, 2013, we entered into an amended and restated revolving credit facility (the "New Facility") in an aggregate principal amount not to exceed $42.5 million.

The revolving loans under the New Facility bear interest subject to a pricing grid based on average historical excess availability under the New Facility, with pricing based from time to time at our election at (i) LIBOR plus a spread ranging from 2.00% to 2.50% or (ii) the Reference Rate (as defined in the agreement) plus a spread ranging from 1.00% to 1.50%. The New Facility also includes an unused line fee of 0.375% or 0.5%, depending on the average unused revolving credit commitments. The New Facility expires on the earlier of (i) July 3, 2018 or (ii) if the outstanding 9.750% senior notes due in 2017 are not refinanced in full, the date that is 91 days before the maturity thereof, at which time all outstanding borrowings are due and payable.

On August 6, 2013, we transferred the $8.8 million unfunded Standby Letter of Credit, which expired on February 3, 2014, to our new lender. The unfunded Standby Letter of Credit requires annual fees, payable quarterly, between 2.00% and 2.50% of the face amount, and is automatically renewed for a one year period at each anniversary date, unless we elect not to renew in writing within 60 days prior to such expiration.

The New Facility is secured by a pledge of substantially all of our assets together with the assets of Lantheus Intermediate and Lantheus MI Real Estate, LLC ("Lantheus Real Estate"), including each such entity's accounts receivable, inventory and machinery and equipment, and is guaranteed by each of Lantheus Intermediate and Lantheus Real Estate. Borrowing capacity is determined by reference to a borrowing base (the "Borrowing Base"), which is based on (i) a percentage of certain eligible accounts receivable, inventory and machinery and equipment minus (ii) any reserves. As of December 31, 2013, the aggregate borrowing base was approximately $42.5 million, which was reduced by (i) an outstanding $8.8 million unfunded Standby Letter of Credit and (ii) an $8.0 million outstanding loan balance, resulting in a net borrowing base availability of approximately $25.7 million.

The New Facility contains affirmative and negative covenants, as well as restrictions on the ability of Lantheus Intermediate, us and our subsidiaries to: (i) incur additional indebtedness or issue preferred stock; (ii) repay subordinated indebtedness prior to its stated maturity; (iii) pay dividends on, repurchase or make distributions in respect of capital stock or make other restricted payments; (iv) make certain investments; (v) sell certain assets; (vi) create liens; (vii) consolidate, merge, sell or otherwise dispose of all or substantially all of our assets; and (viii) enter into certain transactions with our affiliates. The New Facility also contains customary default provisions as well as cash dominion provisions which allow the lender to sweep our accounts during the period certain specified events of default are continuing under the New Facility or excess availability under the New Facility falls below (i) the greater of $5.0 million or 15% of the then-current borrowing base for a period of more than five consecutive Business Days or (ii) $3.5 million. During a cash dominion period, we are required to

comply with a consolidated fixed charge coverage ratio of not less than 1:00:1:00. The fixed charge coverage ratio is calculated on a consolidated basis for Lantheus Intermediate and its subsidiaries for a trailing four-fiscal quarter period basis, as (i) EBITDA (as defined in the agreement) minus capital expenditures minus certain restricted payments divided by (ii) interest plus taxes paid or payable in cash plus certain restricted payments made in cash plus scheduled principal payments paid or payable in cash.

On December 27, 2012, we entered into a second amendment to a license and supply agreement with one of our customers, which extended the term from December 31, 2012 to December 31, 2014 and established new pricing and purchase requirements over the extended term. The second amendment also provided for the supply of TechneLite generators containing molybdenum-99 sourced from LEU targets. The agreement included a $3.0 million upfront payment by our customer to us and during 2013, we received an additional $4.0 million, of which $3.6 million is included in deferred revenue as a current liability at December 31, 2013. During 2012, we received the $3.0 million upfront payment, of which $1.5 million was included in deferred revenue as a current liability and $1.5 million was included in other long-term liabilities at December 31, 2012. We are recognizing the upfront payment as revenue on a straight-line basis over the term of the two year agreement.

Our ability to fund our future capital needs will be affected by our ability to continue to generate cash from operations and may be affected by our ability to access the capital markets, money markets, or other sources of funding, as well as the capacity and terms of our financing arrangements.

We may from time to time repurchase or otherwise retire our debt and take other steps to reduce our debt or otherwise improve our balance sheet. These actions may include open market repurchases of any notes outstanding, prepayments of our term loans or other retirements or refinancing of outstanding debt, privately negotiated transactions or otherwise. The amount of debt that may be repurchased or otherwise retired, if any, would be decided upon at the sole discretion of our Board of Directors and will depend on market conditions, trading levels of our debt from time to time, our cash position and other considerations.

Funding Requirements

Our future capital requirements will depend on many factors, including:

- our ability to have product manufactured and released from JHS and other manufacturing sites in a timely manner in the future;
- the level of product sales of our currently marketed products, particularly DEFINITY, and any additional products that we may market in the future;
- the costs of further commercialization of our existing products, particularly in international markets, including product marketing, sales and distribution and whether we obtain local partners to help share such commercialization costs;
- the costs of investing in our facilities, equipment and technology infrastructure;
- the costs and timing of establishing manufacturing and supply arrangements for commercial supplies of our products;
- the extent to which we acquire or invest in products, businesses and technologies;
- the extent to which we choose to establish collaboration, co- promotion, distribution or other similar arrangements for our marketed products;

- the legal costs relating to maintaining, expanding and enforcing our intellectual property portfolio, pursuing insurance or other claims and defending against product liability, regulatory compliance or other claims; and

- the cost of interest on any additional borrowings which we may incur under our financing arrangements.

If JHS is not able to continue to manufacture and release product supply on a timely and consistent basis, or we are unable to continue to grow DEFINITY sales, then we will need to implement certain additional expense reductions, such as a delay or elimination of discretionary spending in all functional areas, as well as other operating and strategic initiatives. See "Item 1A—Risk Factors—We may not be able to generate sufficient cash flo to meet our debt service obligations."

If our capital resources become insufficient to meet our future capital requirements, we would need to finance our cash needs through public or private equity offerings, assets securitizations, debt financings, sale-leasebacks or other financing or strategic alternatives, to the extent such transactions are permissible under the covenants of the New Facility and the Indenture. Additional equity or debt financing, or other transactions, may not be available on acceptable terms, if at all. If any of these transactions require an amendment or waiver under the covenants in the New Facility and under the Indenture, which could result in additional expenses associated with obtaining the amendment or waiver, we will seek to obtain such a waiver to remain in compliance with the covenants of the New Facility and the Indenture. However, we cannot be assured that such an amendment or waiver would be granted, or that additional capital will be available on acceptable terms, if at all.

At December 31, 2013, our only current committed external source of funds is our borrowing availability under the New Facility. We generated a net loss of $61.7 million during the year ended December 31, 2013 and had $16.7 million of cash and cash equivalents at December 31, 2013. Availability under the New Facility is calculated by reference to the Borrowing Base. If we are not successful in achieving our forecasted results, our accounts receivable and inventory could be negatively affected, reducing the Borrowing Base and limiting our borrowing availability.

We took actions during March 2013 to substantially reduce our discretionary spending in order to reposition us to focus our resources on our higher growth products. In particular, we have implemented a strategic shift in how we fund our important R&D programs. We have reduced our internal R&D resources during 2013 while at the same time we seek to engage one or more strategic partners to assist us in the further development and commercialization of our important development candidates, including flurpiridaz F 18, 18F LMI 1195 and LMI 1174. Based on our current operating plans, we believe that our existing cash and cash equivalents, results of operations and availability under the New Facility will be sufficient to continue to fund our liquidity requirements for at least the next twelve months.

Contractual Obligations

Contractual obligations represent future cash commitments and liabilities under agreements with third parties and exclude contingent contractual liabilities for which we cannot reasonably predict future payment, including contingencies related to potential future development, financing, certain suppliers, contingent royalty payments and/or scientific, regulatory, or commercial milestone payments

under development agreements. The following table summarizes our contractual obligations as of December 31, 2013:

	Payments Due by Period				
	Total	Less than 1 Year	1 - 3 Years	3 - 5 Years	More than 5 Years
	(dollars in thousands)				
Debt obligations (principal)	$ 400,000	$ —	$ —	$ 400,000	$ —
Interest on debt obligations	136,500	39,000	78,000	19,500	—
Operating leases(1)	2,509	898	881	467	263
Purchase obligations(2)	3,416	3,416	—	—	—
Asset retirement obligation	6,385	—	—	—	6,385
Other long-term liabilities(3)	34,898	—	—	—	34,898
Total contractual obligations	$ 583,708	$ 43,314	$ 78,881	$ 419,967	$ 41,546

(1) Operating leases include minimum payments under leases for our facilities and certain equipment.

(2) Purchase obligations include fixed or minimum payments under manufacturing and service agreements with third-parties.

(3) Due to the uncertainty related to the timing of the reversal of uncertain tax positions, the liability is not subject to fixed payment terms and the amount and timing of payments, if any, which we will make related to this liability are not known.

Off-Balance Sheet Arrangements

We are required to provide the U.S. Nuclear Regulatory Commission and Massachusetts Department of Public Health financial assurance demonstrating our ability to fund the decommissioning of our North Billerica, Massachusetts production facility upon closure, though we do not intend to close the facility. We have provided this financial assurance in the form of a $28.2 million surety bond and an $8.8 million letter of credit.

Since inception, we have not engaged in any other off-balance sheet arrangements, including structured finance, special purpose entities or variable interest entities.

Effects of Inflation

We do not believe that inflation has had a significant impact on our revenues or results of operations since inception. We expect our cost of product sales and other operating expenses will change in the future in line with periodic inflationary changes in price levels. Because we intend to retain and continue to use our property and equipment, we believe that the incremental inflation related to the replacement costs of such items will not materially affect our operations. However, the rate of inflation affects our expenses, such as those for employee compensation and contract services, which could increase our level of expenses and the rate at which we use our resources. While we generally believe that we will be able to offset the effect of price-level changes by adjusting our product prices and implementing operating efficiencies, any material unfavorable changes in price levels could have a material adverse affect on our financial condition, results of operations and cash flows.

Recent Accounting Standards

In July 2013, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update ("ASU") No. 2013-11, "Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists" ("ASU 2013-11"). The amendments in ASU 2013-11 provide guidance on the financial statement

presentation of unrecognized tax benefits when a net operating loss carryforward, a similar tax loss, or a tax credit carryforward exists. ASU 2013-11 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2013. We will reflect the impact of these amendments beginning with our Quarterly Report on Form 10-Q for the period ending March 31, 2014. We do not anticipate a material impact to our financial position, results of operations or cash flows as a result of this change.

Critical Accounting Policies and Estimates

The discussion and analysis of our financial condition and results of operations are based on our consolidated financial statements, which have been prepared in accordance with GAAP. These financial statements require us to make estimates and judgments that affect our reported assets and liabilities, revenues and expenses, and other financial information. Actual results may differ materially from these estimates under different assumptions and conditions. In addition, our reported financial condition and results of operations could vary due to a change in the application of a particular accounting standard.

We believe the following represent our critical accounting policies and estimates used in the preparation of our financial statements.

Revenue Recognition

Our revenue is generated from the sales of our diagnostic imaging agents to wholesalers, distributors, radiopharmacies and directly to hospitals and clinics. We recognize revenue when evidence of an arrangement exists, title has passed, substantially all the risks and rewards of ownership have transferred to the customer, the selling price is fixed or determinable and collectability is reasonably assured. For transactions for which revenue recognition criteria have not yet been met, the respective amounts are recorded as deferred revenue until such point in time when criteria are met and revenue can be recognized. Revenue is recognized net of reserves, which consist of allowances for returns and sales rebates. The estimates of these allowances are based on historical sales volumes and mix and require assumptions and judgments to be made in order to make such estimates. In the event that the sales mix is different from our estimates, we may be required to pay higher or lower returns and sales rebates than we previously estimated. Any changes to these estimates are recorded in the current period. In 2013, 2012 and 2011, these changes in estimates were not material to our results.

Revenue arrangements with multiple elements are divided into separate units of accounting if certain criteria are met, including whether the delivered element has stand-alone value to the customer. The arrangement's consideration is then allocated to each separate unit of accounting based on the relative selling price of each deliverable. The estimated selling price of each deliverable is determined using the following hierarchy of values: (i) vendor-specific objective evidence of fair value; (ii) third-party evidence of selling price; and (iii) best estimate of selling price. The best estimate of selling price reflects the our best estimate of what the selling price would be if the deliverable was regularly sold by us on a stand-alone basis. The consideration allocated to each unit of accounting is then recognized as the related goods or services are delivered, limited to the consideration that is not contingent upon future deliverables. Supply or service transactions may involve the charge of a nonrefundable initial fee with subsequent periodic payments for future products or services. The up-front fees, even if nonrefundable, are earned (and revenue is recognized) as the products and/or services are delivered and performed over the term of the arrangement.

Inventory

Inventories include material, direct labor and related manufacturing overhead, and are stated at the lower of cost or market determined on a first-in, first-out basis. We record inventory when we take delivery and title to the product. Any commitment for product ordered but not yet received is included

as purchase commitments in our contractual obligations table. We assess the recoverability of inventory to determine whether adjustments for impairment are required. Inventory that is in excess of future requirements is written down to its estimated net realizable value-based upon estimates of forecasted demand for our products. The estimates of demand require assumptions to be made of future operating performance and customer demand. If actual demand is less than what has been forecasted by management, additional inventory write downs may be required.

Inventory costs associated with product that has not yet received regulatory approval are capitalized if we believe there is probable future commercial use of the product and future economic benefit of the asset. If future commercial use of the product is not probable, then inventory costs associated with such product are expensed during the period the costs are incurred. At December 31, 2012, we had $1.5 million of such product costs included in inventories. Subsequent to the year ended December 31, 2012, the contract manufacturer received regulatory approval to manufacture this product. At December 31, 2013, we had no such inventories.

Goodwill, Intangibles and Long-Lived Assets

Goodwill is not amortized, but is instead tested for impairment at least annually and whenever events or circumstances indicate that it is more likely than not that they may be impaired. We have elected to perform the annual test for indications of goodwill impairment as of October 31 of each year.

In performing tests for goodwill impairment, we are first permitted to perform a qualitative assessment about the likelihood of the carrying value of a reporting unit exceeding its fair value. If we determine that it is more likely than not that the fair value of a reporting unit is less than its carrying amount based on the qualitative assessment, we are required to perform the two-step goodwill impairment test described below to identify the potential goodwill impairment and measure the amount of the goodwill impairment loss, if any, to be recognized for that reporting unit. However, if we conclude otherwise based on the qualitative assessment, the two-step goodwill impairment test is not required. The option to perform the qualitative assessment is not an accounting policy election and can be utilized at our discretion. Further, the qualitative assessment need not be applied to all reporting units in a given goodwill impairment test. For an individual reporting unit, if we elect not to perform the qualitative assessment, or if the qualitative assessment indicates that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then we must perform the two-step goodwill impairment test for the reporting unit. If the implied fair value of goodwill is less than the carrying value, then an impairment charge would be recorded.

In performing the annual goodwill impairment test, we bypassed the option to perform a qualitative assessment and proceeded directly to performing the first step of the two-step goodwill impairment test. We completed our required annual impairment test for goodwill in the fourth quarter of 2013, 2012 and 2011 and determined that at each of those periods the carrying amount of goodwill was not impaired. In each year, our fair value, which includes goodwill, was substantially in excess of our carrying value.

In addition, as a result of the continued supply challenges with BVL, we performed an interim impairment test for goodwill as of December 31, 2011. The interim impairment test did not indicate that there was any impairment as of December 31, 2011. There were no events at December 31, 2012 that triggered an interim impairment test. During the first quarter of 2013, the strategic shift in how we fund our R&D programs significantly altered the expected future costs and revenues associated with our development candidates. Accordingly, this action was deemed to be a triggering event for an evaluation of the recoverability of our goodwill as of March 31, 2013. We performed an interim impairment test and determined that there was no impairment of goodwill as of March 31, 2013. Furthermore, we performed our annual impairment test for goodwill as of October 31, 2013, and there

were no events through December 31, 2013 that triggered an interim impairment test. At each annual and interim impairment test date, the fair value of our reporting unit, which includes goodwill, was substantially in excess of our carrying value.

We calculate the fair value of our reporting units using the income approach, which utilizes discounted forecasted future cash flows and the market approach which utilizes fair value multiples of comparable publicly traded companies. The discounted cash flows are based on our most recent long-term financial projections and are discounted using a risk adjusted rate of return, which is determined using estimates of market participant risk-adjusted weighted average costs of capital and reflects the risks associated with achieving future cash flows. The market approach is calculated using the guideline company method, where we use market multiples derived from stock prices of companies engaged in the same or similar lines of business. There is not a quoted market price for our reporting units or the company as a whole, therefore, a combination of the two methods is utilized to derive the fair value of the business. We evaluate and weigh the results of these approaches as well as ensure we understand the basis of the results of these two methodologies. We believe the use of these two methodologies ensures a consistent and supportable method of determining our fair value that is consistent with the objective of measuring fair value. If the fair value were to decline, then we may be required to incur material charges relating to the impairment of those assets.

We test intangible and long-lived assets for recoverability whenever events or changes in circumstances suggest that the carrying value of an asset or group of assets may not be recoverable. We measure the recoverability of assets to be held and used by comparing the carrying amount of the asset to future undiscounted net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment equals the amount by which the carrying amount of the assets exceeds the fair value of the assets. Any impairments are recorded as permanent reductions in the carrying amount of the assets. Long-lived assets, other than goodwill and other intangible assets, that are held for sale are recorded at the lower of the carrying value or the fair market value less the estimated cost to sell.

In the first quarter of 2012, we reviewed the estimated useful life of our Cardiolite trademark as a result of a triggering event. Utilizing the most recent forecasted revenue data, we revised the estimate of the remaining useful life of the Cardiolite trademark to five years. We continue to monitor the recoverability of our branded Cardiolite trademark intangible asset due to the ongoing generic competition based on actual results and existing estimates of future undiscounted cash flows associated with the branded Cardiolite product. As of December 31, 2013, we conducted, using our revised sales forecast, an impairment analysis and concluded that the estimate of future undiscounted cash flows associated with the Cardiolite trademark intangible did not exceed the carrying amount of the asset totaling $19.2 million and therefore, the asset has been written down to its fair value. Fair value was calculated by utilizing Level 3 inputs in the relief-from-royalty method, an income-based approach. As a result of this analysis, we recorded an impairment charge of $15.4 million to adjust the carrying value to its fair value of $3.8 million. This expense was recorded within cost of goods sold in the accompanying consolidated statement of comprehensive loss in the fourth quarter of 2013.

In the third quarter of 2013, we were in negotiations with a new distributor for the sale of certain products within certain international markets. This agreement was signed in October 2013 and as a result we did not renew the agreements with our former distributors in these international markets. We determined the customer relationship intangible related to these former distributors was no longer recoverable and recorded an impairment charge of $1.0 million in the third quarter of 2013. In the fourth quarter of 2013, we updated our strategic plan to reflect the non-renewal of these agreements and the uncertainty in the timing of product availability in this region. As a result, we reviewed the recoverability of certain of our customer relationship intangible assets in the International segment that were impacted by our revised strategic plan. We conducted an impairment analysis and concluded that the estimate of future undiscounted cash flows associated with the customer relationship intangible

asset did not exceed the carrying amount of the asset and therefore, the asset would need to be written down to its fair value. In order to calculate the fair value of the acquired customer relationship intangible assets, we utilized Level 3 inputs to estimate the future discounted cash flows associated with remaining customers and as a result of this analysis, recorded an impairment charge of $0.7 million in the fourth quarter of 2013. These impairment charges were recorded within cost of goods sold in the accompanying consolidated statement of comprehensive loss.

During the third quarter of 2013, we committed to a plan to sell certain of our excess land in the U.S. segment, which had a carrying value of $7.5 million. This event qualified for held for sale accounting and the excess land was written down to its fair value, less estimated costs to sell. The fair value was estimated utilizing Level 3 inputs and using a market approach, based on available data for transactions in the region, discussions with real estate brokers and the asking price of comparable properties in its principal market. This resulted in a loss of $6.4 million, which is included within operating loss as impairment of land in the accompanying consolidated statement of comprehensive loss. During the fourth quarter of 2013, we sold the excess land for net proceeds of $1.1 million.

Fixed assets dedicated to R&D activities, which were impacted by the recent R&D strategic shift, have a carrying value of $6.3 million as of December 31, 2013. We believethese fixed assets will be utilized for either internally funded ongoing R&D activities or R&D activities funded by a strategic partner. If we are not successful in finding a strategic partner, and there are no alternative uses for those fixed assets, they could be subject to impairment in the future.

We also tested certain long-lived assets utilized in the manufacturing of certain products in the U.S. for recoverability as of December 31, 2013 due to a change in our contract to manufacture Quadramet. The analysis indicated that there was no impairment as of December 31, 2013. We also evaluated the remaining useful lives of long-lived assets that were tested for recoverability at December 31, 2013 and determined no revisions were required to the remaining periods of depreciation.

Intangible assets, consisting of patents, trademarks and customer relationships related to our products are amortized in a method equivalent to the estimated utilization of the economic benefit of the asset. Trademarks and patents are amortized on a straight-line basis, and customer relationships are amortized on an accelerated basis.

Accounting for Stock-Based Compensation

Our employees are eligible to receive awards from our 2013 Equity Plan (as defined below). Our stock-based compensation cost is measured at the grant date based on the fair value of the award and is recognized as expense over the requisite service period, which generally represents the vesting period, and includes an estimate of the awards that will be forfeited. We use the Black Scholes valuation model for estimating the fair value on the date of grant of stock options. The fair value of stock option awards is affected by the valuation assumptions, including the volatility of market participants, expected term of the option, risk-free interest rate and expected dividends as well as the estimated fair value of our common stock. The fair value of our common stock is determined quarterly and each award is approved by our Board of Directors at the fair value in effect as of such award date. Any material change to the assumptions used in estimating the fair value of the options could have a material impact on our results of operations. When a contingent cash settlement of vested options becomes probable, we reclassify the vested awards to a liability and account for any incremental compensation cost in the period in which the settlement becomes probable.

Income Taxes

The provision for income taxes has been determined using the asset and liability approach of accounting for income taxes. The provision for income taxes represents income taxes paid or payable

for the current year plus the change in deferred taxes during the year. Deferred taxes result from differences between the financial and tax bases of our assets and liabilities. Deferred tax assets and liabilities are measured using the currently enacted tax rates that apply to taxable income in effect for the years in which those tax attributes are expected to be recovered or paid, and are adjusted for changes in tax rates and tax laws when changes are enacted.

Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized. The assessment of whether or not a valuation allowance is required involves the weighing of both positive and negative evidence concerning both historical and prospective information with greater weight given to evidence that is objectively verifiable. A history of recent losses is negative evidence that is difficult to overcome with positive evidence. In evaluating prospective information there are four sources of taxable income: reversals of taxable temporary differences, items that can be carried back to prior tax years (such as net operating losses), pre-tax income and tax planning strategies. Any tax planning strategies that are considered must be prudent and feasible, and would only be undertaken in order to avoid losing an operating loss carryforward. Adjustments to the deferred tax valuation allowances are made in the period when such assessments are made.

We account for uncertain tax positions using 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. Differences between tax positions taken in a tax return and amounts recognized in the financial statements are recorded as adjustments to income taxes payable or receivable, or adjustments to deferred taxes, or both. We provide disclosure at the end of each annual reporting period on a tabular reconciliation of unrecognized tax benefits. We classify interest and penalties within the provision for income taxes.

We have a tax indemnification agreement with BMS related to certain contingent tax obligations arising prior to the acquisition of the business from BMS. The tax obligations are recognized in liabilities and the tax indemnification receivable is recognized within other noncurrent assets. The changes in the tax indemnification asset are recognized within other income, net in the statement of income, and the changes in the related liabilities are recorded within the tax provision. Accordingly, as these reserves change, adjustments are included in the tax provision while the offsetting adjustment is included in other income. Assuming that the receivable from BMS continues to be considered recoverable by us, there is no net effect on earnings related to these liabilities and no net cash outflows.

The calculation of our tax liabilities involves certain estimates, assumptions and the application of complex tax regulations in numerous jurisdictions worldwide. Any material change in our estimates or assumptions, or the tax regulations, may have a material impact on our results of operations.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risk from changes in interest rates and foreign currency exchange rates. We do not hold or issue financial instruments to reduce these risks or for trading purposes.

Interest Rate Risk

We are subject to interest rate risk in connection with the New Facility, which is variable rate indebtedness. Interest rate changes could increase the amount of our interest payments and thus negatively impact our future earnings and cash flows. As of December 31, 2013, there was $8.0 million outstanding under the New Facility and an $8.8 million unfunded Standby Letter of Credit, which reduced availability to $25.7 million on the New Facility. Any increase in the interest rate under the New Facility may have a negative impact on our future earnings to the extent we have outstanding

borrowings under the New Facility. Historically, we have not used derivative financial instruments or other financial instruments to hedge such economic exposures.

Foreign Currency Risk

We face exposure to movements in foreign currency exchange rates whenever we, or any of our subsidiaries, enter into transactions with third parties that are denominated in currencies other than ours, or its, functional currency. Intercompany transactions between entities that use different functional currencies also expose us to foreign currency risk. During 2013, 2012 and 2011, the net impact of foreign currency changes on transactions was a loss of $349,000, $579,000 and $156,000, respectively. Historically, we have notused derivative financial instruments or other financial instruments to hedge such economic exposures.

Gross margins of products we manufacture at our U.S. plants and sell in currencies other than the U.S. Dollar are also affected by foreign currency exchange rate movements. Our gross margin on total revenue was 27.3%, 26.1% and 26.7% during the years ended December 31, 2013, 2012 and 2011, respectively. If the U.S. Dollar had been stronger by 1%, 5% or 10%, compared to theactual rates during 2013, our gross margin on total net product sales would have been 27.3%, 27.5% and 27.7%, respectively. If the U.S. Dollar had been stronger by 1%, 5% or 10%, compared to theactual rates during 2012, our gross margin on total net product sales would have been 26.1%, 26.3% and 26.4%, respectively. If the U.S. Dollar had been stronger by 1%, 5% or 10%, compared to the actual rates during 2011, our gross margin on total net product sales would have been 26.7%, 26.9% and 27.0%, respectively.

In addition, a portion of our earnings is generated by our foreign subsidiaries, whose functional currencies are other than the U.S. Dollar. Our earnings could be materially impacted by movements in foreign currency exchange rates upon the translation of the earnings of such subsidiaries into the U.S. Dollar.

If the U.S. Dollar had been uniformly stronger by 1%, 5% or 10%, compared to the actual average exchange rates used to translate the financial results of our foreign subsidiaries, our net product sales and net income for 2013 would have been impacted by approximately the following amounts:

	Approximate Change in Net Revenue	Approximate Change in Net Income
	(dollars in thousands)	
1%	$ (487)	$ 38
5%	(2,436)	191
10%	(4,871)	382

If the U.S. Dollar had been uniformly stronger by 1%, 5% or 10%, compared to the actual average exchange rates used to translate the financial results of our foreign subsidiaries, our net product sales and net income for 2012 would have been impacted by approximately the following amounts:

	Approximate Change in Net Revenue	Approximate Change in Net Income
	(dollars in thousands)	
1%	$ (519)	$ 3
5%	(2,593)	17
10%	(5,187)	34

If the U.S. Dollar had been uniformly stronger by 1%, 5% or 10%, compared to the actual average exchange rates used to translate the financial results of our foreign subsidiaries, our net product sales and net income for 2011 would have been impacted by approximately the following amounts:

	Approximate Change in Net Revenue	Approximate Change in Net Income
	(dollars in thousands)	
1%	$ (608)	$ (24)
5%	(3,041)	(118)
10%	(6,082)	(236)

Item 8. Financial Statements and Supplementary Data

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholder of
Lantheus MI Intermediate, Inc.
North Billerica, Massachusetts

We have audited the accompanying consolidated balance sheets of Lantheus MI Intermediate, Inc. and subsidiaries (the "Company") as of December 31, 2013 and 2012, and the related consolidated statements of comprehensive loss, stockholder's (deficit) equity, and cash flows for each of the three years in the period ended December 31, 2013. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the 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, such consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2013 and 2012, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2013, in conformity with accounting principles generally accepted in the United States of America.

/s/ DELOITTE & TOUCHE LLP

Boston, Massachusetts
March 11, 2014

Lantheus MI Intermediate, Inc. and subsidiaries

Consolidated Balance Sheets

(in thousands except share data)	December 31, 2013	December 31, 2012
Assets		
Current assets		
Cash and cash equivalents	$ 16,669	$ 31,595
Accounts receivable, net	38,910	41,380
Inventory	18,310	18,048
Income tax receivable	325	736
Deferred tax assets	18	115
Other current assets	3,087	2,943
Total current assets	77,319	94,817
Property, plant and equipment, net	97,653	109,573
Capitalized software development costs, net	1,470	2,234
Intangibles, net	34,998	66,802
Goodwill	15,714	15,714
Deferred financing costs	9,639	11,372
Deferred tax assets	15	—
Other long-term assets	22,577	22,414
Total assets	$ 259,385	$ 322,926
Liabilities and Stockholder's Deficit		
Current liabilities		
Line of credit	8,000	—
Accounts payable	18,103	18,945
Accrued expenses and other liabilities	25,492	29,689
Deferred tax liability	57	—
Deferred revenue	3,979	7,320
Total current liabilities	55,631	55,954
Asset retirement obligations	6,385	5,416
Long-term debt, net	399,037	398,822
Deferred tax liability	12	435
Other long-term liabilities	35,408	36,652
Total liabilities	496,473	497,279
Commitments and contingencies (see Notes 14 and 16)		
Stockholder's deficit		
Common stock ($0.001 par value, 10,000 shares authorized; 1 share issued and outstanding)	—	—
Due from parent	(1,259)	(1,353)
Additional paid-in capital	2,903	2,325
Accumulated deficit	(238,338)	(176,660)
Accumulated other comprehensive income	(394)	1,335
Total stockholder's deficit	(237,088)	(174,353)
Total liabilities and stockholder's deficit	$ 259,385	$ 322,926

See notes to consolidated financial statements.

Lantheus MI Intermediate, Inc. and subsidiaries

Consolidated Statements of Comprehensive Loss

(in thousands)	Year Ended December 31, 2013	2012	2011
Revenues			
Net product revenues	$ 271,809	$ 277,354	$ 345,762
License and other revenues	11,863	10,751	10,530
Total revenues	283,672	288,105	356,292
Cost of goods sold	206,311	211,049	255,466
Loss on firm purchase commitment	—	1,859	5,610
Total cost of goods sold	206,311	212,908	261,076
Gross profit	77,361	75,197	95,216
Operating expenses			
General and administrative expenses	33,159	32,520	32,057
Sales and marketing expenses	35,227	37,437	38,689
Research and development expenses	30,459	40,604	40,945
Proceeds from manufacturer	(8,876)	(34,614)	—
Impairment on land	6,406	—	—
Total operating expenses	96,375	75,947	111,691
Operating loss	(19,014)	(750)	(16,475)
Interest expense	(42,915)	(42,014)	(37,658)
Interest income	104	252	333
Other income (expense), net	1,161	(44)	1,429
Loss before income taxes	(60,664)	(42,556)	(52,371)
Provision (benefit) for income taxes	1,014	(555)	84,098
Net loss	(61,678)	(42,001)	(136,469)
Foreign currency translation, net of taxes	(1,729)	964	(337)
Total comprehensive loss	$ (63,407)	$ (41,037)	$ (136,806)

See notes to consolidated financial statements.

Lantheus MI Intermediate, Inc. and subsidiaries

Consolidated Statements of Stockholder's (Deficit) Equity

(in thousands, except share data)	Common Stock Shares	Common Stock Amount	Due from Parent	Additional Paid-In Capital	(Accumulated Deficit) Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Stockholder's (Deficit) Equity
Balance at January 1, 2011	1	$ —	$ —	$ 150,316	$ 2,410	$ 708	$ 153,434
Dividend paid to LMI Holdings (see Note 10)	—	—	—	(149,400)	(600)	—	(150,000)
Net loss	—	—	—	—	(136,469)	—	(136,469)
Foreign currency translation	—	—	—	—	—	(337)	(337)
Stock-based compensation	—	—	—	169	—	—	169
Balance at December 31, 2011	1	—	—	1,085	(134,659)	371	(133,203)
Net loss	—	—	—	—	(42,001)	—	(42,001)
Due from parent (see Note 17)	—	—	(1,353)	—	—	—	(1,353)
Foreign currency translation	—	—	—	—	—	964	964
Stock-based compensation	—	—	—	1,240	—	—	1,240
Balance at December 31, 2012	1	—	(1,353)	2,325	(176,660)	1,335	(174,353)
Net loss	—	—	—	—	(61,678)	—	(61,678)
Payments from parent	—	—	94	—	—	—	94
Foreign currency translation	—	—	—	—	—	(1,729)	(1,729)
Stock-based compensation	—	—	—	578	—	—	578
Balance at December 31, 2013	1	$ —	$(1,259)	$ 2,903	$ (238,338)	$ (394)	$ (237,088)

See notes to consolidated financial statements.

Lantheus MI Intermediate, Inc. and subsidiaries

Consolidated Statements of Cash Flows

(in thousands)	Year ended December 31, 2013	2012	2011
Cash flow from operating activities			
Net loss	$ (61,678)	$ (42,001)	$ (136,469)
Adjustments to reconcile net loss to cash flow from operating activities			
Depreciation	9,336	9,722	12,915
Amortization	15,819	17,680	19,847
Impairment of land	6,406	—	—
Impairment of intangible assets	17,175	—	23,474
Amortization of debt related costs	2,600	2,403	1,554
Write-off of deferred financing costs	598	—	—
Provision for bad debt	63	(117)	301
Provision for excess and obsolete inventory	4,854	12,809	29,432
Stock-based compensation	578	1,240	(969)
Deferred income taxes	(272)	(428)	81,330
Accretion of asset retirement obligations	628	553	496
Loss on disposal of long-lived assets	35	285	54
Loss on firm purchase commitment	—	1,859	5,610
Long-term income tax receivable	(566)	299	(1,122)
Long-term income tax payable and other long-term liabilities	187	139	1,533
Increase (decrease) in cash from operating assets and liabilities			
Accounts receivable, net	2,627	(1,442)	9,466
Prepaid expenses and other current assets	1,043	1,304	626
Inventory	(4,741)	(6,903)	(22,293)
Due from parent	—	—	(614)
Deferred revenue	(4,874)	5,349	(5,995)
Accounts payable	(1,147)	(2,204)	(1,002)
Income tax payable	410	(2,217)	1,353
Accrued expenses and other liabilities	(4,759)	2,193	2,893
Cash (used in) provided by operating activities	(15,678)	523	22,420
Cash flows from investing activities			
Capital expenditures	(5,010)	(7,920)	(7,694)
Proceeds from sale of property, plant and equipment	1,527	—	—
Purchase of certificate of deposit	—	(225)	—
Cash used in investing activities	(3,483)	(8,145)	(7,694)
Cash flows from financing activities			
Proceeds from issuance of debt	—	—	152,250
Consent solicitation fee	—	—	(3,750)
Payments on note payable	(1,310)	(1,530)	—
Deferred financing costs	(1,249)	(442)	(5,491)
Payments from / (to) parent	94	(67)	—
Proceeds from line of credit	8,000	—	10,000
Payments on line of credit	—	—	(10,000)
Payment of dividend	—	—	(150,000)
Cash provided by (used in) financing activities	5,535	(2,039)	(6,991)
Effect of foreign exchange rate on cash	(1,300)	649	(134)
(Decrease) Increase in cash and cash equivalents	(14,926)	(9,012)	7,601
Cash and cash equivalents, beginning of year	31,595	40,607	33,006
Cash and cash equivalents, end of year	$ 16,669	$ 31,595	$ 40,607
Supplemental disclosure of cash flow information			
Interest paid	$ 39,150	$ 39,020	$ 33,958
Income taxes paid / (refunded), net	$ 118	$ 1,146	$ (233)
Noncash investing and financing activities			
Property, plant and equipment included in accounts payable and accrued expenses and other liabilities	$ 1,243	$ 963	$ 1,641

See notes to consolidated financial statements.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements

Unless the context otherwise requires, references to the "Company," "Lantheus," "our company," "we," "us" and "our" refer to Lantheus MI Intermediate, Inc. and its direct and indirect subsidiaries, references to "Lantheus Intermediate" refer to only Lantheus MI Intermediate, Inc., the parent of Lantheus Medical Imaging, Inc., references to "Holdings" refer to Lantheus MI Holdings, Inc., the parent of Lantheus Intermediate and references to "LMI" refer to Lantheus Medical Imaging, Inc., the subsidiary of Lantheus Intermediate. Solely for convenience, we refer to trademarks, service marks and trade names without the TM, SM and ® symbols. Such references are not intended to indicate, in any way, that we will not assert, to the fullest extent permitted under applicable law, our rights to our trademarks, service marks and trade names.

1. Description of Business

Overview

The Company manufactures, markets, sells and distributes medical imaging products globally with operations in the United States, Puerto Rico, Canada and Australia and distribution relationships in Europe, Asia Pacific and Latin America. The Company provides medical imaging products, primarily focused on cardiovascular diagnostic imaging, to nuclear physicians, cardiologists, radiologists, internal medicine physicians, independent delivery networks, group purchasing organizations and technologists/sonographers working in a variety of clinical settings.

The Company's principal products include:

- DEFINITY—an ultrasound contrast agent;
- TechneLite—a generator that provides the radioisotope used to radiolabel Cardiolite and other radiopharmaceuticals;
- Xenon—a radiopharmaceutical inhaled gas used to assess pulmonary function and also for imaging blood flow particularly in the brain; and
- Cardiolite—a myocardial perfusion imaging agent.

In the U.S., the Company's nuclear imaging products are primarily distributed through radiopharmacy chains, with a small portion of the sales of these products also made to hospitals and clinics that maintain their own in-house radiopharmacies. In the U.S., sales of the Company's contrast agents are made through a direct sales force. Outside of the U.S., the Company owns five radiopharmacies in Canada and two radiopharmacies in each of Puerto Rico and Australia. The Company also maintains a direct sales force in each of these countries. In the rest of the world, the Company relies on third-party distributors to sell both nuclear imaging and contrast agent products.

2. Summary of Significant Accounting Policies

Basis of Consolidation and Presentation

The financial statements have been prepared in United States dollars, in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

The accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the discharge of liabilities in the normal course of business.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

The Company incurred a net loss of $61.7 million and an operating loss of $19.0 million during the year ended December 31, 2013. During 2013, the Company relied on Ben Venue Laboratories, Inc. ("BVL") as its sole manufacturer of Neurolite and one of two manufacturers of its DEFINITY and Cardiolite product supply. Following extended operational and regulatory challenges at BVL's Bedford, Ohio facility, as of November 15, 2013, BVL ceased manufacturing for the Company any DEFINITY, Cardiolite or Neurolite. BVL has since released for commercial distribution all of the Company's remaining manufactured product that was awaiting BVL quality approval. The supply challenges with BVL in recent years have had a negative impact on the Company's results. The Company has taken specific steps to address the supply chain risks and reduce discretionary spend.

Following extensive technology transfer activities, the Company currently relies on Jubilant HollisterStier ("JHS") as its sole source manufacturer of DEFINITY. The Company has additional ongoing technology transfer activities at JHS for its Neurolite and Cardiolite product supply. In the meantime, the Company has no other currently active supplier of Neurolite, and its Cardiolite product supply is manufactured by a single manufacturer.

Based on current projections, the Company believes that it will have sufficient supply of DEFINITY from JHS to meet expected demand and sufficient Cardiolite product supply from its current supplier to meet expected demand. The Company also currently anticipates that it will have sufficient BVL-manufactured Neurolite supply for the U.S. market to last until Neurolite technology transfer and U.S. regulatory approval at JHS are completed. Currently, the regulatory authorities in certain countries prohibit the Company from marketing products previously manufactured by BVL, and JHS has not yet obtained approval of such regulatory authorities that would permit the Company to market products manufactured by JHS. Accordingly, until such regulatory approvals have been obtained, the Company will not be able to sell and distribute those products in the relevant markets.

The Company is currently working to secure additional alternative suppliers for its key products as part of its ongoing supply chain diversification strategy. For example, on November 12, 2013, the Company entered into a Manufacturing and Supply Agreement with Pharmalucence to manufacture and supply DEFINITY. However, the Company is uncertain about the timing of the completion of the technology transfer contemplated by the Pharmalucence agreement and whether the Pharmalucence arrangement or any other arrangements could provide meaningful quantities of product.

During 2012, the Company received net proceeds of $34.6 million from BVL to compensate the Company for business losses associated with a lack of product supply. The Company has recognized these proceeds within the Company's results of operations, and the payments are included within operating income as proceeds from manufacturer. During the second quarter of 2013, the Company received $0.9 million from BVL to compensate the Company for low yield and failed batches of DEFINITY and Cardiolite under the then-current manufacturing agreement with BVL. This payment is included within cost of goods sold in the statement of comprehensive loss for the year ended December 31, 2013. As 2013 progressed, the Company continued to experience losses as a result of the prolonged supply disruption from BVL. During the fourth quarter of 2013, the Company received an additional $8.9 million from BVL under a second Settlement and Release Agreement to compensate the Company for additional historic business losses associated with limited product availability under the then-current manufacturing agreement with BVL. The Company does not anticipate any further cash payments from BVL for historic losses.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

During 2013, the Company has utilized its line of credit as a source of liquidity. On July 3, 2013, LMI, Lantheus Intermediate and Lantheus MI Real Estate, LLC ("Lantheus Real Estate") entered into an amended and restated revolving credit facility (the "New Facility") which replaced the previous facility (the "Old Facility"), the terms of which New Facility are more fully described in Note 10. Borrowing capacity under the New Facility is calculated by reference to a borrowing base consisting of a percentage of certain eligible accounts receivable, inventory and machinery and equipment minus any reserves (the "Borrowing Base"). If the Company is not successful in achieving its forecasted results, the Company's accounts receivable and inventory could be negatively affected, thus reducing the Borrowing Base and limiting the Company's borrowing capacity. As of December 31, 2013, the aggregate borrowing base was approximately $42.5 million, which was reduced by (i) an outstanding $8.8 million unfunded Standby Letter of Credit and (ii) an $8.0 million outstanding loan balance, resulting in a net borrowing base availability of approximately $25.7 million.

The Company took actions during March 2013 to substantially reduce its discretionary spending. In particular, the Company began to implement a strategic shift in how it funds its research and development ("R&D") programs. The Company reduced its internal R&D resources during 2013, while at the same time it seeks to engage one or more strategic partners to assist in the further development and commercialization of its development candidates, including flurpiridaz F 18, 18F LMI 1195 and LMI 1174. The Company has completed its 301 trial for flurpiridaz F 18 with internal funding. The Company will seek to engage strategic partners to assist with the further development and possible commercialization of the agent. For the other two development candidates, 18F LMI 1195 and LMI 1174, the Company will also seek to engage strategic partners to assist with the ongoing development activities relating to these agents. Based on the Company's current operating plans, the Company believes the existing cash and cash equivalents, results of operations and availability under the New Facility will be sufficient to continue to fund the Company's liquidity requirements for at least the next twelve months.

If JHS is not able to continue to manufacture and release adequate product supply on a timely and consistent basis, the Company is not successful with the remainder of its JHS technology transfer programs and cannot obtain adequate supply from JHS, or the Company is unable to continue to grow DEFINITY sales, then the Company will need to implement additional expense reductions, such as a delay or elimination of discretionary spending, in all functional areas as well as other operating and strategic initiatives.

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting period. The more significant estimates reflected in the Company's consolidated financial statements include certain judgments regarding revenue recognition, goodwill, tangible and intangible asset valuation, inventory valuation and potential losses on purchase commitments, asset retirement obligations, income tax liabilities, deferred tax assets and liabilities, accrued expenses and stock-based compensation. Actual results could materially differ from those estimates or assumptions.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

Revenue Recognition

The Company recognizes revenue when evidence of an arrangement exists, title has passed, the risks and rewards of ownership have transferred to the customer, the selling price is fixed or determinable, and collectability is reasonably assured. For transactions for which revenue recognition criteria have not yet been met, the respective amounts are recorded as deferred revenue until such point in time the criteria are met and revenue can be recognized. Revenue is recognized net of reserves, which consist of allowances for returns and rebates.

Revenue arrangements with multiple elements are divided into separate units of accounting if certain criteria are met, including whether the delivered element has stand-alone value to the customer. The arrangement's consideration is then allocated to each separate unit of accounting based on the relative selling price of each deliverable. The estimated selling price of each deliverable is determined using the following hierarchy of values: (i) vendor-specific objective evidence of fair value; (ii) third-party evidence of selling price; and (iii) best estimate of selling price. The best estimate of selling price reflects the Company's best estimate of what the selling price would be if the deliverable was regularly sold by the Company on a stand-alone basis. The consideration allocated to each unit of accounting is then recognized as the related goods or services are delivered, limited to the consideration that is not contingent upon future deliverables. Supply or service transactions may involve the charge of a nonrefundable initial fee with subsequent periodic payments for future products or services. The up-front fees, even if nonrefundable, are recognized as revenue as the products and/or services are delivered and performed over the term of the arrangement.

On January 1, 2009, LMI executed an amendment to a license and supply agreement (the "Agreement") with one of its customers, granting non-exclusive U.S. license and supply rights to the customer for the period from January 1, 2009 through December 31, 2012. Under the terms of the Agreement, the customer paid LMI $10.0 million in license fees; $8.0 million of which was received upon execution of the Agreement and $2.0 million of which was received in June 2009 upon delivery of a special license as defined in the Agreement. The Company's product sales under the Agreement are recognized in the same manner as its normal product sales. The Company recognized the license fees as revenue on a straight-line basis over the term of the four-year Agreement. The Company recognized $2.5 million in fiscal years 2012 and 2011 in license fee revenue pursuant to the Agreement.

In February 2012, the Company entered in to the first amendment to the Agreement. The amendment contained obligations for the Company to deliver a specified number of product unit shipments at various prices. Revenue under this arrangement is being recognized at an average selling price as the units are shipped. The Company recognized $5.6 million and $12.8 million in revenue pursuant to the first amendment during the years ended December 31, 2013 and 2012, respectively, and at December 31, 2012, had deferred revenue of $5.6 million attributable to units to be shipped. There was no deferred revenue attributable to these units at December 31, 2013.

On December 27, 2012, the Company entered into the second amendment to the Agreement, which extended the term from December 31, 2012 to December 31, 2014 and established new pricing and purchase requirements over the extended term. The second amendment also provided for the supply of TechneLite generators containing molybdenum-99 sourced from LEU targets. The agreement includes a $3.0 million upfront payment by the customer to the Company and potential future milestone payments. During 2012, the Company received the $3.0 million upfront payment, of which $1.5 million was included in deferred revenue as a current liability and $1.5 million was included in

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

other long-term liabilities at December 31, 2012 in the accompanying consolidated balance sheets. During 2013, the Company received an additional $4.0 million upon achievement of the required milestones. At December 31, 2013, $3.6 million is included in deferred revenue as a current liability in the accompanying consolidated balance sheets. The Company is recognizing the upfront payment as revenue on a straight-line basis over the term of the two year agreement.

The Company had other revenues of $8.5 million, $8.3 million and $8.0 million in fiscal years 2013, 2012 and 2011, respectively. Other revenue primarily represents contract manufacturing services related to one of the Company's products for one customer. The related costs are included in cost of goods sold. Effective December 13, 2013, the Company entered into an Asset Purchase Agreement to purchase the rights to serve as the direct manufacturer and supplier of this product. These revenues will be reported as net product revenues in the consolidated statement of comprehensive loss. Under this agreement, the Company did not have to pay any upfront consideration and will be required to pay royalties based upon net revenues generated by the sale of the product.

Product Returns

The Company provides a reserve for its estimate of sales recorded for which the related products are expected to be returned. The Company does not typically accept product returns unless an over shipment or non-conforming shipment was provided to the customer, or if the product was defective. The Company adjusts its estimate of product returns if it becomes aware of other factors that it believes could significantly impact its expected returns, including product recalls. These factors include its estimate of actual and historical return rates for non-conforming product and open return requests. Historically, the Company's estimates of returns have reasonably approximated actual returns.

Distributor Relationships

Revenue for product sold to distributors is recognized at shipment, unless revenue recognition criteria have not been met. In such instances where collectability cannot be determined or the selling price cannot be reasonably estimated until the distributor has sold through the goods, the Company defers such revenue until such time as the goods have been sold through to the end-user customer, or the selling price can be reasonably estimated based on history of transactions with such distributor.

Rebates and Allowances

Estimates for rebates and allowances represent the Company's estimated obligations under contractual arrangements with third parties. Rebate accruals and allowances are recorded in the same period the related revenue is recognized, resulting in a reduction to product revenue and the establishment of a liability which is included in accrued expenses in the accompanying consolidated balance sheets. These rebates result from performance-based offers that are primarily based on attaining contractually specified sales volumes and growth, Medicaid rebate programs for certain products, administration fees of group purchasing organizations and certain distributor related commissions. The calculation of the accrual for these rebates and allowances is based on an estimate of the third party's buying patterns and the resulting applicable contractual rebate or commission rate(s) to be earned over a contractual period.

The accrual for rebates and allowances was approximately $1.7 million and $1.5 million at December 31, 2013 and 2012, respectively. Rebate and allowance charges against gross revenues totaled

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

$4.8 million, $2.8 million and $3.6 million for the years ended December 31, 2013, 2012 and 2011, respectively.

Income Taxes

The Company accounts for income taxes using an asset and liability approach. The provision for income taxes represents income taxes paid or payable for the current year plus the change in deferred taxes during the year. Deferred taxes result from differences between the financial and tax bases of the Company's assets and liabilities. Deferred tax assets and liabilities are measured using the currently enacted tax rates that apply to taxable income in effect for the years in which those tax attributes are expected to be recovered or paid, and are adjusted for changes in tax rates and tax laws when changes are enacted.

Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized. The assessment of whether or not a valuation allowance is required involves the weighing of both positive and negative evidence concerning both historical and prospective information with greater weight given to evidence that is objectively verifiable. A history of recent losses is negative evidence that is difficult to overcome with positive evidence. In evaluating prospective information there are four sources of taxable income: reversals of taxable temporary differences, items that can be carried back to prior tax years (such as net operating losses), pre-tax income, and tax planning strategies. Any tax planning strategies that are considered must be prudent and feasible, and would only be undertaken in order to avoid losing an operating loss carryforward. Adjustments to the deferred tax valuation allowances are made in the period when such assessments are made.

The Company accounts for uncertain tax positions using 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. Differences between tax positions taken in a tax return and amounts recognized in the financial statements are recorded as adjustments to income taxes payable or receivable, or adjustments to deferred taxes, or both. The Company provides disclosure at the end of each annual reporting period on a tabular reconciliation of unrecognized tax benefits. The Company classifies interest and penalties within the provision for income taxes.

Cash and Cash Equivalents

Cash and cash equivalents include savings deposits, certificates of deposit and money market funds that have maturities of three months or less when purchased.

Accounts Receivable

Accounts receivable consist of amounts billed and currently due from customers. The Company maintains an allowance for doubtful accounts for estimated losses. In determining the allowance, consideration includes the probability of recoverability based on past experience and general economic factors. Certain accounts receivable may be fully reserved when specific collection issues are known to exist, such as pending bankruptcy. As of December 31, 2013 and 2012, the Company had allowances for doubtful accounts of approximately $0.3 million.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

Also included in accounts receivable are miscellaneous receivables of approximately $1.9 million and $1.7 million as of December 31, 2013 and 2012, respectively.

Concentration of Risks and Limited Suppliers

Financial instruments which potentially subject the Company to concentrations of credit risk consist principally of trade accounts receivable. The Company periodically reviews its accounts receivable for collectability and provides for an allowance for doubtful accounts to the extent that amounts are not expected to be collected. The Company sells primarily to large national distributors, which in turn, may resell the Company's products. There were two customers that represented greater than 10% of the total net accounts receivable balance and net revenue during the year ended December 31, 2013, the majority of which is included in the U.S. segment.

	Accounts Receivable as of December 31,		Revenue for the year ended December 31,		
	2013	2012	2013	2012	2011
Company A	16.7%	30.7%	18.8%	27.4%	26.5%
Company B	13.2%	8.8%	10.2%	8.4%	8.5%
Company C	7.2%	7.0%	9.8%	11.5%	11.1%

The Company's cash and cash equivalents are maintained with various financial institutions.

The Company relies on certain materials used in its development and manufacturing processes, some of which are procured from only one or a few sources. The failure of one of these suppliers to deliver on schedule could delay or interrupt the manufacturing or commercialization process and thereby adversely affect the Company's operating results. In addition, a disruption in the commercial supply of, or a significant increase in, the cost of one of the Company's materials from these sources could have a material adverse effect on the Company's business, financial position and results of operations. From May 2009 until August 2010, Nordion, the Company's largest supplier of molybdenum-99 ("Moly"), a key raw material in the Company's TechneLite product, was affected by a nuclear reactor shutdown. The Company was not fully able to replace all of the quantity of supply it previously received from Nordion, which had a negative impact on the Company's results of operations. As part of the conditions for the relicensing of the NRU reactor through October 2016, the Canadian government has asked Atomic Energy of Canada Limited, or AECL, to shut down the reactor for at least four weeks at least once a year for inspection and maintenance. The scheduled 2012 shutdown period ran from mid-April 2012 until mid-May 2012, and during such period, some of LMI's customers diverted a small amount of business to LMI's competitor, which correspondingly reduced our aggregate orders during the shutdown period. With this diversion, LMI was able to fulfill all customer demand for Moly from other suppliers during the shutdown period. On October 19, 2012 and October 30, 2012, the Company executed amendments to agreements with Nordion and NTP, the Company's Moly suppliers, which extended the contract terms of those agreements to December 31, 2015 and December 31, 2017, respectively. In addition, because Xenon is a by-product of the Moly production process and is currently captured only by Nordion, the Company is currently reliant on Nordion as the sole supplier of Xenon to meet customer demand. In March 2013, the Company entered into an agreement with Institute for Radioelements ("IRE") who had previously been supplying the Company with Moly under the previous agreement with NTP and this agreement expires on December 31, 2017.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

Historically, the Company has relied on BVL as its sole manufacturer of DEFINITY and Neurolite and one of two manufacturers of its Cardiolite product supply. Following extended operational and regulatory challenges at BVL's Bedford, Ohio facility, as of November 15, 2013 BVL ceased manufacturing for the Company any DEFINITY, Cardiolite or Neurolite. BVL has since released for commercial distribution all of the Company's remaining manufactured product that was awaiting BVL quality approval.

Following extensive technology transfer activities, the Company currently relies on JHS as its sole source manufacturer of DEFINITY. The Company has additional ongoing technology transfer activities at JHS for its Neurolite and Cardiolite product supply. In the meantime, the Company has no other currently active supplier of Neurolite, and its Cardiolite product supply is manufactured by a single manufacturer.

Based on current projections, the Company believes that it will have sufficient supply of DEFINITY from JHS to meet expected demand and sufficient Cardiolite product supply from its current supplier to meet expected demand. The Company also anticipates that it has sufficient BVL-manufactured Neurolite supply for the U.S. market to last until Neurolite technology transfer and U.S. regulatory approval at JHS are completed. Currently, the regulatory authorities in certain countries prohibit the Company from marketing products previously manufactured by BVL, and JHS has not yet obtained approval of such regulatory authorities that would permit the Company to market products manufactured by JHS. Accordingly, until such regulatory approvals have been obtained, the Company will not be able to sell and distribute those products in the relevant markets.

The Company is also currently working to secure additional alternative suppliers for its key products as part of its ongoing supply chain diversification strategy. For example, on November 12, 2013, the Company entered into a Manufacturing and Supply Agreement with Pharmalucence to manufacture and supply DEFINITY. However, the Company is uncertain about the timing of the completion of the technology transfer contemplated by the Pharmalucence agreement and whether the Pharmalucence arrangement or any other arrangements could provide meaningful quantities of product.

The following table sets forth net product revenues for the Company's products that represented greater than 10% of total net product revenue for the years ended December 31, 2013, 2012 and 2011.

	Year Ended December 31,		
	2013	2012	2011
DEFINITY	28.7%	18.6%	19.8%
TechneLite	33.9%	41.2%	38.0%
Xenon	11.8%	10.8%	7.7%
Cardiolite	9.6%	12.6%	19.1%

Inventory

Inventory includes material, direct labor and related manufacturing overhead, and is stated at the lower of cost or market on a first-in, first-out basis. The Company does have consignment arrangements with certain customers where the Company retains title and the risk of ownership of the inventory, which is included in the Company's inventory balance.

The Company assesses the recoverability of inventory to determine whether adjustments for excess and obsolete inventory are required. Inventory that is in excess of future requirements is written down to its estimated net realizable value based upon forecasted demand for its products. If actual demand is less favorable than what has been forecasted by management, additional inventory write-down may be required.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

Inventory costs associated with product that has not yet received regulatory approval are capitalized if the Company believes there is probable future commercial use of the product and future economic benefit of the asset. If future commercial use of the product is not probable, then inventory costs associated with such product are expensed during the period the costs are incurred. At December 31, 2012, we had $1.5 million of such product costs included in inventories relating to DEFINITY that was manufactured by JHS. In February 2013, the FDA informed the Company that the JHS facility was approved to manufacture DEFINITY, and the Company is now shipping JHS-manufactured DEFINITY to customers. At December 31, 2013, we had no capitalized inventories that did not have regulatory approval.

Property, Plant and Equipment

Property, plant and equipment are stated at cost. Replacements of major units of property are capitalized, and replaced properties are retired. Replacements of minor components of property and repair and maintenance costs are charged to expense as incurred. Depreciation is computed on a straight-line method based on the estimated useful lives of the related assets. The estimated useful lives of the major classes of depreciable assets are as follows:

Buildings	50 years
Land improvements	40 years
Machinery and equipment	3 - 20 years
Furniture and fixtures	15 years
Leasehold improvements	Lesser of lease term or 15 years

Upon retirement or other disposal of property, plant and equipment, the cost and related amount of accumulated depreciation are removed from the asset and accumulated depreciation accounts, respectively. The difference, if any, between the net asset value and the proceeds is included in comprehensive loss.

Capitalized Software Development Costs

Certain costs to obtain internal use software for significant systems projects are capitalized and amortized over the estimated useful life of the software, which ranges from 3 to 5 years. Costs to obtain software for projects that are not significant are expensed as incurred. Capitalized software development costs, net of accumulated amortization, were $1.5 million and $2.2 million at December 31, 2013 and 2012, respectively. Approximately $0.7 million and $0.2 million of software development costs were capitalized in the years ended December 31, 2013 and 2012, respectively. Amortization expense related to the capitalized software was $1.5 million, $1.5 million and $1.4 million for the years ended December 31, 2013, 2012 and 2011, respectively.

Goodwill, Intangibles and Long-Lived Assets

Goodwill is not amortized, but is instead tested for impairment at least annually and whenever events or circumstances indicate that it is more likely than not that they may be impaired. The Company has elected to perform the annual test for indications of goodwill impairment as of October 31 of each year.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

In performing tests for goodwill impairment, the Company is first permitted to perform a qualitative assessment about the likelihood of the carrying value of a reporting unit exceeding its fair value. If the Company determines that it is more likely than not that the fair value of a reporting unit is less than its carrying amount based on the qualitative assessment, it is required to perform the two-step goodwill impairment test described below to identify the potential goodwill impairment and measure the amount of the goodwill impairment loss, if any, to be recognized for that reporting unit. However, if the Company concludes otherwise based on the qualitative assessment, the two-step goodwill impairment test is not required. The option to perform the qualitative assessment is not an accounting policy election and can be utilized at the Company's discretion. Further, the qualitative assessment need not be applied to all reporting units in a given goodwill impairment test. For an individual reporting unit, if the Company elects not to perform the qualitative assessment, or if the qualitative assessment indicates that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then the Company must perform the two- step goodwill impairment test for the reporting unit. If the implied fair value of goodwill is less than the carrying value, then an impairment charge would be recorded.

In performing the annual goodwill impairment test in 2013 and 2012, the Company bypassed the option to perform a qualitative assessment and proceeded directly to performing the first step of the two-step goodwill impairment test.

The Company calculates the fair value of its reporting units using the income approach, which utilizes discounted forecasted future cash flows and the market approach which utilizes fair value multiples of comparable publicly traded companies. The discounted cash flows are based on our most recent long-term financial projections and are discounted using a risk adjusted rate of return, which is determined using estimates of market participant risk-adjusted weighted average costs of capital and reflects the risks associated with achieving future cash flows. The market approach is calculated using the guideline company method, where the Company uses market multiples derived from stock prices of companies engaged in the same or similar lines of business. There is not a quoted market price for the Company's reporting units or the company as a whole, therefore, a combination of the two methods is utilized to derive the fair value of the business. The Company evaluated and weighed the results of these approaches as well as ensures it understands the basis of the results of these two methodologies. The Company believes the use of these two methodologies ensures a consistent and supportable method of determining its fair value that is consistent with the objective of measuring fair value. If the fair value were to decline, then the Company may be required to incur material charges relating to the impairment of those assets. The Company did not identify any impairment in goodwill in 2013, 2012 or 2011. Goodwill is not deductible for tax purposes.

In addition, as a result of the continued supply challenges with BVL, the Company performed an interim impairment test of goodwill as of December 31, 2011. The analyses utilizedthe most recently available forecast information, which considered the potential impact of the continued supply challenges in 2011. The interim impairment test did not indicate that there was any impairment as of December 31, 2011. There were no events at December 31, 2012 that triggered an interim impairment test. During the first quarter of 2013, the strategic shift in how the Company funds its R&D programs significantly altered the expected future costs and revenues associated with our development candidates. Accordingly, this action was deemed to be a triggering event for an evaluation of the recoverability of the Company's goodwill as of March 31, 2013. The Company performed an interim impairment test and determined that there was no impairment of goodwill as of March 31, 2013. Furthermore, the

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

Company performed its annual impairment test for goodwill as of October 31, 2013, and there were no events through December 31, 2013 that triggered an interim impairment test. At each annual and interim impairment test date, the fair value of the Company's reporting unit, which includes goodwill, was substantially in excess of its carrying value.

The Company tests intangible and long-lived assets for recoverability whenever events or changes in circumstances suggest that the carrying value of an asset or group of assets may not be recoverable. The Company measures the recoverability of assets to be held and used by comparing the carrying amount of the asset to future undiscounted net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment equals the amount by which the carrying amount of the assets exceeds the fair value of the assets. Any impairments are recorded as permanent reductions in the carrying amount of the assets. Long-lived assets, other than goodwill and other intangible assets, that are held for sale are recorded at the lower of the carrying value or the fair market value less the estimated cost to sell.

In the first quarter of 2012, the Company reviewed the estimated useful life of its Cardiolite trademark as a result of a triggering event. Utilizing the most recent forecasted revenue data, the Company revised the estimate of the remaining useful life of the Cardiolite trademark to five years. The Company monitors the recoverability of its branded Cardiolite trademark intangible asset due to the ongoing generic competition based on actual results and existing estimates of future undiscounted cash flows associated with the branded Cardiolite product. As of December 31, 2013, the Company conducted, using its revised sales forecast, an impairment analysis and concluded that the estimate of future undiscounted cash flows associated with the Cardiolite trademark intangible did not exceed the carrying amount of the asset totaling $19.2 million and therefore, the asset has been written down to its fair value. Fair value was calculated by utilizing Level 3 inputs in the relief-from-royalty method, an income-based approach. As a result of this analysis, the Company recorded an impairment charge of $15.4 million to adjust the carrying value to its fair value of $3.8 million. This expense was recorded within cost of goods sold in the accompanying consolidated statement of comprehensive loss in the fourth quarter of 2013.

In the third quarter of 2013, the Company was in negotiations with a new distributor for the sale of certain products within certain international markets. This agreement was signed in October 2013 and as a result the Company did not renew the agreements with its former distributors in these international markets. The Company determined the customer relationship intangible related to these former distributors was no longer recoverable and recorded an impairment charge of $1.0 million in the third quarter of 2013. In the fourth quarter of 2013, the Company updated its strategic plan to reflect the non-renewal of these agreements and the uncertainty in the timing of product availability in this region. As a result, the Company reviewed the recoverability of certain of its customer relationship intangible assets in the International segment that were impacted by the Company's revised strategic plan. The Company conducted an impairment analysis and concluded that the estimate of future undiscounted cash flows associated with the customer relationship intangible asset did not exceed the carrying amount of the asset and therefore, the asset would need to be written down to its fair value. In order to calculate the fair value of the acquired customer relationship intangible assets, the Company utilized Level 3 inputs to estimate the future discounted cash flows associated with remaining customers and as a result of this analysis, recorded an impairment charge of $0.7 million in the fourth quarter of 2013. These impairment charges were recorded within cost of goods sold in the accompanying consolidated statement of comprehensive loss.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

During the third quarter of 2013, the Company committed to a plan to sell certain of its excess land in the U.S. segment, which had a carrying value of $7.5 million. This event qualified for held for sale accounting and the excess land was written down to its fair value, less estimated costs to sell. The fair value was estimated utilizing Level 3 inputs and using a market approach, based on available data for transactions in the region, discussions with real estate brokers and the asking price of comparable properties in its principal market. This resulted in a loss of $6.4 million, which is included within operating loss as impairment of land in the accompanying consolidated statement of comprehensive loss. During the fourth quarter of 2013, the Company sold the excess land for net proceeds of $1.1 million.

Fixed assets dedicated to R&D activities, which were impacted by the recent R&D strategic shift, have a carrying value of $6.3 million as of December 31, 2013. The Company believes these fixed assets will be utilized for either internally funded ongoing R&D activities or R&D activities funded by a strategic partner. If the Company is not successful in finding a strategic partner, and there are no alternative uses for those fixed assets, they could be subject to impairment in the future.

The Company also tested certain long-lived assets utilized in the manufacturing of certain products in the U.S. for recoverability as of December 31, 2013, due to a change in the Company's contract to manufacture Quadramet. The analysis indicated that there was no impairment as of December 31, 2013. The Company also evaluated the remaining useful lives of these long-lived assets that were tested for recoverability at December 31, 2013 and determined no revisions were required to the remaining periods of depreciation.

Intangible assets, consisting of patents, trademarks and customer relationships related to the Company's products are amortized in a method equivalent to the estimated utilization of the economic benefit of the asset. Trademarks and patents are amortized on a straight-line basis, and customer relationships are amortized on an accelerated basis.

Deferred Financing Costs

Deferred financing costs are capitalized and amortized to interest expense using the effective interest method. As of December 31, 2013 and 2012, the unamortized deferred financing costs were $9.6 million and $11.4 million, respectively. The expense associated with the amortization of deferred financing costs was $2.4 million, $2.2 million and $1.4 million for the years ended December 31, 2013, 2012 and 2011, respectively, and was included in interest expense. In connection with the New Facility, the Company wrote off $0.6 million of the existing unamortized deferred financing costs related to the Old Facility, which is included in interest expense in the accompanying consolidated statements of comprehensive loss.

Contingencies

In the normal course of business, the Company is subject to loss contingencies, such as legal proceedings and claims arising out of its business, that cover a wide range of matters, including, among others, product and environmental liability. The Company records accruals for such loss contingencies when it is probable that a liability will be incurred and the amount of loss can be reasonably estimated. The Company does not recognize gain contingencies until realized.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

Fair Value of Financial Instruments

The estimated fair values of the Company's financial instruments, including its cash and cash equivalents, receivables, accounts payable and accrued expenses approximate the carrying values of these instruments due to their short term nature. Assets measured at fair value on a nonrecurring basis include long-lived assets held for sale and certain intangible assets. The estimated fair value of the debt, at December 31, 2013, based on Level 2 inputs of recent market activity available to the Company was $356.0 million compared to the face value of $400.0 million. At December 31, 2012, the estimated fair value of the debt based on Level 2 inputs of recent market activity available to the Company was $380.0 million compared to the face value of $400.0 million.

Shipping and Handling Revenues and Costs

The Company typically does not charge customers for shipping and handling costs, but any shipping and handling costs charged to customers are included in product revenues. Shipping and handling costs are included in cost of goods sold and were $20.5 million, $20.4 million and $20.3 million for the years ended December 31, 2013, 2012 and 2011, respectively.

Advertising and Promotion Costs

Advertising and promotion costs are expensed as incurred and totaled $2.7 million, $3.2 million and $4.1 million for the years ended December 31, 2013, 2012 and 2011, respectively, and are included in sales and marketing expenses.

Research and Development

Research and development costs are expensed as incurred and relate primarily to the development of new products to add to the Company's portfolio and costs related to its medical affairs and medical information functions. Nonrefundable advance payments for goods or services that will be used or rendered for future research and development activities are deferred and recognized as an expense as the goods are delivered or the related services are performed.

Foreign Currency Translation

The consolidated statements of comprehensive loss of the Company's foreign subsidiaries are translated into U.S. Dollars using average exchange rates. The net assets of the Company's foreign subsidiaries are translated into U.S. Dollars using the end of period exchange rates. The impact from translating the net assets of these subsidiaries at changing rates are recorded in the foreign currency translation adjustment account, which is included in consolidated accumulated other comprehensive loss.

For the years ended December 31, 2013, 2012 and 2011, losses arising from foreign currency transactions totaled approximately $0.3 million, $0.6 million and $0.2 million, respectively. Transaction gains and losses are reported as a component of other income (expense), net.

Accounting for Stock-Based Compensation

The Company's stock-based compensation cost is measured at the grant date of the stock-based award based on the fair value of the award and is recognized as expense over the requisite service

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

period, which generally represents the vesting period, and includes an estimate of the awards that will be forfeited. The Company uses the Black-Scholes valuation model for estimating the fair value of stock options. The fair value of stock option awards is affected by the valuation assumptions, including the expected volatility based on comparable market participants, expected term of the option, risk-free interest rate and expected dividends. When a contingent cash settlement of vested options becomes probable, the Company reclassifies its vested awards to a liability and accounts for any incremental compensation cost in the period in which the settlement becomes probable.

Accumulated Other Comprehensive (Loss) Income

Comprehensive loss is comprised of net loss, plus all changes in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources, including any foreign currency translation adjustments. These changes in equity are recorded as adjustments to accumulated other comprehensive (loss) income in the Company's consolidated balance sheet. The components of accumulated other comprehensive income (loss) consist of foreign currency translation adjustments.

Asset Retirement Obligations

The Company's compliance with federal, state, local and foreign environmental laws and regulations may require it to remove or mitigate the effects of the disposal or release of chemical substances in jurisdictions where it does business or maintains properties. The Company establishes accruals when such costs are legally obligated and probable and can be reasonably estimated. Accrual amounts are estimated based on currently available information, regulatory requirements, remediation strategies, historical experience, the relative shares of the total remediation costs and a relevant discount rate, when the time periods of estimated costs can be reasonably predicted. Changes in these assumptions could impact the Company's future reported results. The amounts recorded for asset retirement obligations in the accompanying balance sheets at December 31, 2013 and 2012 were $6.4 million and $5.4 million, respectively.

Self Insurance Reserves

The Company's consolidated balance sheet at December 31, 2013 and 2012 includes approximately $0.4 million and $0.5 million, respectively, of accrued liabilities associated with employee medical costs that are retained by the Company. The Company estimates the required liability of such claims on an undiscounted basis based upon various assumptions which include, but are not limited to, the Company's historical loss experience and projected loss development factors. The required liability is also subject to adjustment in the future based upon changes in claims experience, including changes in the number of incidents (frequency) and change in the ultimate cost per incident (severity). The Company also maintains a separate cash account to fund these medical claims and must maintain a minimum balance as determined by the plan administrator. The balance of this restricted cash account was approximately $0.2 million and $27,000 at December 31, 2013 and 2012, respectively, and is included in other current assets.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

Recent Accounting Standards

In July 2013, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update ("ASU") No. 2013-11, "Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists" ("ASU 2013-11"). The amendments in ASU 2013-11 provide guidance on the financial statement presentation of unrecognized tax benefits when a net operating loss carryforward, a similar tax loss, or a tax credit carryforward exists. ASU 2013-11 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2013. The Company will reflect the impact of these amendments beginning with the Company's Quarterly Report on Form 10-Q for the period ending March 31, 2014. The Company does not anticipate a material impact to the Company's financial position, results of operations or cash flows as a result of this change.

3. Fair Value of Financial Instruments

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. In order to increase consistency and comparability in fair value measurements, financial instruments are categorized based on a hierarchy that prioritizes observable and unobservable inputs used to measure fair value into three broad levels, which are described below:

Level 1—Inputs are unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.

Level 2—Inputs include quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the asset or liability (i.e., interest rates, yield curves, etc.) and inputs that are derived principally from or corroborated by observable market data by correlation or other means (market corroborated inputs).

Level 3—Unobservable inputs that reflect a Company's estimates about the assumptions that market participants would use in pricing the asset or liability. The Company develops these inputs based on the best information available, including its own data.

At December 31, 2013 and 2012, the Company's financial assets that are measured at fair value on a recurring basis are comprised of money market securities and are classified as cash equivalents. The Company invests excess cash from its operating cash accounts in overnight investments and reflects these amounts in cash and cash equivalents on the consolidated balance sheet using quoted prices in active markets for identical assets (Level 1).

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

3. Fair Value of Financial Instruments (Continued)

The tables below present information about the Company's assets and liabilities that are measured at fair value on a recurring basis as of December 31, 2013 and 2012:

(in thousands)	Total fair value at December 31, 2013	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Money market	$ 1,236	$ 1,236	$ —	$ —
Certificates of deposit—restricted	322	—	322	—
	$ 1,558	$ 1,236	$ 322	$ —

(in thousands)	Total fair value at December 31, 2012	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Money market	$ 2,004	$ 2,004	$ —	$ —
Certificates of deposit—restricted	328	—	328	—
	$ 2,332	$ 2,004	$ 328	$ —

In the first quarter of 2012, the Company invested $0.2 million in a certificate of deposit in which the Company's use of such cash is restricted and is included in the line item "Certificates of deposit—restricted" above. This investment is classified in other current assets on the consolidated balance sheet. The remaining $0.1 million represents a certificate of deposit that is collateral for a long-term lease and is included in other long-term assets on the consolidated balance sheet. Certificates of deposit are classified within Level 2 of the fair value hierarchy as these are not traded on the open market.

At December 31, 2013, the Company had total cash and cash equivalents of $16.7 million, which included approximately $1.2 million of money market funds and $15.5 million of cash on-hand. At December 31, 2012, the Company had total cash and cash equivalents of $31.6 million, which included approximately $2.0 million of money market funds and $29.6 million of cash on-hand.

The estimated fair values of the Company's financial instruments, including its cash and cash equivalents, receivables, accounts payable and accrued expenses approximate the carrying values of these instruments due to their short term nature. The estimated fair value of the debt, at December 31, 2013, based on Level 2 inputs of recent market activity available to the Company was $356.0 million compared to the face value of $400.0 million. At December 31, 2012, the estimated fair value of the debt based on Level 2 inputs of recent market activity available to the Company was $380.0 million compared to the face value of $400.0 million.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

3. Fair Value of Financial Instruments (Continued)

The table below presents information about the Company's assets and liabilities that are measured at fair value on a nonrecurring basis during the year ended December 31, 2013, due to the remeasurement of assets resulting in impairment charges.

Year ending December 31, 2013 (in thousands)	Total fair value	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Cardiolite trademark	$ 3,800	$ —	$ —	$ 3,800
Customer relationships	—	—	—	—
Total	$ 3,800	$ —	$ —	$ 3,800

During the third quarter of 2013, the Company recorded an impairment charge of $6.4 million to write down the carrying value of excess land held for sale in the U.S. segment totaling $7.5 million to its fair value, less estimated costs to sell. See Note 6 for further discussion regarding the impairment charge. The fair value of land held for sale was determined using Level 3 inputs and was estimated using a market approach, based on available data for transactions in the region, discussions with real estate brokers and the asking price of comparable properties in its principal market. Unobservable inputs obtained from third parties are adjusted as necessary for the condition and attributes of the specific asset. The land sale was completed in the fourth quarter of 2013.

During the third and fourth quarters of 2013, the Company recorded an impairment charge of $1.0 million and $0.7 million, respectively, to write down the carrying value of a customer relationship intangible asset in the International segment totaling $1.8 million and $0.7 million, respectively, to its fair value of zero. See Note 8 for further discussion regarding the impairment charge. The determination of the customer relationship intangible assets impairment charge was based on Level 3 measurements under the fair value hierarchy. The Company utilized an income approach to calculate the discounted cash flows that would be generated by its remaining customer base. The unobservable inputs utilized by the Company included management's assumptions regarding future revenues and profitability from the remaining customers and a discount rate of 15% as of September 30, 2013 and December 31, 2013, respectively.

During the fourth quarter of 2013, the Company recorded an impairment charge of $15.4 million to write down the Cardiolite trademark intangible asset in the U.S. segment totaling $19.2 million to its fair value of $3.8 million. See Note 8 for further discussion regarding the impairment charge. The fair value measurements were determined using a relief-from-royalty method, which incorporates unobservable inputs, thereby classifying the fair value measurements as a Level 3 measurement within the fair value hierarchy. The primary inputs used in the relief-from-royalty method, an income-based approach, included estimated prospective cash flows expected to be generated by Cardiolite and an estimated royalty rate that would be used by a market participant. The unobservable inputs utilized by the Company included management's assumptions regarding future revenues and profitability from the branded Cardiolite product, a royalty rate of 6%, a discount rate of 15% and a life of 15 years.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

4. Income Taxes

The components of (loss) income before income taxes for the years ended December 31 were:

(in thousands)	2013	2012	2011
United States	$ (58,093)	$ (43,868)	$ (55,658)
International	(2,571)	1,312	3,287
	$ (60,664)	$ (42,556)	$ (52,371)

The provision (benefit) for income taxes as of December 31 was:

(in thousands)	2013	2012	2011
Current			
Federal	$ (782)	$ (3,508)	$ (41)
State	1,712	2,763	2,607
International	356	618	202
	$ 1,286	$ (127)	$ 2,768
Deferred			
Federal	$ —	$ 200	$ 75,939
State	—	—	6,326
International	(272)	(628)	(935)
	(272)	(428)	81,330
	$ 1,014	$ (555)	$ 84,098

The Company's provision (benefit) for income taxes in the years ended December 31, 2013, 2012 and 2011 was different from the amount computed by applying the statutory U.S. Federal income tax rate to (loss) income from operations before income taxes, as a result of the following:

(in thousands)	2013		2012		2011	
U.S. statutory rate	$ (21,224)	35.0%	$ (14,895)	35.0%	$ (18,331)	35.0%
Permanent items and foreign tax credits	292	(0.5)%	(1,200)	2.8%	(363)	0.7%
Uncertain tax positions	809	(1.3)%	892	(2.1)%	1,148	(2.2)%
Research credits	(1,346)	2.2%	—	—	(910)	1.7%
State and local taxes	(1,780)	3.0%	(1,821)	4.3%	(1,815)	3.5%
Impact of rate change on deferred taxes	31	(0.1)%	(974)	2.3%	(393)	0.7%
True-up of prior year tax	(1,422)	2.3%	(2,345)	5.5%	33	(0.1)%
Foreign tax rate differential	92	(0.2)%	(455)	1.1%	(584)	1.1%
Valuation allowance	25,674	(42.3)%	20,243	(47.6)%	102,692	(196.1)%
Tax on repatriation	(18)	0.0%	—	—	2,600	(5.0)%
Other	(94)	0.2%	—	—	21	—%
	$ 1,014	(1.7)%	$ (555)	1.3%	$ 84,098	(160.7)%

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

4. Income Taxes (Continued)

The components of deferred income tax assets (liabilities) at December 31 were:

(in thousands)	2013	2012
Deferred Tax Assets		
Federal benefit of state taxes payable	$ 11,541	$ 10,926
Reserves, accruals and other	29,242	33,977
Capitalized research and development	30,057	22,320
Capital loss carryforward	2,309	—
Amortization of intangibles other than goodwill	52,665	61,131
Net operating loss carryforwards	31,405	7,851
Deferred tax assets	157,219	136,205
Deferred Tax Liabilities		
Reserves, accruals and other	(500)	(1,125)
Customer relationships	(7,860)	(10,274)
Depreciation	(360)	(2,191)
Deferred tax liability	(8,720)	(13,590)
Less: Valuation allowance	(148,535)	(122,935)
	$ (36)	$ (320)

	2013	2012
Recorded in the accompanying consolidated balance sheet as:		
Current deferred tax assets	$ 18	$ 115
Current deferred tax liabilities	(57)	—
Noncurrent deferred tax assets	15	—
Noncurrent deferred tax liability	(12)	(435)
Net deferred tax liabilities	$ (36)	$ (320)

The Company files separate federal income tax returns for Lantheus MI Intermediate, Inc. and Lantheus Medical Imaging, Inc. For state tax purposes, the Company files combined tax returns with Lantheus MI Holdings, Inc. For income tax provision purposes, the Company uses the separate return method in calculating its state tax provision. As of December 31, 2013 and December 31, 2012, the Company reflects an amount payable to Lantheus MI Holdings of $85,000, for the tax benefit of losses incurred by Lantheus MI Holdings, which is included in due from parent on the consolidated balance sheets.

As of December 31, 2013 and 2012, total liabilities for tax obligations and associated interest and penalties were $34.9 million and $34.7 million, respectively, consisting of income tax provisions for uncertain tax benefits of $14.1 million and $15.4 million, interest accruals of $18.2 million and $16.5 million and penalty accruals of $2.6 million and $2.8 million, respectively, which were included in other long-term liabilities on the consolidated balance sheets with the offsetting asset in other long-term assets. The total noncurrent asset related to the indemnification was $19.7 million and $18.5 million as of December 31, 2013 and 2012, respectively. Included in the 2013, 2012 and 2011 tax provision is $1.9 million, $2.6 million and $2.4 million, respectively, relating to current year interest

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

4. Income Taxes (Continued)

expense, with an offsetting amount included in other income due to the indemnification related to these obligations.

A reconciliation of the Company's changes in uncertain tax positions for 2013, 2012 and 2011 is as follows:

(in thousands)	
Beginning balance of uncertain tax positions as of January 1, 2011	$ 16,059
Additions related to current year tax positions	195
Reductions related to prior year tax positions	(876)
Balance of uncertain tax positions as of December 31, 2011	15,378
Additions related to current year tax positions	301
Reductions related to prior year tax positions	—
Settlements	(651)
Lapse of statute of limitations	(1,122)
Balance of uncertain tax positions as of December 31, 2012	13,906
Additions related to current year tax positions	18
Reductions related to prior year tax positions	—
Settlements	(34)
Lapse of statute of limitations	(763)
Balance of uncertain tax positions as of December 31, 2013	$ 13,127

As of December 31, 2013 and 2012, the total amount of unrecognized tax benefits was $13.1 million and $13.9 million, respectively, all of which would affect the effective tax rate, if recognized. These amounts are primarily associated with domestic state tax issues, such as the allocation of income among various state tax jurisdictions, transfer pricing and U.S. federal R&D credits. Since the Company operates in a number of countries in which it has income tax treaties, it believes that it is more-likely-than-not that the Company should be able to receive competent authority relief for potential adjustments in those countries. Included in the Company's uncertain tax positions for transfer pricing exposures are $1.0 million, which is reflected within other long-term liabilities, and an offset of $1.0 million, which is reflected in other long-term assets. The tabular rollforward reflected above is net of the $1.0 million of competent authority relief.

The Company's U.S. income tax returns remain subject to examination for three years. The state income tax returns remain subject to examination for three to four years depending on the state's statute of limitations.

In 2013, as a result of the expiration of the 2009 statute of limitations, the Company has recognized the benefit associated with the reversal of uncertain tax positions including interest and penalties of $2.0 million.

Included in other expense for the year ended December 31, 2013, is $0.9 million relating to the reduction in the indemnification receivable from BMS associated with the expiration of statute of limitations. Within the next twelve months, unrecognized tax benefits of $6.9 million may be recognized associated with potential state settlements and transfer pricing due to the closing of the statute of limitations.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

4. Income Taxes (Continued)

In accordance with the Company's acquisition of the medical imaging business from BMS in 2008, the Company obtained a tax indemnification agreement with Bristol Myers Squibb ("BMS") related to certain tax obligations arising prior to the acquisition of the Company, for which the Company has the primary legal obligation. The tax indemnification receivable is recognized within other noncurrent assets. The changes in the tax indemnification asset are recognized within other income, net in the consolidated statement of comprehensive (loss) income. In accordance with the Company's accounting policy, the change in the tax liability and penalties and interest associated with these obligations (net of any offsetting federal or state benefit) is recognized within the tax provision. Accordingly, as these reserves change, adjustments are included in the tax provision while the offsetting adjustment is included in other income. Assuming that the receivable from BMS continues to be considered recoverable by the Company, there is no net effect on earnings related to these liabilities and no net cash outflows.

During the fourth quarter of 2012, the Company was contacted by several state tax jurisdictions relating to tax matters that would be subject to the BMS indemnification agreement. It is not certain as to how these matters will be resolved. The effect on the Company's financial statements should be neutral as any changes to the Company's income tax provision will be offset by other income or expense as described below.

During the year ended December 31, 2012, BMS, on behalf of the Company, made payments totaling $0.7 million to a number of states in connection with prior year state income tax filings. As a result of these payments, the amount due from BMS, included within other long-term assets, decreased by $0.7 million which represents the total cash payments of $0.7 million in 2012. There were no payments made on behalf of the Company in 2013.

The Company has generated domestic pre-tax losses for the past three years. This loss history demonstrates negative evidence concerning the Company's ability to utilize its domestic gross deferred tax assets. In order to overcome the presumption of recording a valuation allowance against the deferred tax assets, the Company must have sufficient positive evidence that it can generate sufficient taxable income to utilize these deferred tax assets within the carryover or forecast period. Although the Company has no history of expiring net operating losses or other tax attributes, based on the cumulative loss incurred over the three-year period ended December 31, 2013, management determined that the net U.S. deferred tax assets are not more-likely-than-not recoverable. As a result of this analysis, the Company continues to maintain a full valuation allowance primarily against its net U.S. deferred tax assets in the amount of $148.5 million and $122.9 million at December 31, 2013 and 2012, respectively.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

4. Income Taxes (Continued)

The following is a reconciliation of the Company's valuation allowance for the years ending December 31, 2013, 2012, and 2011.

(in thousands)	
Balance at January 1, 2011	$ 0
Charged to provision for income taxes	102,692
Deductions	—
Balance at December 31, 2011	102,692
Charged to provision for income taxes	20,243
Deductions	—
Balance at December 31, 2012	122,935
Charged to provision for income taxes	25,600
Deductions	—
Balance at December 31, 2013	$ 148,535

At December 31, 2013, the Company has federal net operating loss carryovers of $74.3 million, which begin to expire in 2031. The Company has $2.4 million of federal research credits, which begin to expire in 2029. The Company has foreign tax credits of approximately $4.2 million that will begin to expire in 2020. The Company has state research credits of $1.6 million, which will expire between 2024 and 2028. The Company has Massachusetts investment tax credits of approximately $0.4 million, which have no expiration date.

At December 31, 2013, the Company sold land which resulted in a capital loss of $6.0 million. A capital loss can only be carryforward for five years and can only be offset against capital gains. Although the Company has no history of expiring capital tax losses, based on the history that the Company has not generated capital gains, management determined that the deferred asset is not more-likely-than-not recoverable, a full valuation allowance was established.

In 2010, the Company was granted a tax holiday from the Commonwealth of Puerto Rico, which expires on January 1, 2024. This grant provides for a 4% tax rate on activities relating to the operations of the Company's radiopharmacies. This grant is conditioned upon the Company meeting certain employment and investment thresholds. The impact of this tax holiday was to decrease foreign tax by approximately $0.3 million, $0.3 million and $0.2 million in 2013, 2012 and 2011, respectively.

In September 2013, the Internal Revenue Service released final Tangible Property Regulations (the "Final Regulations"). The Final Regulations provide guidance on applying Section 263(a) of the Code to amounts paid to acquire, produce or improve tangible property, as well as rules for materials and supplies (Code Section 162). These regulations contain certain changes from the temporary and proposed tangible property regulations that were issued on December 27, 2011. The Final Regulations are generally effective for taxable years beginning on or after January 1, 2014. In addition, taxpayers are permitted to early adopt the Final Regulations for taxable years beginning on or after January 1, 2012. The Company does not expect the Final Regulations to have a material effect on its results of operations or financial condition.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

5. Inventory

The Company includes within current assets the amount of inventory that is estimated to be utilized within twelve months. Inventory that will be utilized after twelve months is classified within other long-term assets.

Inventory, classified in inventory or other long-term assets, consisted of the following:

(in thousands)	December 31, 2013	December 31, 2012
Raw materials	$ 7,063	$ 7,573
Work in process	5,849	5,019
Finished goods	5,398	5,456
Inventory	18,310	18,048
Other long-term assets	1,687	2,090
Total	$ 19,997	$ 20,138

At December 31, 2013, inventories reported as other long-term assets included $1.7 million of raw materials. At December 31, 2012, other long-term assets included $1.5 million of raw materials and $0.6 million of finished goods.

The Company's Ablavar product was commercially launched in January 2010. The revenues for this product through December 31, 2013 have not been significant. At December 31, 2013 and 2012, the balances of inventory on-hand reflect approximately $1.5 million and $2.8 million, respectively, of finished products and raw materials related to Ablavar. At December 31, 2013 and 2012, approximately $0.5 million and $2.1 million, respectively, of Ablavar inventory were included in long-term assets.

The Company entered into an agreement and subsequent amendments with a supplier to provide Active Pharmaceutical Ingredient ("API") and finished products for Ablavar under which the Company is required to purchase future minimum quantities. At December 31, 2013, the remaining purchase commitment under the amended agreement was approximately $1.8 million, of which the Company has accrued a loss of $1.3 million associated with this future purchase commitment. The Company records the inventory when it takes delivery, at which time the Company assumes title and risk of loss.

During 2011, the Company recorded inventory write-downs to cost of goods sold of $25.8 million, which represented the cost of Ablavar finished good product and API that the Company did not believe it would be able to sell prior to its expiration. The Company completed updated sales forecasts for Ablavar based on actual sales in consideration of its supply agreement for API. Based on the updated sales forecasts, coupled with the aggregate six-year shelf life of API and finished goods, the Company also recorded in cost of goods sold a total of $5.6 million for the loss associated with the portion of the committed purchases of Ablavar product that the Company did not believe it would be able to sell prior to its expiration. Additionally, the Company determined that its write-down of Ablavar inventory during 2011 represented an event that warranted assessment of the intellectual property associated with Ablavar for its recoverability and concluded that the intellectual property was not recoverable and in 2011, recorded in cost of goods sold an impairment of this intangible asset of $23.5 million. See Note 8, "Intangibles, net."

During 2012, the Company implemented a reduction in the sales force dedicated to Ablavar. The Company performed an analysis of expected future sales of its Ablavar product, based on an updated

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

5. Inventory (Continued)

sales forecast reflecting the reduction in sales force personnel dedicated to Ablavar, and recorded to cost of goods sold, an additional inventory write-down of $10.6 million and an additional reserve of $1.9 million associated with the portion of the committed purchases of Ablavar product that the Company did not believe it would sell prior to expiry.

In 2013, the Company transitioned the sales and marketing efforts for Ablavar from its direct sales force to the Company's customer service team. During the fourth quarter of 2013, the Company updated its strategic plan, which had a significant impact on the Ablavar sales forecast. The Company performed an inventory reserve analysis using its expected future Ablavar sales and recorded an additional write-down of $1.6 million related to the API that the Company would not be able to convert or be able to sell prior to its expiry as of December 31, 2013. In the event that the Company does not meet its revised sales expectations for Ablavar or cannot sell the product it has committed to purchase prior to its expiration, the Company could incur additional inventory write-downs and/or losses on its purchase commitments.

6. Property, Plant and Equipment, net

Property, plant and equipment consisted of the following at December 31:

(in thousands)	2013	2012
Land	$ 14,950	$ 22,450
Buildings	65,787	64,649
Machinery, equipment and fixtures	65,026	63,503
Construction in progress	8,029	7,331
Accumulated depreciation	(56,139)	(48,360)
Property, plant and equipment, net	$ 97,653	$ 109,573

Depreciation expense related to property, plant and equipment was $9.3 million, $9.7 million and $12.9 million for the years ended December 31, 2013, 2012 and 2011, respectively.

Included within machinery, equipment and fixtures are spare parts of approximately $2.5 million and $2.7 million as of December 31, 2013 and 2012, respectively. Spare parts include replacement parts relating to plant and equipment and are either recognized as an expense when consumed or re-classified and capitalized as part of the related plant and equipment and depreciated over a time period not exceeding the useful life of the related asset.

The Company tests long-lived assets for recoverability whenever events or changes in circumstances suggest that the carrying value of an asset or group of assets may not be recoverable. The Company measures the recoverability of assets to be held and used by comparing the carrying amount of the asset to future undiscounted net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment equals the amount by which the carrying amount of the assets exceeds the fair value of the assets. Any impairments are recorded as permanent reductions in the carrying amount of the assets. Long-lived assets, other than goodwill and other intangible assets, that are held for sale are recorded at the lower of the carrying value or the fair market value less the estimated cost to sell. As of December 31, 2013, the Company reviewed certain long-lived assets, utilized in the manufacturing of certain products in the U.S. due to a change in the Company's contract to manufacture Quadramet for recoverability and the analysis indicated that there was no impairment

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

6. Property, Plant and Equipment, net (Continued)

as of December 31, 2013. The Company also evaluated the remaining useful lives of long-lived assets that were tested for recoverability and determined no revisions were required to the remaining periods of depreciation.

Fixed assets dedicated to R&D activities, which were impacted by the recent R&D strategic shift, have a carrying value of $6.3 million as of December 31, 2013. The Company believes these fixed assets will be utilized for either internally funded ongoing R&D activities or R&D activities funded by a strategic partner. If the Company is not successful in finding a strategic partner and there are no alternative uses for these fixed assets, then they could be subject to impairment in the future.

Long-Lived Assets Held for Sale

During the third quarter of 2013, the Company committed to a plan to sell certain of its excess land in the U.S. segment, which had a carrying value of $7.5 million. This event qualified for held for sale accounting and the excess land was written down to its fair value, less estimated costs to sell. The fair value was estimated utilizing Level 3 inputs and using a market approach, based on available data for transactions in the region, discussions with real estate brokers and the asking price of comparable properties in its principal market. This resulted in a loss of $6.4 million, which is included within operating loss as impairment of land in the accompanying consolidated statement of comprehensive loss. During the fourth quarter of 2013, the Company sold the excess land for net proceeds of $1.1 million.

7. Asset Retirement Obligations

The Company considers the legal obligation to remediate its facilities upon a decommissioning of its radioactive related operations as an asset retirement obligation. The operations of the Company have radioactive production facilities at its North Billerica, Massachusetts and San Juan, Puerto Rico sites.

The Company is required to provide the U.S. Nuclear Regulatory Commission and Massachusetts Department of Public Health financial assurance demonstrating the Company's ability to fund the decommissioning of the North Billerica, Massachusetts production facility upon closure, though the Company does not intend to close the facility. The Company has provided this financial assurance in the form of a $28.2 million surety bond and an $8.8 million letter of credit.

The fair value of a liability for asset retirement obligations is recognized in the period in which the liability is incurred. The liability is measured at the present value of the obligation expected to be incurred, of approximately $25.9 million, and is adjusted in subsequent periods as accretion expense is recorded. The corresponding asset retirement costs are capitalized as part of the carrying value of the related long-lived assets and depreciated over the asset's useful life.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

7. Asset Retirement Obligations (Continued)

The following is a reconciliation of the Company's asset retirement obligations for the years ended December 31, 2013, 2012 and 2011:

(in thousands)	
Balance at January 1, 2011	$ 4,372
Capitalization	—
Accretion expense	496
Balance at December 31, 2011	4,868
Capitalization	—
Net decrease due to changes in estimated future cash flows	(5)
Accretion expense	553
Balance at December 31, 2012	5,416
Capitalization	—
Net increase due to changes in estimated future cash flows	341
Accretion expense	628
Balance at December 31, 2013	$ 6,385

The Company revises the asset retirement obligation as information about material changes to the liability becomes known. During the year ended December 31, 2013, the Company revised the asset retirement obligation, which resulted in an additional asset capitalization, in the amount of $0.3 million.

8. Intangibles, net

Intangibles, net consisted of the following:

	December 31, 2013			
(in thousands)	Cost	Accumulated amortization	Net	Amortization Method
Trademarks	$ 13,540	$ 3,298	$ 10,242	Straight-line
Customer relationships	106,298	84,476	21,822	Accelerated
Other patents	42,780	39,846	2,934	Straight-line
	$ 162,618	$ 127,620	$ 34,998	

	December 31, 2012			
(in thousands)	Cost	Accumulated amortization	Net	Amortization Method
Trademarks	$ 53,390	$ 20,743	$ 32,647	Straight-line
Customer relationships	114,000	83,385	30,615	Accelerated
Other patents	42,780	39,240	3,540	Straight-line
	$ 210,170	$ 143,368	$ 66,802	

On April 6, 2009, the Company acquired the U.S., Canadian and Australian territory rights to a Gadolinium-based blood pool contrast agent, Ablavar (formerly known as Vasovist), from EPIX Pharmaceuticals for an aggregate purchase price of $32.6 million, including drug product and active

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

8. Intangibles, net (Continued)

pharmaceutical ingredient inventory. Ablavar was approved by the U.S. Food and Drug Administration ("FDA") in December 2008 and commercially launched by the Company in early January 2010 after final FDA approval of its product label.

As noted in Note 5, during 2011, the Company conducted an impairment analysis on the intellectual property associated with Ablavar and concluded that the estimate of future undiscounted cash flows associated with the Ablavar product did not exceed the carrying amount and therefore, the asset would need to be written down to its fair value. In order to calculate the fair value of the Ablavar intellectual property intangible asset, the Company estimated the future discounted cash flows associated with the Ablavar product and as a result of this analysis, recorded an impairment charge of $23.5 million to adjust the carrying value to its fair value of zero. This expense was recorded within cost of goods sold in the accompanying consolidated statement of comprehensive loss.

During 2012, the Company reviewed the estimated useful life of its Cardiolite trademark. As a result of utilizing the most recent forecasted data, the Company revised its estimate of the remaining useful life of the Cardiolite trademark from eleven to five years, which increased the amortization expense by $3.5 million during the year ended December 31, 2012. The Company monitors the recoverability of its branded Cardiolite trademark intangible asset due to the ongoing generic competition based on actual results and existing estimates of future undiscounted cash flows associated with the branded Cardiolite product. As of December 31, 2013, the Company conducted, using its revised sales forecast, an impairment analysis and concluded that the estimate of future undiscounted cash flows associated with the Cardiolite trademark intangible did not exceed the carrying amount of the asset totaling $19.2 million and therefore, the asset has been written down to its fair value. Fair value was calculated by utilizing Level 3 inputs in the relief-from-royalty method, an income-based approach. As a result of this analysis, the Company recorded an impairment charge of $15.4 million to adjust the carrying value to its fair value of $3.8 million. This expense was recorded within cost of goods sold in the accompanying consolidated statement of comprehensive loss in the fourth quarter of 2013.

In the third quarter of 2013, the Company was in negotiations with a new distributor for the sale of certain products within certain international markets. This agreement was signed in October 2013 and as a result the Company did not renew the agreements with its former distributors in these international markets. The Company determined the customer relationship intangible related to these former distributors was no longer recoverable and recorded an impairment charge of $1.0 million in the third quarter of 2013. In the fourth quarter of 2013, the Company updated its strategic plan to reflect the non-renewal of these agreements and the uncertainty in the timing of product availability in this region. As a result, the Company reviewed the recoverability of certain of its customer relationship intangible assets in the International segment that were impacted by the revised strategic plan. The Company conducted an impairment analysis and concluded that the estimate of future undiscounted cash flows associated with the acquired customer relationships did not exceed the carrying amount of the asset and therefore, the asset would need to be written down to its fair value. In order to calculate the fair value of the acquired customer relationship intangible assets, the Company utilized Level 3 inputs to estimate the future discounted cash flows associated with remaining customers and as a result of this analysis, recorded an impairment charge of $0.7 million in the fourth quarter of 2013. These impairment charges were recorded within cost of goods sold in the accompanying consolidated statement of comprehensive loss.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

8. Intangibles, net (Continued)

The Company recorded amortization expense for its intangible assets of $14.4 million, $16.1 million and $18.5 million for the years ended December 31, 2013, 2012 and 2011, respectively.

Expected future amortization expense related to the intangible assets is as follows (in thousands):

Years ended December 31,	
2014	$ 7,629
2015	6,036
2016	5,349
2017	3,530
2018	2,799
2019 and thereafter	9,655
	$ 34,998

Changes in the gross carrying amount of intangible assets for the year ended December 31, 2013 were as follows (in thousands):

(in thousands)	
Balance at December 31, 2012	$ 210,170
Asset impairment charges	(46,592)
Effect of currency translation	(960)
Balance at December 31, 2013	$ 162,618

9. Accrued Expenses and Other Liabilities

Accrued expenses are comprised of the following at December 31:

(in thousands)	2013	2012
Compensation and benefits	$ 10,209	$ 5,351
Accrued interest	4,989	5,040
Accrued professional fees	1,361	1,628
Research and development services	338	3,205
Freight, distribution and operations	3,432	3,633
Accrued loss on firm purchase commitment	1,315	7,469
Marketing expense	749	1,168
Accrued rebates, discounts and chargebacks	1,739	1,542
Other	1,360	653
	$ 25,492	$ 29,689

As of December 31, 2013 and 2012, the Company had accrued a contract loss of $1.3 million and $7.5 million, respectively, associated with the portion of the committed purchases of Ablavar product from the Company's supplier that the Company did not believe it would sell prior to expiry and was included in accrued expenses.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

9. Accrued Expenses and Other Liabilities (Continued)

During March 2013, the Company took actions to reduce its workforce, which resulted in a $2.7 million charge to the consolidated statement of comprehensive loss for severance expense during the first quarter of 2013. At December 31, 2013, $0.6 million associated with these actions is included in accrued expenses.

10. Financing Arrangements

On March 21, 2011, LMI issued $150.0 million of New Restricted Notes. The New Restricted Notes were issued at a price of 101.50% and were issued as additional debt securities under the Indenture pursuant to which LMI previously issued $250.0 million in aggregate principal amount of 9.750% Senior Notes due 2017. The New Restricted Notes were issued with the same terms and conditions as the Senior Notes, except that the New Restricted Notes were subject to a separate registration rights agreement. The New Notes and the Senior Notes, or together, the Notes, vote as one class under the Indenture. As a result of the issuance of the New Restricted Notes, LMI has $400.0 million in aggregate principal amount of Notes outstanding. The Notes bear interest at a rate of 9.750% per year, payable on May 15 and November 15 of each year, beginning May 15, 2011 with respect to the New Restricted Notes. Interest on the Senior Notes accrued from November 15, 2010. The Notes mature on May 15, 2017. The net proceeds of the Senior Notes were used to repay $77.9 million due under LMI's then outstanding credit agreement and to pay a $163.8 million dividend to Holdings to repay a $75.0 million demand note it issued and for Holdings to repurchase $90.0 million of its Series A Preferred Stock at the accreted value. The net proceeds of the New Restricted Notes were used to pay a $150.0 million dividend to Holdings, which it used to fully redeem the balance of its Series A Preferred Stock at the accreted value of $44.0 million and to pay a $106.0 million dividend to the holders of its common securities and stock options. In conjunction with the issuance of the New Restricted Notes, LMI also made a cash payment of $3.75 million to the Holders of the Senior Notes in exchange for the Holders of the Senior Notes consent to amend the Indenture to modify the restricted payments covenant to provide for additional restricted payment capacity in order to accommodate the dividend payment. The premium of $2.25 million and the consent fee of $3.75 million were capitalized and are being amortized over the term of the Notes as an adjustment to interest expense. All of the Notes have been registered with the Securities and Exchange Commission.

Redemption

LMI can redeem the Notes at 100% of the principal amount on May 15, 2016 or thereafter. LMI may also redeem the Notes prior to May 15, 2016 depending on the timing of the redemption during the twelve-month period beginning May 15 of each of the years indicated below:

Year	Percentage
2014	104.875%
2015	102.438%
2016	100.000%

At any time prior to May 15, 2014, LMI may also redeem all or any part of the Notes, with notice, at a redemption price equal to 100% of the principal amount thereof of the Notes redeemed plus the applicable premium (as defined in the Indenture) as of, and accrued and unpaid interest and additional

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

10. Financing Arrangements (Continued)

interest (as defined in the Indenture), if any, to, but not including, the redemption date, subject to the rights of holders of record on the relevant record date to receive interest due on the relevant interest payment date.

Upon a change of control (as defined in the Indenture), LMI will be required to make an offer to purchase each holder's Note at a price of 101% of the principal amount thereof, plus accrued and unpaid interest, if any, to the date of purchase.

If LMI or its subsidiaries engage in asset sales (as defined in the Indenture), they generally must either invest the net cash proceeds from such sales in such business within a specified period of time, prepay certain indebtedness or make an offer to purchase a principal amount of the Notes equal to the excess net cash proceeds (as defined in the Indenture), subject to certain exceptions.

The Notes are unsecured and are equal in right of payment to all of the existing and future senior debt, including borrowings under its secured credit facilities, subject to the security interest thereof. LMI's obligations under the Notes are fully and unconditionally guaranteed, jointly and severally, on an unsecured senior basis by Lantheus Intermediate and by one of LMI's subsidiaries, and the obligations of such guarantors under their guarantees are equal in right of payment to all of their existing and future senior debt.

Revolving Line of Credit

As of December 31, 2012, LMI had outstanding the Old Facility with an aggregate principal amount not to exceed $42.5 million and an interest rate of LIBOR plus 3.75% or the Reference Rate (as defined in the agreement) plus 2.75%. The Old Facility also contained an unused line of credit fee of 0.75%, which was payable quarterly. At December 31, 2012, there was no outstanding balance under the Old Facility, other than the $8.8 million unfunded Standby Letter of Credit, and the aggregate borrowing capacity was $33.7 million. On July 3, 2013, LMI, Lantheus Intermediate and Lantheus Real Estate entered into the New Facility which replaced the Old Facility.

As of December 31, 2013, LMI has a New Facility with an aggregate principal amount not to exceed $42.5 million. The revolving loans under the New Facility bear interest subject to a pricing grid based on average historical excess availability under the New Facility, with pricing based from time to time at the election of the Company at (i) LIBOR plus a spread ranging from 2.00% to 2.50% or (ii) the Reference Rate (as defined in the agreement) plus a spread ranging from 1.00% to 1.50%. The New Facility also includes an unused line fee of 0.375% or 0.5%, depending on the average unused revolving credit commitments. The New Facility expires on the earlier of (i) July 3, 2018 or (ii) if the outstanding Notes are not refinanced in full, the date that is 91 days before the maturity thereof, at which time all outstanding borrowings are due and payable.

On February 3, 2012, the Company entered into an unfunded Standby Letter of Credit for up to $4.4 million. On April 11, 2012, the unfunded Standby Letter of Credit was increased to $8.8 million. On August 6, 2013, the Company transferred the $8.8 million unfunded Standby Letter of Credit, which expired on February 3, 2014, to a new lender. The unfunded Standby Letter of Credit requires annual fees, payable quarterly, between 2.00% and 2.50% of the face amount, and expires on February 5, 2015, which will automatically renew for a one year period at each anniversary date, unless the Company elects not to renew in writing within 60 days prior to such expiration.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

10. Financing Arrangements (Continued)

Covenants

The New Facility is secured by a pledge of substantially all of the assets of each of the Company, LMI and Lantheus Real Estate, including each entity's accounts receivable, inventory and machinery and equipment, and is guaranteed by each of Lantheus Intermediate and Lantheus Real Estate. Borrowing capacity is determined by reference to a borrowing base, which is based on (i) a percentage of certain eligible accounts receivable, inventory and machinery and equipment minus (ii) any reserves. As of December 31, 2013, the aggregate borrowing base was approximately $42.5 million, which was reduced by (i) an outstanding $8.8 million unfunded Standby Letter of Credit and (ii) an $8.0 million outstanding loan balance, resulting in a net borrowing base availability of approximately $25.7 million.

The New Facility contains affirmative and negative covenants, as well as restrictions on the ability of the Company and its subsidiaries to: (i) incur additional indebtedness or issue preferred stock; (ii) repay subordinated indebtedness prior to its stated maturity; (iii) pay dividends on, repurchase or make distributions in respect of capital stock or make other restricted payments; (iv) make certain investments; (v) sell certain assets; (vi) create liens; (vii) consolidate, merge, sell or otherwise dispose of all or substantially all of its assets; and (viii) enter into certain transactions with its affiliates. The New Facility also contains customary default provisions as well as cash dominion provisions which allow the lender to sweep its accounts during the period certain specified events of default are continuing under the New Facility or excess availability under the New Facility falls below (i) the greater of $5.0 million or 15% of the then-current borrowing base for a period of more than five consecutive Business Days or (ii) $3.5 million. During a cash dominion period, the Company is required to comply with a consolidated fixed charge coverage ratio of not less than 1:00:1:00. The fixed charge coverage ratio is calculated on a consolidated basis for Lantheus Intermediate and its subsidiaries for a trailing four fiscal quarter period basis, as (i) EBITDA minus capital expenditures minus certain restricted payments divided by (ii) interest plus taxes paid or payable in cash plus certain restricted payments made in cash plus scheduled principal payments paid or payable in cash.

Financing Costs

LMI incurred and capitalized approximately $15.6 million in direct financing fees including $5.2 million associated with the New Restricted Notes issued in March 2011, consisting primarily of underwriting fees and expenses, consent solicitation fee, legal fees, accounting fees and printing costs in connection with the issuance of the New Restricted Notes, the Existing Notes and the Old Facility. Deferred financing costs are being amortized over the life of the Notes, as appropriate, using the effective interest method and are included in interest expense in the accompanying consolidated statements of comprehensive loss.

During the years ended December 31, 2013 and 2012, LMI incurred approximately $0.1 million and $0.4 million, respectively, in fees and expenses associated with amendments under the Old Facility. These fees were being amortized over the remaining life of the Old Facility using the straight-line method and was included in interest expense in the accompanying consolidated statements of comprehensive loss. During the year ended December 31, 2013, the Company wrote off $0.6 million of the existing unamortized deferred financing costs related to the Old Facility, which is included in interest expense in the accompanying consolidated statements of comprehensive loss.

In connection with the New Facility, LMI incurred approximately $1.1 million in fees and expenses, which are being amortized on a straight-line basis over the term of the New Facility.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

11. Stockholder's Equity

As of December 31, 2013 and 2012, the authorized capital stock of the Company consisted of 10,000 shares of voting common stock with a par value of $0.001 per share and 1 share outstanding.

12. Stock-Based Compensation

The Company's employees are eligible to receive awards under the Holdings 2013 Equity Incentive Plan (the "2013 Plan"). The 2013 Plan is administered by the Holdings Board of Directors and permits the granting of nonqualified stock options, stock appreciation rights (or SARs), restricted stock and restricted stock units to employees, officers, directors and consultants of Holdings or any subsidiary of Holdings (including Lantheus Intermediate and LMI). On August 5, 2013, the Holdings Board of Directors adopted a resolution providing that no further grants be made under the Holdings 2008 Equity Incentive Plan (the "2008 Plan"). At the same time, the maximum number of shares that may be issued pursuant to awards under the 2013 Plan was increased from 1,500,000 to 2,700,000. Option awards under the 2013 Plan are granted with an exercise price equal to the fair value of Holdings' stock at the date of grant, as determined by the Board of Directors of Holdings. Time based option awards vest based on time, either four or five years, and performance based option awards vest based on the performance criteria specified in the grant. All option awards have a ten-year contractual term. The Company recognizes compensation costs for its time based awards on a straight-line basis equal to the vesting period. The compensation cost for performance based awards is recognized on a graded vesting basis, based on the probability of achieving the performance targets over the requisite service period for the entire award. The fair value of each option award is estimated on the date of grant using a Black-Scholes valuation model that uses the assumptions noted in the following table. Expected volatilities are based on the historic volatility of a selected peer group. Expected dividends represent the dividends expected to be issued at the date of grant. The expected term of options represents the period of time that options granted are expected to be outstanding. The risk-free interest rate assumption is the U.S. Treasury rate at the date of the grant which most closely resembles the expected life of the options.

The Company uses the following Black-Scholes inputs to determine the fair value of new stock option grants.

	Years Ended December 31,		
	2013	2012	2011
Expected volatility	30 - 37%	36 - 41%	33 - 40%
Expected dividends	—	—	—
Expected life (in years)	3.6 - 6.3	5.5 - 6.5	6.5
Risk-free interest rate	0.5 - 1.7%	0.7 - 1.4%	1.9 - 2.9%

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

12. Stock-Based Compensation (Continued)

A summary of option activity for 2013 is presented below:

	Time Based	Performance Based	Total Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at January 1, 2013	2,326,350	1,002,948	3,329,298	$ 3.11	5.6	$15,336,000
Options granted	1,348,177	600,000	1,948,177	6.77		
Options cancelled	(228,925)	(260,980)	(489,905)	2.33		
Options exercised	(583,750)	(47,768)	(631,518)	2.00		
Options forfeited and expired	(100,815)	(196,775)	(297,590)	7.66		
Outstanding at December 31, 2013	2,761,037	1,097,425	3,858,462	$ 4.89	6.9	$6,777,0000
Vested and expected to vest at December 31, 2013	2,675,020	722,055	3,397,075	$ 4.63	6.6	$6,777,0000
Exercisable at December 31, 2013	1,491,401	506,705	1,998,106	$ 2.90	4.7	$6,777,0000

The weighted average grant-date fair value of options granted during the years ended December 31, 2013, 2012 and 2011 was $2.45, $3.29 and $4.05, respectively. During the years ended December 31, 2013, 2012 and 2011, 349,605, 710,139 and 362,300 options vested, respectively, with an aggregate fair value of approximately $1.0 million, $1.0 million and $0.4 million, respectively.

During the years ended December 31, 2013, 2012 and 2011, 631,518, 21,220 and 14,650 stock options, respectively, were exercised on a cashless basis for which 459,171, 9,085 and4,629 shares of common stock, respectively, were issued.

Stock-based compensation expense (income) for both time based and performance based awards was recognized in the consolidated statements of comprehensive loss as follows:

	Years Ended December 31,		
(in thousands)	2013	2012	2011
Cost of goods sold	$ 41	$ 79	$ 2
General and administrative	429	982	58
Sales and marketing	93	111	(1,064)
Research and development	15	68	35

Total stock-based compensation expense (income)	$ 578	$ 1,240	$ (969)

Stock-based compensation expense (income) recognized in the consolidated statement of comprehensive loss for the years ended December 31, 2013, 2012, and 2011 are based on awardsultimately expected to vest as well as any changes in the probability of achieving certain performance features as required.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

12. Stock-Based Compensation (Continued)

During the year ended December 31, 2012, the Company recognized approximately $0.6 million of stock-based compensation expense associated with the modification of three option agreements, two of which were effectuated in the first quarter of 2012 and one of which was effectuated in the third quarter of 2012. The modification of these awards affected the vesting terms of the awards, allowing vesting to continue beyond the last day of employment, so long as the option holders, whom are no longer employees, continue to provide services to the Company or Avista Capital Partners, the majority stockholder of the Company's ultimate parent, as applicable. The Company remeasured the fair value of these options at each reporting period until the services were completed.

The Company used the following Black-Scholes inputs to determine the fair value of stock options that were modified during the quarters ended March 31, 2012 and September 30, 2012.

	Three Months Ended March 31, 2012	Three Months Ended September 30, 2012
Expected volatility	30 - 36%	31%
Expected dividends	—	—
Expected term (in years)	0.3 - 3.5	3.3
Risk-free interest rate	0.3 - 0.8%	0.3%

The Company used the following Black-Scholes inputs to remeasure the fair value of stock options that were modified during 2012 as of December 31, 2012. No remeasurement was required during 2013 since the consulting services had been completed.

	Year Ended December 31, 2012
Expected volatility	30.0%
Expected dividends	—
Expected term (in years)	2.5
Risk-free interest rate	0.3%

Upon termination of employment, Holdings has the right to call shares held by employees that were purchased or acquired through option exercise. As a result of this right, upon termination of service, vested stock-based awards are reclassified to liability-based awards when it is probable the employee will exercise the option and Holdings will exercise its call right. The Company did not reclassify any equity awards to liability-based awards as of December 31, 2013 and 2012, since the Company concluded it was not probable that Holdings would exercise its call right. There were no liability awards paid out during the years ended December 31, 2013, 2012 and 2011. The Company recorded a benefit of approximately $1.0 million in the three-month period ended March 31, 2011 related to 2010 liability awards which expired during the period.

The Company did not recognize an income tax benefit for the years ended December 31, 2013, 2012 and 2011. As of December 31, 2013, there was approximately $3.0 million of total unrecognized compensation costs related to non-vested stock options granted under the 2013 and 2008 Plans. These costs are expected to be recognized over a weighted-average remaining period of 1.7 years. In addition, performance based awards contain certain contingent features, such as change in control provisions,

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

12. Stock-Based Compensation (Continued)

which allow for the vesting of previously forfeited and unvested awards. As of December 31, 2013, there was approximately $1.0 million of unrecognized compensation expense relating to these features, which could be recognized through 2018 or longer.

13. Other Income (Expense), net

Other income, net consisted of the following:

	Years Ended December 31,		
(in thousands)	2013	2012	2011
Foreign currency (losses)	$ (349)	$ (579)	$ (156)
Tax indemnification income	1,141	346	1,380
Other income	369	189	205
Total other income (expense), net	$ 1,161	$ (44)	$ 1,429

14. Commitments

The Company leases certain buildings, hardware and office space under operating leases. In addition, the Company has entered into purchasing arrangements in which minimum quantities of goods or services have been committed to be purchased on an annual basis.

Minimum lease and purchase commitments under noncancelable arrangements are as follows (in thousands):

Years ended December 31,	Operating Leases	Other	Total
2014	$ 898	$ 3,416	$ 4,314
2015	535	—	535
2016	345	—	345
2017	267	—	267
2018	200	—	200
2019 and thereafter	264	—	264
	$ 2,509	$ 3,416	$ 5,925

Lease expense was $0.9 million, $1.0 million and $1.0 million for the years ended December 31, 2013, 2012 and 2011, respectively.

The Company has an agreement with a supplier to provide API and finished products for Ablavar under which LMI is required to purchase future minimum quantities through September 30, 2014. Annual purchases under this supply agreement were $7.7 million, $1.7 million and $24.8 million for the years ended December 31, 2013, 2012 and 2011, respectively. At December 31, 2013, $1.7 million is included in accounts payable as unpaid purchases under this agreement and an additional $1.8 million of committed purchases remain. At December 31, 2012, there were no unpaid purchases under this agreement that were included in accounts payable and accrued expenses. As described in Note 9, "Accrued Expenses", the Company had accrued a contract loss of $1.3 million and $7.5 million at December 31, 2013 and 2012, respectively, associated with the portion of the committed purchases of Ablavar product under this agreement that the Company does not believe it would sell prior to expiry.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

14. Commitments (Continued)

The Company has entered into agreements which contain certain percentage volume purchase requirements. The Company has excluded these future purchase commitments from the table above since there are no minimum purchase commitments or payments under these agreements.

15. 401(k) Plan

The Company maintains a qualified 401(k) plan (the "401(k) Plan") for its U.S. employees. The 401(k) Plan covers U.S. employees who meet certain eligibility requirements. Under the terms of the 401(k) Plan, the employees may elect to make tax-deferred contributions through payroll deductions within statutory and plan limits, and the Company may elect to make non-elective discretionary contributions. During the year ended December 31, 2011, the Company matched employee contributions up to 4.5% of eligible compensation and did not contribute an additional non-elective discretionary match. Effective April 2012, the employer match was suspended and was subsequently reinstated in January 2013. The Company did not contribute any additional non-elective discretionary match during the years ended December 31, 2013 and 2012. The Company may also make optional contributions to the 401(k) Plan for any plan year at its discretion. Expense recognized by the Company for matching contributions related to the 401(k) Plan was $1.2 million, $0.4 million and $1.9 million for the years ended December 31, 2013, 2012 and 2011, respectively.

16. Legal Proceedings

From time to time, the Company is a party to various legal proceedings arising in the ordinary course of business. In addition, the Company has in the past been, and may in the future be, subject to investigations by governmental and regulatory authorities, which expose it to greater risks associated with litigation, regulatory or other proceedings, as a result of which the Company could be required to pay significant fines or penalties. The outcome of litigation, regulatory or other proceedings cannot be predicted with certainty, and some lawsuits, claims, actions or proceedings may be disposed of unfavorably to the Company. In addition, intellectual property disputes often have a risk of injunctive relief which, if imposed against the Company, could materially and adversely affect its financial condition or results of operations. As of December 31, 2013, the Company had no material ongoing litigation in which the Company was a defendant or any material ongoing regulatory or other proceedings and had no knowledge of any investigations by government or regulatory authorities in which the Company is a target that could have a material adverse effect on its current business.

On December 16, 2010, LMI filed suit against one of its insurance carriers seeking to recover business interruption losses associated with the NRU reactor shutdown and the ensuing global Moly supply shortage. The claim is the result of the shutdown of the NRU reactor in Chalk River, Ontario. The NRU reactor was off-line from May 2009 until August 2010 due to a "heavy water" leak in the reactor vessel. The defendant answered the complaint on January 21, 2011, denying substantially all of the allegations, presenting certain defenses and requesting dismissal of the case with costs and disbursements. Discovery has commenced and is continuing. The Company cannot be certain what amount, if any, or when, if ever, it will be able to recover for business interruption losses related to this matter.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

17. Related Party Transactions

In the third quarter of 2012, LMI reclassified the then outstanding receivable from Holdings of $1.2 million to stockholder's deficit since Holdings did not and continues to not have assets sufficient to repay amounts due to LMI. At December 31, 2013 and 2012, LMI had outstanding receivables from Holdings in the amount of $1.3 million and $1.4 million, respectively, which was included in due from parent within stockholder's deficit.

Avista, the majority shareholder of LMI Holdings, provides certain advisory services to the Company pursuant to an advisory services and monitoring agreement. The Company is required to pay an annual fee of $1.0 million and other reasonable and customary advisory fees, as applicable, paid on a quarterly basis. The initial term of the agreement is seven years. Upon termination, all remaining amounts owed under the agreement shall become due immediately. The Company incurred costs associated with this agreement totaling $1.0 million for each of the years ended December 31, 2013, 2012 and 2011. At December 31, 2013 and 2012, $30,000 was included in accrued expenses.

In the third quarter of 2012, the Company entered into a Master Contract Research Organization Services Agreement with INC Research, LLC ("INC") to provide clinical development services in connection with the flurpiridaz F 18 Phase III program. Avista and certain of its affiliates are the principal owners of both INC and the Company. The agreement has a term of five years and the Company incurred costs associated with this agreement of approximately $0.5 million and $0.9 million during the years ended December 31, 2013 and 2012, respectively. At December 31, 2012, $0.5 million was included in accounts payable and accrued expenses. There was no balance outstanding at December 31, 2013.

The Company purchases inventory supplies from VWR Scientific ("VWR"). Avista and certain of its affiliates are principal owners of both VWR and the Company. The Company made purchases of approximately $0.3 million during each of the years ended December 31, 2013, 2012 and 2011. At December 31, 2013 and 2012, $1,000 and $19,000, respectively, was included inaccounts payable.

At December 31, 2013 and 2012, the Company had $0.1 million due from an officer of the Company included in accounts receivable, net. These amounts represent federal and state tax withholdings paid by the Company on behalf of the officer.

18. Segment Information

The Company reports two operating segments, U.S. and International, based on geographic customer base. The results of these operating segments are regularly reviewed by our chief operating decision maker, the President and Chief Executive Officer. The Company's segments derive revenues through the manufacturing, marketing, selling and distribution of medical imaging products, focused primarily on cardiovascular diagnostic imaging. The U.S. segment comprises 75.3%, 72.9% and 75.3% of consolidated revenues in 2013, 2012 and 2011, respectively, and 89.8% and 86.7% of consolidated assets at December 31, 2013 and 2012, respectively. All goodwill has been allocated to the U.S. operating segment.

Included in Cardiolite revenues are branded Cardiolite and generic sestamibi revenues, some of which is produced by the Company and some of which is procured from time to time from third parties. Reflected in the 2011 table below, is the reclassification of $0.8 million of generic sestamibi revenues from "Other" revenues to "Cardiolite" revenues to conform with the current period presentation.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

18. Segment Information (Continued)

Selected information for each business segment are as follows (in thousands):

(in thousands)	2013	2012	2011
Revenues			
U.S.	$ 234,567	$ 229,926	$ 291,344
International	70,033	78,094	87,927
Total revenue, including inter-segment	304,600	308,020	379,271
Inter-segment revenue	(20,928)	(19,915)	(22,979)
	$ 283,672	$ 288,105	$ 356,292
Revenues from external customers			
U.S.	$ 213,639	$ 210,011	$ 268,365
International	70,033	78,094	87,927
	$ 283,672	$ 288,105	$ 356,292
Revenues by product			
DEFINITY	$ 78,094	$ 51,431	$ 68,503
TechneLite	92,195	114,249	131,241
Cardiolite	26,137	34,995	66,127
Xenon	32,125	30,075	26,761
Other	55,121	57,355	63,660
	$ 283,672	$ 288,105	$ 356,292
Geographical revenue			
U.S.	$ 213,639	$ 210,011	$ 268,365
Canada	35,502	37,017	42,366
All other	34,531	41,077	45,561
	$ 283,672	$ 288,105	$ 356,292
Operating income/(loss)			
U.S.	$ (18,904)	$ (11,104)	$ (25,881)
International	703	9,820	12,767
Total operating loss, including inter-segment	(18,201)	(1,284)	(13,114)
Inter-segment operating income (loss)	(813)	534	(3,361)
Operating loss	(19,014)	(750)	(16,475)
Interest expense	(42,915)	(42,014)	(37,658)
Interest income	104	252	333
Other income (expense), net	1,161	(44)	1,429
Loss before income taxes	$ (60,664)	$ (42,556)	$ (52,371)
Depreciation and amortization			
U.S.	$ 22,146	$ 23,918	$ 28,912
International	3,009	3,484	3,850

International	5,009	5,484	5,850
	$ 25,155	$ 27,402	$ 32,762
Capital expenditures			
U.S.	$ 4,903	$ 7,353	$ 7,100
International	107	567	594
	$ 5,010	$ 7,920	$ 7,694

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

18. Segment Information (Continued)

	2013	2012
Assets		
U.S.	$ 232,973	$ 279,808
International	26,412	43,118
	$ 259,385	$ 322,926

	2013	2012
Long-lived assets		
U.S.	$ 91,683	$ 101,773
International	5,970	7,800
	$ 97,653	$ 109,573

19. Valuation and Qualifying Accounts

(in thousands)	Balance at Beginning of Fiscal Year	Charge to Costs and Expenses (Recovery of write-offs)	Deductions From Reserves	Balance at End of Fiscal Year
Year ended December 31, 2013:				
Allowance for doubtful accounts	$ 301	$ 63	$ (74)	$ 290
Year ended December 31, 2012:				
Allowance for doubtful accounts	$ 462	$ (117)	$ (44)	$ 301
Year ended December 31, 2011:				
Allowance for doubtful accounts	$ 796	$ 301	$ (635)	$ 462

Amounts charged to deductions from reserves represent the write-off of uncollectible balances.

20. Guarantor Financial Information

The Notes, issued by LMI, are guaranteed by Lantheus Intermediate (the "Parent Guarantor") and Lantheus Real Estate, one of Lantheus Intermediate's wholly-owned consolidated subsidiaries (the "Guarantor Subsidiary"). The guarantees are full and unconditional and joint and several. The following supplemental financial information sets forth, on a condensed consolidating basis, balance sheet information as of December 31, 2013 and 2012, and comprehensive (loss) income and cash flow information for the years ended December 31, 2013, 2012 and 2011 for Lantheus Intermediate, LMI, the Guarantor Subsidiary and Lantheus Intermediate's other wholly-owned subsidiaries (the "Non-Guarantor Subsidiaries"). The supplemental financial information have been prepared on the same basis as the consolidated financial statements of Lantheus Intermediate. The equity method of accounting is followed within this financial information.

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

20. Guarantor Financial Information (Continued)

Consolidating Balance Sheet Information

December 31, 2013

(in thousands)	Lantheus Intermediate	LMI	Guarantor Subsidiary	Non-Guarantor Subsidiaries	Eliminations	Total
Assets:						
Current assets						
Cash and cash equivalents	$ —	$ 11,995	$ —	$ 4,674	$ —	$ 16,669
Accounts receivable, net	—	28,099	—	10,811	—	38,910
Intercompany accounts receivable	—	2,671	—	—	(2,671)	—
Inventory	—	15,414	—	2,896	—	18,310
Income tax receivable	—	297	—	28	—	325
Deferred tax assets	—	—	—	18	—	18
Other current assets	—	2,906	—	181	—	3,087
Total current assets	—	61,382	—	18,608	(2,671)	77,319
Property, plant and equipment, net	—	76,068	15,615	5,970	—	97,653
Capitalized software development costs, net	—	1,468	—	2	—	1,470
Intangibles, net	—	31,838	—	3,160	—	34,998
Goodwill	—	15,714	—	—	—	15,714
Deferred financing costs	—	9,639	—	—	—	9,639
Deferred tax assets	—	—	—	15	—	15
Investment in subsidiaries	(237,088)	40,289	—	—	196,799	—
Intercompany note receivable	—	—	—	5,396	(5,396)	—
Other long-term assets	—	22,370	—	207	—	22,577
Total assets	$ (237,088)	$ 258,768	$ 15,615	$ 33,358	$ 188,732	$ 259,385

Liabilities and (deficit) equity:						
Current liabilities						
Line of Credit	$ —	$ 8,000	$ —	$ —	$ —	$ 8,000
Accounts payable	—	16,672	—	1,431	—	18,103
Intercompany accounts payable	—	—	—	2,671	(2,671)	—
Accrued expenses and other liabilities	—	21,409	—	4,083	—	25,492
Deferred tax liability	—	—	—	57	—	57
Deferred revenue	—	3,979	—	—	—	3,979
Total current liabilities	—	50,060	—	8,242	(2,671)	55,631
Asset retirement obligations	—	6,212	—	173	—	6,385
Long-term debt, net	—	399,037	—	—	—	399,037
Intercompany note payable	—	5,396	—	—	(5,396)	—
Deferred tax liability	—	—	—	12	—	12
Other long-term liabilities	—	35,151	—	257	—	35,408
Total liabilities	—	495,856	—	8,684	(8,067)	496,473
(Deficit) equity	(237,088)	(237,088)	15,615	24,674	196,799	(237,088)
Total liabilities and (deficit) equity	$ (237,088)	$ 258,768	$ 15,615	$ 33,358	$ 188,732	$ 259,385

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

20. Guarantor Financial Information (Continued)

Consolidating Balance Sheet Information

December 31, 2012

(in thousands)	Lantheus Intermediate	LMI	Guarantor Subsidiary	Non-Guarantor Subsidiaries	Eliminations	Total
Assets:						
Current assets						
Cash and cash equivalents	$ —	$ 17,635	$ —	$ 13,960	$ —	$ 31,595
Accounts receivable, net	—	30,218	—	11,162	—	41,380
Intercompany accounts receivable	—	1,992	—	—	(1,992)	—
Inventory	—	15,417	—	2,631	—	18,048
Income tax receivable	—	291	—	445	—	736
Deferred tax assets	—	—	—	115	—	115
Other current assets	—	2,596	—	347	—	2,943
Total current assets	—	68,149	—	28,660	(1,992)	94,817
Property, plant and equipment, net	—	78,578	23,195	7,800	—	109,573
Capitalized software development costs, net	—	2,230	—	4	—	2,234
Intangibles, net	—	60,370	—	6,432	—	66,802
Goodwill	—	15,714	—	—	—	15,714
Deferred financing costs	—	11,372	—	—	—	11,372
Investment in subsidiaries	(174,353)	58,166	—	—	116,187	—
Other long-term assets	—	22,192	—	222	—	22,414
Total assets	$ (174,353)	$ 316,771	$ 23,195	$ 43,118	$ 114,195	$ 322,926
Liabilities and (deficit) equity:						
Current liabilities						

Accounts payable	$ —	$ 16,835	$ —	$ 2,110	$ —	$ 18,945
Intercompany accounts payable	—	—	—	1,992	(1,992)	—
Accrued expenses	—	26,592	—	3,097	—	29,689
Deferred revenue	—	7,229	—	91	—	7,320
Total current liabilities	—	50,656	—	7,290	(1,992)	55,954
Asset retirement obligations	—	5,268	—	148	—	5,416
Long-term debt, net	—	398,822	—	—	—	398,822
Deferred tax liability	—	—	—	435	—	435
Other long-term liabilities	—	36,378	—	274	—	36,652
Total liabilities	—	491,124	—	8,147	(1,992)	497,279
(Deficit) equity	(174,353)	(174,353)	23,195	34,971	116,187	(174,353)
Total liabilities and (deficit) equity	$ (174,353)	$ 316,771	$ 23,195	$ 43,118	$ 114,195	$ 322,926

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

20. Guarantor Financial Information (Continued)

Consolidating Comprehensive Loss Information

Year Ended December 31, 2013

(in thousands)	Lantheus Intermediate	LMI	Guarantor Subsidiary	Non-Guarantor Subsidiaries	Eliminations	Total
Revenues						
Net product revenues	$ —	$231,216	$ —	$ 61,521	$ (20,928)	$271,809
License and other revenues	—	11,863	—	—	—	11,863
Total revenues	—	243,079	—	61,521	(20,928)	283,672
Cost of goods sold	—	169,334	—	57,905	(20,928)	206,311
Gross profit	—	73,745	—	3,616	—	77,361
Operating expenses						
General and administrative expenses	—	30,785	80	2,294	—	33,159
Sales and marketing expenses	—	31,668	—	3,559	—	35,227
Research and development expenses	—	30,138	—	321	—	30,459
Proceeds from manufacturer	—	(8,876)	—	—	—	(8,876)
Impairment on land	—	—	6,406	—	—	6,406
Operating loss	—	(9,970)	(6,486)	(2,558)	—	(19,014)
Interest expense	—	(43,011)	—	—	96	(42,915)
Interest income	—	1	—	199	(96)	104
Other income (expense)	—	1,373	—	(212)	—	1,161
Equity in earnings (losses) of affiliates	(61,678)	(9,142)	—	—	70,820	—
(Loss) income before income taxes	(61,678)	(60,749)	(6,486)	(2,571)	70,820	(60,664)
Provision (benefit) for income taxes	—	929	—	85	—	1,014
Net (loss) income	(61,678)	(61,678)	(6,486)	(2,656)	70,820	(61,678)
Foreign currency translation, net of						

taxes	—	—	—	(1,729)	—	(1,729)
Equity in other comprehensive income (loss) of subsidiaries	(1,729)	(1,729)	—	—	3,458	—
Total other comprehensive (loss) income	$ (63,407)	$ (63,407)	$ (6,486)	$ (4,385)	$ 74,278	$ (63,407)

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

20. Guarantor Financial Information (Continued)

Consolidating Comprehensive Loss Information

Year Ended December 31, 2012

(in thousands)	Lantheus Intermediate	LMI	Guarantor Subsidiary	Non-Guarantor Subsidiaries	Eliminations	Total
Revenues						
Net product revenues	$ —	$230,655	$ —	$ 66,614	$ (19,915)	$277,354
License and other revenues	—	10,751	—	—	—	10,751
Total revenues	—	241,406	—	66,614	(19,915)	288,105
Cost of goods sold	—	171,257	—	59,707	(19,915)	211,049
Loss on firm purchase commitment	—	1,859	—	—	—	1,859
Total cost of goods sold	—	173,116	—	59,707	(19,915)	212,908
Gross profit	—	68,290	—	6,907	—	75,197
Operating expenses						
General and administrative expenses	—	30,112	80	2,328	—	32,520
Sales and marketing expenses	—	34,220	—	3,217	—	37,437
Research and development expenses	—	40,457	—	147	—	40,604
Proceeds from manufacturer	—	(34,614)	—	—	—	(34,614)
Operating income (loss)	—	(1,885)	(80)	1,215	—	(750)
Interest expense	—	(42,014)	—	—	—	(42,014)
Interest income	—	1	—	251	—	252
Other income (expense)	—	110	—	(154)	—	(44)
Equity in earnings (losses) of affiliates	(42,001)	1,242	—	—	40,759	—
(Loss) income before income taxes	(42,001)	(42,546)	(80)	1,312	40,759	(42,556)
Provision (benefit) for income taxes	—	(545)	—	(10)	—	(555)

Net (loss) income	(42,001)	(42,001)	(80)	1,322	40,759	(42,001)
Foreign currency translation, net of taxes	—	200	—	764	—	964
Equity in other comprehensive income (loss) of subsidiaries	964	764	—	—	(1,728)	—
Total other comprehensive (loss) income	$ (41,037)	$ (41,037)	$ (80)	$ 2,086	$ 39,031	$ (41,037)

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

20. Guarantor Financial Information (Continued)

Consolidating Comprehensive Loss Information

Year Ended December 31, 2011

(in thousands)	Lantheus Intermediate	LMI	Guarantor Subsidiary	Non-Guarantor Subsidiaries	Eliminations	Total
Revenues						
Net product revenues	$ —	$ 293,775	$ —	$ 74,966	$ (22,979)	$ 345,762
License and other revenues	—	10,530	—	—	—	10,530
Total revenues	—	304,305	—	74,966	(22,979)	356,292
Cost of goods sold	—	213,121	—	65,324	(22,979)	255,466
Loss on firm purchase commitment	—	5,610	—	—	—	5,610
Total cost of goods sold	—	218,731	—	65,324	(22,979)	261,076
Gross profit	—	85,574	—	9,642	—	95,216
Operating expenses						
General and administrative expenses	—	29,335	80	2,642	—	32,057
Sales and marketing expenses	—	34,665	—	4,024	—	38,689
Research and development expenses	—	40,387	—	558	—	40,945
Operating income (loss)	—	(18,813)	(80)	2,418	—	(16,475)
Interest expense	—	(37,658)	—	—	—	(37,658)
Interest income	—	1	—	332	—	333
Other income (expense)	—	1,573	—	(144)	—	1,429
Equity in earnings (losses) of affiliates	(136,469)	3,288	—	—	133,181	—
(Loss) income before income taxes	(136,469)	(51,609)	(80)	2,606	133,181	(52,371)
Provision (benefit) for income taxes	—	84,860	(28)	(734)	—	84,098
Net (loss)						

income	(136,469)	(136,469)	(52)	3,340	133,181	(136,469)
Foreign currency translation	—	—	—	(104)	—	(104)
Income tax expense related to items of other comprehensive (loss) income	—	(233)	—	—	—	(233)
Total other comprehensive (loss) income	$ (136,469)	$(136,702)	$ (52)	$ 3,236	$ 133,181	$(136,806)

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

20. Guarantor Financial Information (Continued)

Condensed Consolidating Cash Flow Information

Year Ended December 31, 2013

	Lantheus Intermediate	LMI	Guarantor Subsidiary	Non-Guarantor Subsidiaries	Eliminations	Total
Cash provided by operating activities	$ —	$(17,273)	$ —	$ 3,333	$ (1,738)	$(15,678)
Cash flows from investing activities						
Capital expenditures	—	(4,903)	—	(107)	—	(5,010)
Proceeds from dividend	—	5,268	—	—	(5,268)	—
Proceeds from sale of property, plant and equipment	—	433	1,094	—	—	1,527
Cash provided by (used in) investing activities	—	798	1,094	(107)	(5,268)	(3,483)
Cash flows from financing activities						
Proceeds on line of credit	—	8,000	—	—	—	8,000
Payments on note payable	—	(1,310)	—	—	—	(1,310)
Payments of deferred financing costs	—	(1,249)	—	—	—	(1,249)
Due from parent	—	94	—	—	—	94
Intercompany note	—	5,300	—	(5,300)	—	—

Payment of dividend	—	—	(1,094)	(5,912)	7,006	—
Cash provided by (used in) financing activities	—	10,835	(1,094)	(11,212)	7,006	5,535
Effect of foreign exchange rate on cash	—	—	—	(1,300)	—	(1,300)
Decrease in cash and cash equivalents	—	(5,640)	—	(9,286)	—	(14,926)
Cash and cash equivalents, beginning of year	—	17,635	—	13,960	—	31,595
Cash and cash equivalents, end of year	$ —	$ 11,995	$ —	$ 4,674	$ —	$ 16,669

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

20. Guarantor Financial Information (Continued)

Condensed Consolidating Cash Flow Information

Year Ended December 31, 2012

	Lantheus Intermediate	LMI	Guarantor Subsidiary	Non-Guarantor Subsidiaries	Eliminations	Total
Cash provided by operating activities	$ —	$ 3,829	$ —	$ 4,568	$ (7,874)	$ 523
Cash flows from investing activities						
Capital expenditures	—	(7,353)	—	(567)	—	(7,920)
Purchase of certificate of deposit	—	(225)	—	—	—	(225)
Proceeds from dividend	—	2,949	—	—	(2,949)	—
Cash provided by (used in) investing activities	—	(4,629)	—	(567)	(2,949)	(8,145)
Cash flows from financing activities						
Payments on note payable	—	(1,530)	—	—	—	(1,530)
Payments of deferred financing costs	—	(442)	—	—	—	(442)
Due from parent	—	(67)	—	—	—	(67)
Payment of dividend	—	—	—	(10,823)	10,823	—
Cash used in						

financing activities	—	(2,039)	—	(10,823)	10,823	(2,039)
Effect of foreign exchange rate on cash	—	—	—	649	—	649
Decrease in cash and cash equivalents	—	(2,839)	—	(6,173)	—	(9,012)
Cash and cash equivalents, beginning of year	—	20,474	—	20,133	—	40,607
Cash and cash equivalents, end of year	$ —	$ 17,635	$ —	$ 13,960	$ —	$ 31,595

Lantheus MI Intermediate, Inc. and subsidiaries

Notes to Consolidated Financial Statements (Continued)

20. Guarantor Financial Information (Continued)

Condensed Consolidating Cash Flow Information

Year Ended December 31, 2011

	Lantheus Intermediate	LMI	Guarantor Subsidiary	Non-Guarantor Subsidiaries	Eliminations	Total
Cash provided by operating activities	$ 600	$ 15,409	$ —	$ 7,011	$ (600)	$ 22,420
Cash flows from investing activities						
Capital expenditures	—	(7,023)	—	(671)	—	(7,694)
Proceeds from dividend	149,400	—	—	—	(149,400)	—
Cash provided by (used in) investing activities	149,400	(7,023)	—	(671)	(149,400)	(7,694)
Cash flows from financing activities						
Proceeds from issuance of debt	—	152,250	—	—	—	152,250
Consent solicitation fee	—	(3,750)	—	—	—	(3,750)
Payments of deferred financing costs	—	(5,491)	—	—	—	(5,491)
Proceeds from line of credit	—	10,000	—	—	—	10,000
Payments on line of credit	—	(10,000)	—	—	—	(10,000)
Payment of						

dividend	(150,000)	(150,000)	—	—	150,000	(150,000)
Cash used in financing activities	(150,000)	(6,991)	—	—	150,000	(6,991)
Effect of foreign exchange rate on cash	—	—	—	(134)	—	(134)
Increase in cash and cash equivalents	—	1,395	—	6,206	—	7,601
Cash and cash equivalents, beginning of year	—	19,079	—	13,927	—	33,006
Cash and cash equivalents, end of year	$ —	$ 20,474	$ —	$ 20,133	$ —	$ 40,607

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

Not applicable.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) or 15d-15(e) promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Based on this evaluation, our principal executive officer and our principal financial officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this report.

Management's Annual Report on Internal Control Over Financial Reporting

Our management, with the participation of our principal executive officer and principal financial officer, is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control system is designed to provide reasonable assurance to our management and Board of Directors regarding the preparation and fair presentation of published financial statements.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2013. In making its assessment of internal control over financial reporting, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control—Integrated Framework (1992)*. Based on this assessment, management concluded that, as of December 31, 2013, our internal control over financial reporting is effective.

We do not include an attestation report of our independent registered public accounting firm regarding internal control over financial reporting in this annual report. Our report was not subject to attestation by the Company's independent registered public accounting firm pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act signed into law on July 21, 2010("Dodd-Frank"). Dodd-Frank provides a permanent exemption from the requirements of Section 404(b) of the Sarbanes-Oxley Act of 2002 for those entities that are neither large accelerated filers nor accelerated filers. As a result, we were not required to have our independent registered public accounting firm attest to, and report on, internal controls over financial reporting.

Changes in Internal Control Over Financial Reporting

There have been no changes during the quarter ended December 31, 2013 in our internal control over financial reporting (as defined in Rule 13a-15(f) promulgated under the Exchange Act) that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

PART III

All information contained in Part III is included in this annual report and not incorporated by reference because we do not have any public equity that requires us to file a definitive proxy statement.

Item 10. Directors, Executive Officers and Corporate Governance

The following table sets forth the names, ages and positions of the executive officers and directors of Holdings and other key employees of Lantheus, as of March 11, 2014. Holdings is our ultimate parent company, and the Board of Directors of Holdings is the primary board that takes action with respect to our business and strategic planning.

Name	Age	Position
Brian Markison	53	Director and Non-Executive Chairman of the Board
Jeffrey Bailey	51	Director, President and Chief Executive Officer
John Golubieski	48	Interim Chief Financial Officer
William Dawes	42	Vice President, Manufacturing and Operations
Michael Duffy	53	Vice President, General Counsel and Secretary
Mary Anne Heino	54	Chief Commercial Officer
Michael Heslop	54	Vice President, Business Development and Strategic Planning
Cesare Orlandi	63	Chief Medical Officer
Simon Robinson	54	Vice President, Research and Pharmaceutical Development
Cyrille Villeneuve	62	Vice President, International
Nigel Williams	54	Vice President, Quality
David Burgstahler	45	Director
Samuel Leno	68	Director
Patrick O'Neill	64	Director
Sriram Venkataraman	41	Director

Set forth below is a description of the business experience of the foregoing persons.

Brian. A. Markison is the Non-Executive Chairman of the Board of Directors of Holdings, Lantheus Intermediate and LMI. Mr. Markison joined the Board of Holdings in September 2012 and was elevated to Chairman in January 2013. Mr. Markison has been a Healthcare Industry Executive for Avista since September 2012. Mr. Markison is a seasoned executive with more than 30 years of operational, marketing, commercial development and sales experience with international pharmaceutical companies. He most recently held the position of President and Chief Executive Officer and member of the Board of Directors of Fougera Pharmaceuticals Inc., a specialty pharmaceutical company in dermatology, prior to its sale to Sandoz, the generics division of Novartis AG. Before leading Fougera, Mr. Markison was Chairman and Chief Executive Officer of King Pharmaceuticals, which he joined as Chief Operating Officer in March 2004, and was promoted to President and CEO later that year, and elected Chairman in 2007. Prior to joining King, Mr. Markison held various senior leadership positions at Bristol-Myers Squibb, including President of Oncology, Virology and Oncology Therapeutics Network; President of Neuroscience, Infectious Disease and Dermatology; and Senior Vice President, Operational Excellence and Productivity. Mr. Markison also serves on the Board of Directors of Immunomedics, Inc., PharmAthene, Inc. and Rosetta Genomics, Ltd., where he also serves as Board Chairman. He is also a Director of the Komen Foundation for South / Central New Jersey, the College of New Jersey and the Pennington School. Mr. Markison holds a BS degree from Iona College. Mr. Markison was chosen as a Director because of his strong commercial and operational management background and extensive experience in the pharmaceutical industry.

Jeffrey Bailey became our new President and Chief Executive Officer effective January 23, 2013 and is a Director of Holdings, Lantheus Intermediate and LMI. Mr. Bailey has more than 26 years of

diverse pharmaceutical leadership experience across multiple functions, including sales, marketing, manufacturing, supply chain and operations. Prior to joining Lantheus, Mr. Bailey served from July 2011 to August 2012 as Chief Operating Officer and a member of the Executive Committee of Fougera Pharmaceuticals, Inc. prior to its sale to Sandoz. Before joining Fougera, from April 2010 to June 2011, Mr. Bailey served as the Chief Commercial Officer of King-Pfizer Pharmaceuticals. From January 2008 to April 2010, he worked with Novartis Pharmaceuticals as President and General Manager of the Northwest Operating Unit, and from June 1984 to June 2006 he served in several roles with increasing responsibilities across manufacturing operations, commercial operations and general management at the Johnson & Johnson Family of Companies. Mr. Bailey holds a Bachelor of Arts in Business from Rutgers University. Mr. Bailey was chosen to serve as a Director because of his extensive experience in the healthcare industry in senior commercial and operating positions. As our President and Chief Executive Officer and the only management representative on our Board of Directors, Mr. Bailey has significant knowledge of the pharmaceutical industry and provides valuable insight into a variety of business issues and challenges we face.

John Golubieski has served as our Interim Chief Financial Officer since August 2013. Mr. Golubieski has more than 25 years of diverse financial leadership experience in the pharmaceutical industry. Prior to joining Lantheus, Mr. Golubieski served from July 2011 to October 2012 as Chief Financial Officer and a member of the Executive Committee of Fougera Pharmaceuticals, Inc. prior to its sale to Sandoz. Before joining Fougera, from October 2005 to June 2011, Mr. Golubieski held the role of Vice President Financial Planning & Analysis at King-Pfizer Pharmaceuticals. From September 2000 to October 2005, he worked with Bristol Meyers Squibb as Senior Director—Strategic Analysis of the Worldwide Medicines Group after serving in several roles with increasing responsibilities in finance from August 1989 to September 2000. Mr. Golubieski began his career with Price Waterhouse. Mr. Golubieski holds a Bachelor's degree in Commerce and a Masters of Business Administration from Rider University. He is also a Certified Public Accountant for the State of New Jersey.

William Dawes is our Vice President, Manufacturing and Operations since November 2010. Mr. Dawes held the position of Vice President, Manufacturing & Supply Chain from January 2008 to November 2010. From 2005 to 2008, Mr. Dawes served as General Manager, Medical Imaging Technical Operations, Interim General Manager, Medical Imaging Technical Operations, and Director, Engineering and Maintenance for BMSMI. Mr. Dawes began his career with DuPont Merck Pharmaceuticals. He holds a Bachelor's degree in Engineering from Hofstra University.

Michael Duffy is our Vice President, General Counsel and Secretary, a position he has held since January 2008. From 2002 to 2008, he served as Senior Vice President, General Counsel and Secretary of Point Therapeutics, Inc., a Boston-based biopharmaceutical company. Between 1999 and 2001, Mr. Duffy served as Senior Vice President, General Counsel and Secretary of Digital Broadband Communications, Inc., a competitive local exchange carrier which filed for protection under Chapter 11 of the United States Bankruptcy Code in December 2000. After the filing, Mr. Duffy served as the court-appointed liquidating trustee of the bankruptcy estate. From 1996 to 1999, Mr. Duffy served as Senior Vice President, General Counsel and Secretary of ETC w/tci, a sub-portfolio of TCI Ventures, Inc./Liberty Media Corporation. Mr. Duffy began his legal career with the law firm Ropes & Gray and holds law degrees from the University of Pennsylvania and Oxford University and a Bachelor's degree in History of Science from Harvard College. Mr. Duffy is also the current Chairman of the Board of Directors of CORAR, the Council on Radionuclides and Radiopharmaceuticals, a national trade association for the radiopharmaceutical industry.

Mary Anne Heino joined Lantheus in April 2013 as Chief Commercial Officer. Ms. Heino brings more than 25 years of diverse pharmaceutical industry experience. Prior to joining Lantheus, Ms. Heino led Angelini Labopharm LLC and Labopharm USA in the roles of President and Senior Vice President of World Wide Sales & Marketing from February 2007 to March 2012. From May 2000 until February 2007, Ms. Heino served in numerous capacities at Centocor, Inc., a Johnson & Johnson Company,

including Vice President Strategic Planning & Competitive Intelligence, Vice President Sales, Executive Director Customer Relationship Management and Senior Director Immunology Marketing. Ms. Heino began her professional career with Janssen Pharmaceutical as a Sales Representative in June 1989 and worked her way up to the role of Field Sales Director in 1999. Ms. Heino received her Master's in Business Administration from New York University. She earned a Bachelor's of Science in Nursing from the City University of New York and a Bachelor's of Science in Biology from the State University of New York at Stony Brook.

Michael Heslop joined Lantheus in June 2012 as our Vice President, International and became our Vice President, Business Development and Strategic Planning in April 2013. Mr. Heslop possesses more than 25 years of general management and commercial experience. Prior to joining Lantheus, Mr. Heslop was General Manager and Senior Vice President, Biosurgical Specialties at Genzyme Corporation from 2009 to 2011. While at Genzyme, Mr. Heslop also held the positions of General Manager and Senior Vice President, Endocrinology from 2003 to 2009, and Vice President, Global Marketing, PGH Business from 2000 to 2003. Previously Mr. Heslop held the positions of Vice President, Business Development at Sciptgen Pharmaceuticals from 1998 to 2000 and Director, Marketing Anti-Infectives at Glaxo Welcome USA from 1996 to 1998. Mr. Heslop received a B.S. degree in Biology from McGill University and an M.B.A. from Concordia University.

Dr. Cesare Orlandi joined Lantheus in March 2013 as Chief Medical Officer. Dr. Orlandi brings more than 20 years of diverse pharmaceutical industry experience. Prior to joining Lantheus, Dr. Orlandi served from January 2012 until February 2013 as Senior Vice President and Chief Medical Officer of TransTech Pharma, Inc., a clinical stage pharmaceutical company focused on discovery and development of human therapeutics. From 2007 until 2011, Dr. Orlandi served as Senior Vice President and Chief Medical Officer of Cardiokine, Inc., a specialty pharmaceutical company developing hospital products for cardiovascular indications. From 1998 until 2007, Dr. Orlandi served, in among other positions, as Vice President, Global Clinical Development of Otsuka Pharmaceuticals, a large Japanese pharmaceutical company. Earlier in his career, Dr. Orlandi served in increasing roles of clinical research responsibility at Medco Research, Inc. and the Radiopharmaceutical Division of The DuPont Merck Pharmaceutical Company, a predecessor organization to Lantheus, and The Upjohn Company. Dr. Orlandi received his medical degree from the University of Pavia Medical School in Pavia, Italy. He is currently an Adjunct Assistant Professor of Medicine at Tufts University School of Medicine in Boston, Massachusetts, and he is a founding member of the American Society of Nuclear Cardiology, and a Fellow of the American College of Cardiology, the European Society of Cardiology and the American College of Angiology.

Dr. Simon Robinson is our Vice President, Research and Pharmaceutical Development, a position he has held since February 2010. Dr. Robinson was our Senior Director Discovery Research from 2008 to 2010 and our Director Discovery Biology and Veterinary Sciences from 2001 to 2008. Prior to joining us, he held research positions at BMS, Sphinx Pharmaceuticals, BASF and Dupont Pharmaceuticals. He holds a Ph.D. and B.Sc. in Pharmacology from the University of Leeds, England and did post-doctoral training at the University of Wisconsin Clinical Cancer Center.

Cyrille Villeneuve was our Chief Commercial Officer from October 2011 to April 2013, and he currently serves as our Vice President, International, responsible for global sales and marketing. Previously, Mr. Villeneuve was our Vice President and General Manager, International, a position he held since November 2008. Prior to joining us in 1985, Mr. Villeneuve held positions at the Montreal Heart Institute and Hospital Hotel-Dieu Montreal. He holds a Bachelor of Arts from Montreal University and a Master of Public Administration from the Ecole Nationale Administration Publique.

Nigel Williams joined Lantheus Medical Imaging in April 2012 as Vice President, Quality. Mr. Williams brings more than 30 years of industry experience in manufacturing, quality and supply of a wide range of healthcare and diagnostic products. Prior to joining Lantheus, Mr. Williams served as

Head of Quality for Merck KGaA Chemicals Operations from 2001- 2012, Vice President, Quality Management at EMD Millipore from 2009 - 2011 and Director of Manufacturing for Millipore Corporation from 2006 to 2009. He held the roles of Site General Manager from 2005 to 2006 and Director of operations from 2004 to 2005 for Celliance Limited. Mr. Williams received a B.S. honors degree in Applied Biology from Brunel University.

David Burgstahler is a Director of Holdings, Lantheus Intermediate and LMI and the Chairman of our Compensation Committee, serving on our Board of Directors of each entity since January 2008. He is a founding partner of Avista since 2005 and since 2009, has been President of Avista. Prior to forming Avista, he was a partner of DLJMB. He was at DLJ Investment Banking from 1995 to 1997 and at DLJMB from 1997 through 2005. Prior to that, he worked at Andersen Consulting (now known as Accenture) and McDonnell Douglas (now known as Boeing). He holds a Bachelor of Science in Aerospace Engineering from the University of Kansas and a Master of Business Administration from Harvard Business School. He currently serves as a Director of AngioDynamics Inc. (NASDAQ: ANGO), Armored AutoGroup Inc., ConvaTec Inc., INC Research Holdings, Inc., Strategic Partners, Inc., Visant Corporation and WideOpenWest, LLC. He previously served as a Director of Warner Chilcott plc (NASDAQ: WCRX) and BioReliance Holdings, Inc. Mr. Burgstahler was chosen as a Director because of his strong finance and management background, with over 18 years in banking and private equity finance. He has extensive experience serving as a director for a diverse group of private and public companies.

Samuel Leno is a Director of Holdings, Lantheus Intermediate and LMI and the Chairman of our Audit Committee, serving on the Board of Directors of Holdings since May 2012. Mr. Leno is a strategic executive with more than 40 years of experience with complex multinational companies. He most recently held the positions of Executive Vice President and Chief Operations Officer at Boston Scientific. He previously served as Executive Vice President, Finance and Information Systems and Chief Financial Officer. He retired from Boston Scientific in December 2011. Prior to joining Boston Scientific, Mr. Leno served as Executive Vice President, Finance and Corporate Services and Chief Financial Officer at Zimmer Holdings, Inc. and Chief Financial Officer positions at Arrow Electronics, Inc., Corporate Express, Inc. and Coram Healthcare. Previously, he held a variety of senior financial positions at Baxter International, Inc. and American Hospital Supply Corporation. He is a member of the Board of Directors and the Audit Committee of Omnicare, is the Chairman of the Board of Zest Anchors, Inc. and serves as a Director of Endotronix. He is also a member of the Advisory Board of the Harvard Business School Healthcare Initiative. He previously served on the Board and Audit Committee of Tomotherapy, Inc. Mr. Leno served as a Lieutenant in the United States Navy and is a Vietnam veteran. He holds a Bachelor of Science in Accounting from Northern Illinois University and an MBA from Roosevelt University. Mr. Leno was chosen as a Director because of his finance expertise and industry background.

Dr. Patrick O'Neill is a Director of Holdings, Lantheus Intermediate and LMI, serving on the Board of Directors of Holdings since February 2008. He is also an industry advisor for Avista, a position he has held since 2008. Dr. O'Neill was at Johnson & Johnson from 1976 to 2006, holding Research and Development and New Business Development leadership positions in Johnson & Johnson's pharmaceutical business, their Medical Devices and Diagnostics Group, and the surgical and interventional cardiology/radiology business units until he retired in February 2006. He served as Executive in Residence at New Enterprise Associates from March 2006 through 2007. Dr. O'Neill holds a Bachelor of Science in Pharmacy and Ph.D. in Pharmacology from Ohio State University. He currently serves as Director of OptiNose US Inc. and Zest Anchors, Inc. Dr. O'Neill was chosen as a Director because of his experience in the pharmaceutical industry. Dr. O'Neill has participated directly in the development of pharmaceutical products for other companies, which provides valuable insight into strategic business decisions.

Sriram Venkataraman is a Director of Holdings, Lantheus Intermediate and LMI, serving on the Board of Directors of Holdings since November 2010. He is also a Partner of Avista, having joined in May 2007. Prior to joining Avista, Mr. Venkataraman was a Vice President in the Healthcare Investment Banking group at Credit Suisse Group AG from 2001 to 2007. Previously, he worked at GE Healthcare (formerly known as GE Medical Systems) from 1996 to 1999. Mr. Venkataraman holds a Master of Science in Electrical Engineering from the University of Illinois, Urbana-Champaign and a Master of Business Administration with Honors from The Wharton School. He currently serves as a Director of AngioDynamics, Inc. (Nasdaq: ANGO), OptiNose Inc., Zest Anchors, Inc. and Vertical / Trigen Holdings, LLC Mr. Venkataraman was chosen as a Director because of his experience in the healthcare industry and his strong finance and management background. He also has experience serving as a director of private and public companies.

Former Executives included in our Named Executive Officers

Don Kiepert was our President and Chief Executive Officer, a position he held from January 2008 to January 2013. He was also a Director of Holdings, Lantheus Intermediate and LMI, serving from January 2008 to January 2013. Mr. Kiepert ceased being our President and Chief Executive Officer effective January 23, 2013 (see "Item 11—Executive Compensation—Potential Payment Upon Termination or Change of Control —Employment Agreements and Arrangements" for additional details).

Jeffrey Young was our Chief Financial Officer, a position he held from January 2012 to August 2013. Mr. Young resigned as Chief Financial Officer effective August 9, 2013.

Board of Directors

The Board of Directors is responsible for the management of our business. The Board of Directors is comprised of six directors. Directors who are elected annually serve in their position until their next election and until their successors are elected and qualified. Pursuant to the management and employee Shareholders Agreements described in "Item 13—Certain Relationships and Related Transactions, and Director Independence—Transactio with Related Persons—Shareholders Agreement," Avista has designation rights with respect to the composition of the Holdings board of directors and Avista is entitled to majority representation on any committee that the Board creates. Messrs. Pickering, Kiepert, Burgstahler, O'Neill and Venkataraman were appointed pursuant to these agreements. Mr. Larry Pickering, our former Chairman retired from the Board in September 2012. Mr. Donald Kiepert, our former President and CEO, resigned from the Board in January 2013. Messrs. Markison, Leno and Bailey were appointed to the Board in September 2012, May 2012 and January 2013, respectively.

Although not formally considered by the Board of Directors of Holdings because our securities are not registered or traded on any national securities exchange, we believe that Mr. Markison, Mr. Leno and Dr. O'Neill would be considered independent for our Board of Directors and that Mr. Leno would be considered independent for our Audit Committee and that Mr. Markison would be considered independent for our Compensation Committee based upon the listing standards of the New York Stock Exchange.

Board Committees

The Audit Committee of Holdings is composed of Messrs. Leno and Venkataraman. Mr. Leno, the Chairman of the Audit Committee, has been designated by the Board of Directors of Holdings as our "audit committee financial expert." The Compensation Committee of Holdings is composed of Messrs. Burgstahler and Markison. Additionally, because we are a closely-held company with no public trading market for our common stock, the Board of Directors has not deemed it necessary for us to

have a standing nominating committee or committee performing a similar function. Presently, all directors participate in the consideration of director nominees.

Code of Ethics

We have a code of conduct and ethics for all of our employees, including our principal executive, financial and accounting officers and our controller, or persons performing similar functions, and each of the non-employee directors on our Board of Directors. Our Company Code of Conduct is currently available on our website, www.lantheus.com. The information on our web site is not part of, and is not incorporated into, this annual report. We intend to provide any required disclosure of any amendment to or waiver from such code that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, in a Current Report on Form 8-K filed with the Commission.

Item 11. Executive Compensation

Compensation Discussion and Analysis

The Compensation Committee is generally charged with the oversight of our executive compensation program. The Compensation Committee is composed of Messrs. Burgstahler and Markison. Responsibilities of the Compensation Committee include the review and approval of the following items:

- executive compensation strategy and philosophy;
- compensation arrangements for executive management;
- design and administration of the annual incentive plan;
- design and administration of our equity incentive plans;
- executive benefits; and
- any other compensation or benefits related items deemed appropriate by the Compensation Committee.

In addition, the Compensation Committee considers the proper alignment of executive pay with our values and strategy by overseeing executive compensation policies, measuring and assessing corporate performance and taking into account our Chief Executive Officer's performance assessment of the Company.

The Compensation Committee engaged the services of an independent compensation consultant, Pearl Meyers & Partners, to assist in the strategic review of programs and arrangements relating to executive compensation and performance.

The following executive compensation discussion and analysis describes the principles underlying our executive compensation policies and decisions including material elements of compensation for our named executive officers. Our named executive officers for 2013 were:

- Jeffrey Bailey, President and Chief Executive Officer;
- John Golubieski, Interim Chief Financial Officer;
- Mary Anne Heino, Chief Commercial Officer;
- Cesare Orlandi, Chief Medical Officer;
- Michael Duffy, Vice President, General Counsel and Secretary;
- Donald Kiepert, (former) President and Chief Executive Officer; and

- Jeffrey Young, (former) Chief Financial Officer and Treasurer.

As discussed in more detail below, the material elements and structure of our executive compensation program were negotiated and determined in connection with the Acquisition.

Compensation Philosophy and Objectives

The core philosophy of our executive compensation program is to support our primary objective of providing innovative medical imaging solutions to improve the treatment of human disease while enhancing our long-term value to our stockholders.

Specifically, the Compensation Committee believes the most effective executive compensation program for all executives, including named executive officers:

- reinforces our strategic initiatives;
- aligns the economic interests of our executives with those of our stockholders; and
- encourages attraction and long-term retention of key contributors.

The Compensation Committee considers the following factors when determining compensation for our executive officers, including our named executive officers:

- the executive's individual performance during the year;
- his or her projected role and responsibilities for the coming year;
- his or her actual and potential impact on the successful execution of our strategy;
- recommendations from our President and Chief Executive Officer and any independent compensation consultants, if used;
- an officer's prior compensation, experience, and professional status;
- the requirements of any applicable employment agreements;
- relative pay among the executive officers; and
- employment market conditions and compensation practices within our peer group.

The weighting of these and other relevant factors is determined on an individual basis for each executive upon consideration of the relevant facts and circumstances.

The Compensation Committee is committed to a strong, positive link between our objectives and our compensation practices. Our compensation philosophy also allows for flexibility in establishing executive compensation based on an evaluation of information prepared by management or other advisors and other objective and subjective considerations deemed appropriate by the Compensation Committee, subject to any contractual agreements with our executives. This flexibility is important to ensure our compensation programs are competitive and that our compensation decisions appropriately reflect the unique contributions and characteristics of the Company executive officers.

Compensation Benchmarking

The Compensation Committee ensures executives' pay levels are materially consistent with our compensation philosophy and objectives described above by conducting annual assessments of competitive executive compensation. We utilize data from publicly traded, similarly-sized pharmaceutical, biopharmaceutical and other life science companies as our primary source for competitive pay levels. However, the Compensation Committee does not support rigid adherence to benchmarks or compensatory formulas and strives to make compensation decisions which effectively support our compensation objectives and reflect the unique attributes of the Company and each executive.

For 2013 compensation for our executive officers, including our named executive officers, the Compensation Committee reviewed executive compensation data provided by Radford Life Sciences Survey, a nationally recognized survey source. The Compensation Committee looked at compensation

data for life sciences companies, which most closely approximated our size, and, to the extent possible, had comparable position matches and compensation components.

For 2013 compensation for our President and Chief Executive Officer, data was also collected from a review of the following industry peers:

Acorda Therapeutics, Analogic, AngioDynamics, ArthroCare, Auxilium Pharmaceuticals, Greatbatch, Hi Tech Pharmaceuticals, ICU Medical, Impax Laboratories, Integra LifeSciences, Masimo, The Medicines Company, Merit Medical Systems, Myriad Genetics, Nordion, NuVasive, Symmetry Medical, Thoratec, ViroPharma and Volcano. The data used was from the most recent proxy available as of July 2012. This peer group had mean revenue of $418 million and a mean enterprise value of $910 million. This peer group selection included 20 life science and specialty pharmaceutical companies. It was selected to best reflect similarly-sized companies in our industry with mature products and full field sales operations.

Employment Agreements

The Compensation Committee determined that it was appropriate to enter into employment agreements with each of our named executive officers. Among other things, these agreements set the executives' compensation terms, their rights upon a termination of employment, and restrictive covenants relating to non-competition, non-solicitation, and confidentiality. See "—Potential Payment Upon Termination or Change of Control—Employment Agreements and Arrangements."

Mr. Golubieski's Consulting Agreement

Mr. Golubieski has a consulting agreement with us which provides that he will serve as our interim Chief Financial Officer on a month-to-month basis unless otherwise terminated by the parties. His compensation is $25,000 per month plus reimbursement for reasonable and necessary travel expenses. Either party may terminate the agreement on 10 days written notice. Mr. Golubieski will also be paid a bonus, as determined by the Compensation Committee, in recognition of his contribution as interim Chief Financial Officer in 2013.

Elements of Compensation

Our compensation program is heavily weighted towards performance-based compensation, reflecting our philosophy of increasing our long-term value and supporting strategic imperatives, as discussed above. Total compensation and other benefits consist of the following elements:

- base salary;
- annual non-equity incentive compensation; and
- long-term equity incentives in the form of stock options.

We do not offer a defined benefit pension plan. The Compensation Committee supports a competitive employee benefit package, but does not support executive perquisites or other supplemental programs targeted to executives.

Base Salary

Base salaries are intended to provide reasonable and competitive fixed compensation for regular job duties. In 2013, the Compensation Committee approved adjustments to Messrs. Duffy's and Young's respective salaries to $315,000 in recognition of their performance and roles within the Company. The base salaries of Messrs. Bailey, Ms. Heino and Dr. Orlandi were negotiated as part of their employment offers and were deemed to be in line with our assessment of competitive salaries for their respective roles. Mr. Golubieski does not receive a salary in his capacity of a consultant to the

company (see Mr. Golubieski's Consulting Agreement above). Mr. Kiepert did not receive a salary increase in 2013.

Our general practice with respect to cash compensation is that executive base salaries and annual cash incentive compensation values should generally position total annual cash compensation at or below market median of similarly-sized life science companies. See "—Compensation Discussion and Analysis—Compensation Benchmarking." Cash compensation is generally between the 25th percentile and the median relative to our peers.

As of December 31, 2013, the base salaries of Messrs. Bailey, Golubieski, Ms. Heino, Dr. Orlandi, and Duffy, were as follows:

Name	Base Salary
Jeffrey Bailey	$ 450,000
John Golubieski	$ —
Mary Anne Heino	$ 340,000
Cesare Orlandi	$ 365,000
Michael Duffy	$ 315,000
Don Kiepert (former President and CEO)	$ —
Jeffrey Young (former CFO)	$ —

Annual Cash Incentive Compensation

Our 2013 Executive Leadership Team Incentive Bonus Plan (the "Bonus Plan") was intended to reward executive officers, including our named executive officers, except for our interim Chief Financial Officer Mr. Golubieski, for annual financial performance, performance of other corporate goals that may be long-term in nature and meeting or exceeding certain short-term objectives.

Cash incentive compensation under the Bonus Plan is subject to the achievement of a certain EBITDA target. For purposes of the Bonus Plan, we utilize management EBITDA, see "Item 6—Selected Financial Data—Non-GAAP Financial Measures" for the calculation of EBITDA as defined in the award agreements. The Bonus Plan provides for adjustments to the EBITDA targets by the Compensation Committee for extraordinary and unforeseen events.

The Compensation Committee chose two primary performance measures from which to structure annual incentives: EBITDA weighted 75% and GAAP cash, net of line of credit ("GAAP Cash") weighted 25%. EBITDA was selected as the primary metric for a number of reasons:

- it effectively measures our overall performance;
- it can be considered an important surrogate for cash flow, a critical metric related to servicing our outstanding debt;
- it is a key metric driving our valuation, consistent with the valuation approach used by industry analysts; and
- it is consistent with the metric used for the vesting of the financial performance portion of our option grants.

These EBITDA targets should not be understood as management's predictions of future performance or other guidance, and investors should not apply these in any other context. EBITDA targets were linked to our short-term and long-term business objectives to ensure incentives are provided for appropriate performance.

The year-end GAAP Cash position of the company was selected as the second performance as it provided executive focus on the liquidity of the company and the goal of minimizing the utilization of credit for ongoing operations.

The Compensation Committee believes our cash incentive compensation structure is consistent with competitive practice.

The potential bonus payouts under various scenarios in 2013 for our named executive officers were as follows:

Named Executive Officer	Threshold Bonus(1) (as % of Base Salary)	Target Bonus (as % of Base Salary)	Above Target Bonus (as % of Base Salary)
Jeffrey Bailey	50%	100%	180%
John Golubieski(2)	N/A	N/A	N/A
Mary Anne Heino	22.5%	45%	81%
Cesare Orlandi	20%	40%	72%
Michael Duffy	20%	40%	72%
Don Kiepert(2)	N/A	N/A	N/A
Jeffrey Young(2)	N/A	N/A	N/A

(1) Assuming that the EBITDA and GAAP Cash thresholds were achieved and the named executive achieved his/her department and individual performance goals.

(2) Mr. Golubieski was not eligible for a bonus under the Bonus Plan in 2013. Mr. Kiepert ceased being our President and Chief Executive Officer effective January 23, 2013 and was not eligible for a bonus in 2013. Mr. Young resigned as Chief Financial Officer effective August 9, 2013 and was not eligible for a bonus in 2013.

For our participating named executives, pursuant to their employment agreements, payout of the target level bonus was tied to the achievement of the EBITDA target, GAAP Cash and other corporate performance goals established by the Compensation Committee.

Pursuant to the Bonus Plan, payout of the target level bonus for our other named executive officers was tied to the achievement of the EBITDA target, GAAP Cash and the achievement of certain department performance and individual performance goals. The achievement of the EBITDA target accounts for 75% of the total bonus award and GAAP Cash accounts for the remaining 25%. The achievement of department performance and individual performance goals is applied as a multiplier. Department performance goals are recommended and approved by our Chief Executive Officer at the start of each year. Achievement of individual performance goals are assessed by our Chief Executive Officer at the end of each year. These targets were intended to provide a meaningful incentive for executives to achieve or exceed performance goals.

If we did not meet the threshold of 90% of the EBITDA target of $45.0 million, no bonus would be awarded under the plan. If we achieve the stretch goals above the EBITDA and GAAP Cash targets established for the year, each participating named executive offer would be eligible for additional payout above their target bonus subject to the application of their individual performance multiplier.

Our EBITDA and GAAP Cash targets relative to the Bonus Plan for the fiscal year ended December 31, 2013 was established at $49.5 million and $3.8 million, respectively. In the fiscal year ended December 31, 2013, our Adjusted EBITDA and GAAP Cash were approximately $47.2 million and $8.7 million, respectively.

For Mr. Bailey in 2013, performance goals included: in addition to our EBITDA and GAAP Cash goals: driving revenue from DEFINITY and the nuclear product portfolio; responding to the supply challenge presented by the shutdown of the BVL facilities; implementing a revised research and

development strategy to focus on advancing flupiridaz F 18 in Phase 3; achieving certain project milestones toward expanding the International business into China; and developing a five year operating plan for improved profitability and growth.

For Ms. Heino, performance goals included: achieving global revenue targets; revenue targets for select products and markets; translating underperforming assets into value contributors; and increasing the focus on metrics and accountability within the Commercial organization.

For Dr. Orlandi, performance goals included: completion of the flurpiridaz 301 clinical trial; oversight of medical affairs and pharmacovigilance support to commercial operations; and clinical development and regulatory affairs support to advance DEFINITY in China, Luminity in Europe and manufacturing tech transfer activities in the United States.

For Mr. Duffy, performance goals included: successfully negotiating and closing key agreements; partnering with various functional areas to achieve corporate goals; advancing the Zurich litigation to optimize our potential recovery; managing the global intellectual property portfolio; and managing all legal aspects of any potential strategic transaction.

The Compensation Committee reviewed each executive's performance relative to the goals set forth above and recognized significant achievements and attainment of most individual objectives. The Compensation Committee concluded that cash incentives should be paid as detailed in the Summary Compensation Table for each participating executive.

Long-Term Equity Incentive Awards

In connection with the Acquisition, the Board of Directors approved and adopted the Lantheus MI Holdings, Inc. 2008 Equity Incentive Plan and the Lantheus MI Holdings, Inc. 2013 Equity Incentive Plan, or the Equity Plans, which allow grants of equity awards and options for shares of Holdings. The purpose of the Equity Plans are to:

- promote our long-term financial interests and growth by attracting and retaining management and other personnel and key service providers with the training, experience and abilities to enable them to make substantial contributions to the success of our business;
- motivate management personnel by means of growth-related incentives to achieve long range goals; and
- further the alignment of interests of participants with those of our stockholders through opportunities for increased stock or stock-based ownership in us.

We look at competitive long-term equity incentive award values when assessing our compensation programs, as described above under "—Compensation Discussion and Analysis—Compensation Benchmarking". In the five year period following the Acquisition, we issued large upfront stock option grants that vested over time and with the achievement of certain performance goals in lieu of annual grants. In 2013, we determined that it was appropriate to provide supplemental merit grants to improve our competitive position. The Compensation Committee believes these stock option grants establish performance objectives and incentives and help align our executives' interests with the interests of the stockholders in fostering long-term value.

The options have an exercise price equal to fair market value on the date of grant. Since our common stock is not currently traded on a national securities exchange, fair market value is determined reasonably and in good faith by the Board of Directors. These options have a ten-year term.

Options are generally issued either as time based options, or the Time Vesting Options or EBITDA-based performance options, or the Performance Vesting Options.

The Performance Vesting Options are intended to motivate financial performance in line with investors' outlook for performance during our first five years. We chose EBITDA as the performance metric since it is a key driver of our valuation and for the reasons described above in "Annual Cash Incentive Compensation." EBITDA is defined in the award agreements as the sum of net income (or loss) of the business or entity for such period; plus interest expense, income taxes, depreciation expenses, amortization expenses, all fees paid by us or any of our subsidiaries pursuant to the Advisory Services Agreements with Avista, dated as of January 8, 2008, non-recurring expenses for executive severance, relocation, recruiting and one-time compensation, the aggregate amount of all other non-cash charges reducing net income including stock-based compensation expense, retention bonuses paid in fiscal year 2008; all extraordinary losses; less all extraordinary gains in each case determined in accordance with GAAP.

The Time Vesting Options are also granted to align our executives with factors that drive the valuation of the Company and to aid in their long-term retention. The combination of time and performance-based vesting of these awards is designed to compensate our executive officers, including our named executive officers, for their long-term commitment to us.

All of our stock options are issued with provisions that join the optionees to the Lantheus Shareholder Agreement in the event of an exercise of their options. The provisions for control, forfeiture and ownership of the Shareholder Agreements are designed to help ensure that the investors have received an appropriate return on their invested capital before executive officers receive significant value from these options.

In 2013, the options granted to Mr. Bailey in conjunction with his employment offer are 50% Time Vesting Options and 50% EBITDA-based performance options. Mr. Bailey's Time Vesting Options vest ratably each month over a four year period from his date of hire; the options granted to Ms. Heino and Dr. Orlandi in conjunction with their employment offers vest ratably on the anniversary of grant date over a four year period; 50% are Time Vesting Options and 50% are EBITDA-based performance options.

In 2013, the supplemental options granted to Mr. Duffy and Dr. Orlandi were 100% Time Vesting Options which will vest ratably on the anniversary of grant date over a four year period.

The EBITDA targets can be adjusted by the Board of Directors in consultation with our Chief Executive Officer as described below.

Due to the number of events that can occur within our industry in any given year that are beyond the control of management but may significantly impact EBITDA and our financial performance, such as significant fluctuations in the cost of raw materials and unit sales volume, and regulatory and reimbursement changes, we have incorporated certain vesting provisions into each stock option grant agreement that allow such Performance Vesting Options to vest later than the date specified. Performance Vesting Options that were eligible to vest but failed to vest due to our failure to achieve an EBITDA target in any given year may vest if we exceed the annual EBITDA target in a subsequent year.

Consistent with the EBITDA targets under the Bonus Plan, pursuant to the terms of the 2008 and 2013 Equity Plans and the individual Stock Option Agreements governing each option grant, the Board of Directors, in consultation with our Chief Executive Officer, has the ability to adjust the EBITDA targets for significant events, changes in accounting rules and other customary adjustment events. We believe these adjustments may be necessary in order to effectuate the intents and purposes of our compensation plans and to avoid unintended consequences that are inconsistent with these intents and

purposes. If our EBITDA is below the EBITDA target but is equal to at least 90% of the EBITDA target, then a percentage of the Performance Vesting Options vests in that year, calculated as follows:

$$\text{(10\% of possible vested Performance Vesting Options)} \times \frac{\text{(Incremental EBITDA over 90\% of EBITDA target)}}{\text{(EBITDA target—10\% of EBITDA target)}} + \text{(90\% of possible vested Performance Vesting Options)}$$

Our EBITDA target relative to performance vesting of options in 2013 was $49.5 million. In the fiscal year ended December 31, 2013, our actual EBITDA relative to performance vesting of options in 2013 was $46.4 million. As a result, 94% of the Performance Vesting Options vested in 2013.

For additional information concerning the options awarded in 2011, 2012 and 2013, see "—2013 Grants of Plan-Based Awards" and "—Outstanding Equity Awards at 2013 Fiscal Year-End."

Other Benefits

Retirement Plans

We offer a 401(k) qualified defined contribution retirement plan for U.S.-based employees, including named executive officers, with a 4.5% company match of the contributor's base salary. The company match was temporarily suspended from April 2012 to December 2012 and reinstated in January 2013. Mr. Villeneuve participates in deferred profit sharing plan (DPSP) plan in Canada which was funded with a contribution of 2.5% of eligible pay for 2013.

Personal Benefits

Except as otherwise discussed herein, other welfare and employee-benefit programs are the same for all of our eligible employees, including our named executive officers. Our other named executive officers do not receive additional benefits outside of those offered to our other employees.

Ownership Guidelines

In the event of exercise of an option grant, the resulting shares are subject to the provisions of the Employee Shareholder Agreement which restricts transfer and voting rights to ensure alignment with the initial investors. For example, Employee Shareholders (as defined in the Employee Shareholder Agreement) are restricted from transferring any of our securities, subject to certain exceptions outlined in the Employee Shareholder Agreement. We do not maintain formal ownership guidelines.

Severance and Change in Control Benefits

In January 2008, we entered into an employment agreement with Don Kiepert, our former President and Chief Executive Officer, which detailed, among other things, his rights upon a termination of employment in exchange for non-competition, non-solicitation and confidentiality covenants. See "—Potential Payment Upon Termination or Change in Control."

We believe that reasonable severance benefits are appropriate in order to be competitive in our executive retention efforts. These benefits reflect the fact that it may be difficult for such executives to find comparable employment within a short period of time. We also believe formalized severance arrangements are at times a competitive requirement to attract the required talent for the role.

Mr. Bailey's employment agreement provides for 12 months of salary, bonus and health benefit subsidies in the event of termination by the company without cause or by Mr. Bailey with good reason. If his termination under these provisions is within 12 months following a change of control, the

agreement provides for 12 months of 2 times his salary, 2 times in bonus and 12 months of certain benefit subsidies. See "—Potential Payment Upon Termination or Change in Control."

All of our other current named executive officers are covered by employment agreements which provide for 12 months of salary, prorated bonus and certain benefit subsidies in the event of termination by the company without cause. If their termination is by the company without cause or by the executive for good reason within 12 months following a change of control, the agreements provides for 12 months salary, full target bonus and 12 months of certain benefit subsidies. See "—Potential Payment Upon Termination or Change in Control."

Tax and Accounting Implications

We were not subject to Section 162(m) of the Internal Revenue Code. For 2013 and beyond, the Compensation Committee will consider the impact of Section 162(m) in the design of its compensation strategies. Under Section 162(m), compensation paid to executive officers in excess of $1,000,000 cannot be taken by us as a tax deduction unless the compensation qualifies as performance-based compensation. We have determined, however, that we will not necessarily seek to limit executive compensation to amounts deductible under Section 162(m) if such limitation is not in the best interests of our stockholders. While considering the tax implications of its compensation decisions, the Compensation Committee believes its primary focus should be to attract, retain and motivate executives and to align the executives' interests with those of our stockholders.

The Compensation Committee operates its compensation programs with the good faith intention of complying with Section 409A of the Internal Revenue Code. We account for stock based payments with respect to our long-term equity incentive award programs in accordance with the requirements of ASC 718.

Compensation Risk Assessment

In consultation with the Compensation Committee, members of Human Resources, Legal and Finance groups conducted an annual assessment of whether our compensation policies and practices encourage excessive or inappropriate risk taking by our employees, including employees other than our named executive officers. This assessment included a review of the risk characteristics of our business and the design of our incentive plans and policies. Although a significant portion of our executive compensation program is performance-based, the Compensation Committee has focused on aligning our compensation policies with our long-term interests and avoiding rewards or incentive structures that could create unnecessary risks to us.

Management reported its findings to the Compensation Committee, which agreed with management's assessment that our plans and policies do not encourage excessive or inappropriate risk taking and determined such policies or practices are not reasonably likely to have a material adverse effect on us.

Summary Compensation Table

The following table sets forth certain information with respect to compensation for the years ended December 31, 2013, 2012 and 2011 earned by or paid to our named executive officers.

Name and Principal Position	Year	Salary ($)	Bonus ($)(1)	Option Awards ($)(2)(3)	Non-Equity Incentive Plan Compensation ($)(4)	All Other Compensation ($)(5)(6)(7)(8)	Total ($)
Jeffrey Bailey	2013	$401,538	$ —	$2,440,000	$ 500,000	$ 79,281	$3,420,819
President and CEO	2012			(New hire in 2013)			
	2011						
John Golubieski(9)	2013	$ —	$70,000	$ —	$ —	$ 120,415	$ 190,415
Interim Chief Financial Officer	2012			(New hire in 2013)			
	2011						
Mary Anne Heino	2013	$228,846	$ —	$ 312,500	$ 112,000	$ 150,432	$ 803,778
Chief Commercial Officer	2012			(New hire in 2013)			
	2011						
Cesare Orlandi	2013	$287,787	$30,000	$ 211,750	$ 108,000	$ 9,172	$ 646,709
Chief Medical Officer	2012			(New hire in 2013)			
	2011						
Michael Duffy	2013	$304,581	$ —	$ 177,100	$ 129,000	$ 10,876	$ 621,557
VP, General Counsel and Secretary	2012	$268,163	$ —	$ —	$ —	$ 248,933	$ 517,096
	2011	$278,934	$ —	$ —	$ —	$ 249,854	$ 528,788
Donald Kiepert	2013	$ 45,922	$ —	$ —	$ —	$ 492,371(10)	$ 538,293
(Former) President and CEO	2012	$406,739	$ —	$ —	$ —	$ 1,229,866	$1,636,605
	2011	$422,538	$ —	$ —	$ —	$ 1,206,074	$1,628,612
Jeffrey Young	2013	$209,502	$ —	$ —	$ —	$ 9,828	$ 219,330
(Former) Chief Financial Officer	2012	$251,354	$ —	$ 59,850	$ —	$ 109,774	$ 420,978
	2011	$243,083	$40,550	$ 142,450	$ —	$ 48,850	$ 474,933

(1) Mr. Golubieski was awarded a bonus in recognition of his contribution as interim Chief Financial Officer in 2013. Dr. Orlandi was granted a $30,000 sign-on bonus to offset certain reimbursements required of his previous employer. Mr. Young was granted a bonus for his individual contributions to the business in 2011 prior to being promoted to the role of Chief Financial Officer.

(2) Mr. Bailey, Ms. Heino and Dr. Orlandi received initial stock option grants in conjunction with their employment offer in 2013. Dr. Orlandi and Mr. Duffy were granted supplemental grants in August 2013 in recognition of their performance and to improve our competitive position. In January 2012, Mr. Young was granted a supplemental grant of stock options in connection with his promotion to CFO.

(3) Includes the grant date fair value of the stock option awards granted during the fiscal years ended December 31, 2013, 2012 and 2011, in accordance with ASC 718 with respect to options to purchase shares of our common stock awarded to the named executive officers in 2013, 2012 and 2011 under our 2008 and 2013 Equity Plans. See "Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Estimates—Accounting for Stock-Based Compensation."

(4) For 2013, the Compensation Committee awarded bonuses to Messrs Bailey, Ms. Heino, Dr. Orlandi, and Duffy under the Bonus Plan. For 2012 and 2011, Messrs. Duffy, Kiepert, and Young did not earn bonuses under the Bonus Plan.

(5) Effective March 21, 2011, the Board of Directors declared a dividend of approximately $1.93 per common share and awarded a dividend equivalent right on all outstanding stock options. All option holders, including our named executive officers employed at the time, were paid a cash dividend of approximately $1.93 for each vested option. DERs on all unvested options as of March 21, 2011 were placed in escrow and were subject to forfeiture. In recognition of management's efforts in 2012, the Compensation Committee determined to distribute the balance of the DERs to each eligible active executive. Included in the All Other Compensation column above is the value of DERs distributed to Messrs. Duffy, Kiepert, and Young were $244,541, $1,224,660 and $106,788, respectively during 2012. The value of DERs distributed to Messrs. Duffy, Kiepert, and Young were $237,788, $1,190,844 and $37,911, respectively during 2011None of our named executive officers held DERs in 2013.

(6) For Messrs. Bailey, Duffy, Kiepert ,Young, Ms. Heino and Dr. Orlandi, the amounts reflect matching contributions to our defined contribution retirement plans in 2013 of $7,057, $9,566, $1,722, $8,971, $2,887 and $4,853, respectively. For Messrs. Duffy, Kiepert, and Young, the amounts reflect matching contributions to our defined contribution retirement plans in 2012 of $3,082, $3,896 and $1,676, respectively. For Messrs. Duffy, Kiepert and Young, the amounts reflect matching contributions to our defined contribution retirement plans in 2011 of $12,066, $15,230 and $10,939, respectively.

(7) For Messrs. Bailey, Duffy, Kiepert, Young, Ms. Heino and Dr. Orlandi, the amounts reflect employer contributions to our long term disability insurance premiums in 2013 of $1,159, $1,310, $151, $857, $907 and $1,058, respectively. For Messrs. Duffy, Kiepert, and Young, the amounts reflect employer contributions to our long term disability insurance premiums in 2012 of $1,310, $1,310 and $1,310, respectively. Prior to 2012, the employees were responsible for long term disability insurance premiums.

(8) As part of Mr. Bailey's agreement he has been compensated for his commuting expenses from the New Jersey area and temporary housing expenses in Massachusetts, and that compensation arrangement is terminating as of March 31, 2014. Included in his "All Other Compensation" is $71,065 for these expenses which included a tax gross up on aggregate basis of one and a half times. As part of Ms. Heino's agreement she was reimbursed for certain relocation expenses from the New Jersey area to Massachusetts. Included in her "All Other Compensation" is $146,639 for taxable expenses associated with her home sales, temporary housing and physical move which includes the associated tax gross up on an aggregate basis. As part of Dr. Orlandi's agreement he was reimbursed for certain relocation expenses. Included in her "All Other Compensation" is $3,261 for taxable expenses associated with the physical move which includes the associated tax gross up on an aggregate basis.

(9) Mr. Golubieski entered into a consulting agreement with Lantheus to provide for continuity of leadership upon the departure of Mr. Young in August 2013. Under the terms of his consulting arrangement with Lantheus, Mr. Golubieski is paid a consulting fee of $25,000 each month and is reimbursed for standard travel and expenses. Included in his "All Other Compensation" is $100,000 for consulting fees and $20,415 for associated expenses. Mr. Golubieski will also be paid a bonus in recognition of his contribution as interim Chief Financial Officer in 2013.

(10) Mr. Kiepert received severance payments totaling $380,498 during 2013. To have a smooth leadership transition, Mr. Kiepert received $110,000 under a consulting agreement with us.

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2013 Grants of Plan-Based Awards

The following table sets forth certain information with respect to grants of plan-based awards for the year ended December 31, 2013 with respect to the named executive officers.

		Estimated Future Payouts Under Non-Equity Incentive Plan Awards			Estimated Future Payouts Under Equity Incentive Plan Awards			All Other Option Awards: Number of Securities Underlying Options	Exercise or Base Price of Option Awards
Name	Grant Date	Threshold ($)(1)	Target ($)(2)	Maximum ($)(3)	Threshold (#)	Target (#)	Maximum (#)	(#)	($/Sh)
Jeffrey Bailey(4)	—	$225,000	$450,000	$810,000					
	05/08/13(4)				50,000	500,000	500,000	500,000	$ 6.80
John Golubieski	—	—	—	—	—	—	—	—	—
Mary Anne Heino(4)	—	$ 54,493	$108,986	$196,175					
	04/15/13(4)				6,250	62,500	62,500	62,500	$ 6.80
Cesare Orlandi(4)	—	$ 60,400	$120,800	$217,440					
	08/15/13(5)							25,000	$ 6.64
	03/04/13(4)				3,750	37,500	37,500	37,500	$ 7.51
Michael Duffy	—	$ 63,000	$126,000	$226,800					
	08/15/13(5)							70,000	$ 6.64
Donald Kiepert	—	—	—	—	—	—	—	—	—
Jeffrey Young	—	—	—	—	—	—	—	—	—

(1) The amounts shown in the "Threshold" column reflect the threshold payment, which is 50% of the amount shown in the "Target" column. See "—Compensation Discussion and Analysis—Elements of Compensation—Annual Cash Incentive Compensati

(2) The amount shown in the "Target" column is the potential cash incentive award given to our named executive officers if the EBITDA target is hit in 2013. For Mr. Bailey that amount is 100% of his respective 2013 base salary. For Mr. Duffy, Ms. Heino and Dr. Orlandi, that amount is 40%, 45% and 40% of their respective 2013 base salaries prorated for their length of service in 2013. See "—Compensation Discussion and Analysis—Elements of Compensation—Annual Cash Incentive Compensation As a result of their termination of employment, Messrs. Kiepert and Young were not eligible for awards in 2013.

(3) The amount shown in the "Maximum" column is 180% of the amount shown in the "Target" column. Pursuant to the Bonus Plan, if we achieve an EBITDA and GAAP Cash level that is at the stretch target, the Bonus Plan specifies a cap of 120% target with an individual multiplier capped at 150% for amounts achieved above the Target. The maximum payment from the Bonus Pool for Mr. Bailey is 180% of his base salary. The maximum for all other participants, including our other named executive officers, ranges from 71% to 82% of their respective base salaries. See "—Compensation Discussion and Analysis—Elements Compensation—Annual Cash Incentive Compensation."

(4) The options granted to Mr. Bailey in conjunction with his employment offer are 50% Time Vesting Options and 50% EBITDA-based performance options. Mr. Bailey's Time Vesting Options vest ratably each month over a four year period from his date of hire. The options granted to Ms. Heino and Dr. Orlandi in conjunction with their employment offers vest ratably on the anniversary of grant date over a four year period; 50% are Time Vesting and Options and 50% are EBITDA-based performance options. See "—Compensation Discussion and Analysis—Elements of Compensation—Long-Term Equity Incentive Awards

(5) In 2013, the supplemental options granted to Mr. Duffy and Dr. Orlandi were 100% Time Vesting Option which will vest ratably on the anniversary of grant date over a four year period. See "—Compensation Discussion and Analysis—Elements of Compensation—Long-Term Equity Incentive Awards."

Outstanding Equity Awards at 2013 Fiscal Year-End

The following table includes certain information with respect to options held by the named executive officers as of December 31, 2013.

	Option Awards				
Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Securities of Underlying Unexercised Unearned Options (#)	Option Exercise Price ($)	Option Expiration Date
Jeffrey Bailey					
Stock Options(1)	114,583	385,417	500,000	$ 6.80	05/08/23
John Golubieski(4)	—	—	—	—	—
Mary Anne Heino					
Stock Options(1)	—	62,500	62,500	$ 6.80	04/14/23
Cesare Orlandi:					
Stock Options(1)	—	37,500	37,500	$ 7.51	03/03/23
Stock Options(2)	—	25,000	—	$ 6.64	08/04/23
Michael Duffy:					
Stock Options(2)	—	70,000	—	$ 6.64	08/04/23
Stock Options(3)	173,250	—	76,750	$ 2.00	04/03/18
Don Kiepert (former President & CEO)(5)	—	—	—	—	—
Jeffrey Young (former CFO)(5)	—	—	—	—	—

(1) The options granted to Mr. Bailey in conjunction with his employment offer are 50% Time Vesting Options and 50% EBITDA-based performance options. Mr. Bailey's Time Vesting Options vest ratably each month over a four year period from his date of hire; the options granted to Ms. Heino and Dr. Orlandi in conjunction with their employment offers vest ratably on the anniversary of grant date over a four year period; 50% are Time Vesting and Options and 50% are EBITDA-based performance options. See "—Compensation Discussion and Analysis—Elements of Compensation—Long-Term Equity Incentive Awards

(2) In 2013, the supplemental options granted to Mr. Duffy and Dr. Orlandi were 100% Time Vesting Option which will vest ratably on the anniversary of grant date over a four year period. See "—Compensation Discussion and Analysis—Elements of Compensation—Long-Term Equity Incentive Awards."

(3) Relative to Mr. Duffy's grant in 2008, 100% of his Time Vesting Options were vested as of December 31, 2013 with 20% vesting in each of January 2009, 2010, 2011, 2012 and 2013. Upon the Compensation Committee's determination that we achieved the EBITDA performance targets, 20% of the Performance Vesting Options vested on April 16, 2009 and 18.6% vested in April 2010. We did not meet our EBITDA targets in 2010, 2011 or 2012, and as such, none of the Performance Vesting Options vested for those years. As EBITDA targets were not met for 2012, these options will remain unvested, subject to other vesting opportunities under the 2008 Equity Plan.

(4) As a consultant and interim CFO, Mr. Golubieski has not been granted equity in the company (see "Mr. Golubieski's Consulting Agreement").

(5) As former employees, Messrs Kiepert and Young did not hold any Lantheus options as of December 31, 2013.

Option Exercises and Stock Vested in 2013

The following table provides information regarding the number of Company stock options that were exercised by named officers for the fiscal year ended December 31, 2013, and the value realized from the exercise of such awards.

	Option Awards	
Name	Number of Shares Acquired on Exercise	Value Realized on Exercise
Donald Kiepert (former President & CEO)	337,660	$ 2,539,200

No other named executive officers exercised any options during 2013. We do not offer any stock awards, other than stock options, from which vesting would occur.

2013 Pension Benefits

We do not offer our executives or others a pension plan. Retirement benefits are limited to participation in our 401(k) plan with a 4.5% employer match of the contributor's salary and a corresponding international plan. In 2012, the employer match was suspended from April through December and reinstated in January 2013.

Nonqualified Deferred Compensation

We do not offer our executives any nonqualified deferred compensation.

Potential Payment Upon Termination or Change in Control

The information below describes and quantifies certain compensation that would become payable under certain named executive officer's employment agreements if, as of December 31, 2013, his or her employment had terminated or there was a change in control. Due to the number of factors that affect the nature and amount of any benefits provided upon the events discussed below, any actual amounts paid or distributed may be different. Factors that could affect these amounts include the timing during the year of any such event.

Employment Agreements and Arrangements

Jeffrey Bailey

Mr. Bailey's employment agreement provides for 12 months of salary of $450,000, a bonus of $450,000 and health benefit subsidies of $20,080 in the event of termination by the company without cause or by Mr. Bailey with good reason totaling to $920,080. If his termination under these provisions is within 12 months following a change of control, the agreement provides for 12 months of two times his salary in the amount of $900,000, two times in bonus payment of $900,000 and 12 months of certain benefit subsidies of $20,080 totaling to $1,820,080.

Other Active Named Executive Officers

The following table sets forth certain information with respect to agreements for Ms. Heino, Dr. Orlandi and Mr. Duffy who are covered by employment agreements which provide for 12 months

of salary, prorated bonus and 12 months of certain benefit subsidies in the event of termination by the company without cause.

Name	Salary	Bonus	Benefits	Total
Mary Anne Heino	$ 340,000	$ 108,986	$ 20,080	$ 469,066
Cesare Orlandi	$ 365,000	$ 120,800	$ 14,052	$ 499,852
Michael Duffy	$ 315,000	$ 126,000	$ 21,365	$ 462,365

If their termination is by the company without cause or by the executive for good reason within 12 months following a change of control, the agreements provides for 12 months salary, full target bonus and 12 months of certain benefit subsidies.

Name	Salary	Bonus	Benefits	Total
Mary Anne Heino	$ 340,000	$ 153,000	$ 20,080	$ 513,080
Cesare Orlandi	$ 365,000	$ 146,000	$ 14,052	$ 525,052
Michael Duffy	$ 315,000	$ 126,000	$ 21,365	$ 462,365

Mr. Golubieski's consulting contract requires ten days notice and no other compensation for ending the arrangement.

Donald Kiepert

On February 19, 2013, we entered into a separation agreement with Don Kiepert, our former President and Chief Executive Officer. Pursuant to his separation agreement, Mr. Kiepert received 12 months of severance payments totaling $426,000, and continuation of life insurance and subsidized COBRA health benefits at the active employee rate for 12 months totaling $12,305. Mr. Kiepert will be paid a pro rata bonus for 2013 in the amount of $26,844 in early 2014. To effect a smooth leadership transition, Mr. Kiepert has also agreed to a consulting arrangement with us at a rate of $10,000 per month for 12 months. Mr. Kiepert also reaffirmed his non-competition, non-solicitation and confidentiality obligations to the Company under his original employment agreement.

The Equity Plans

The Equity Plans and each individual Stock Option Agreement provides for accelerated vesting of both Time Vesting Options and Performance Vesting Options granted under the 2008 and 2013 Equity Plans upon a change of control if net cumulative cash proceeds received by our investors exceed certain multiples of their initial investment. If such a change in control occurred on December 31, 2013, each named executive officer's unvested Time Vesting Options and Performance Vesting Options would immediately vest and become exercisable. The aggregate dollar value of unvested stock options held by such named executive officer on December 31, 2013 as listed below.

Name	Aggregate Dollar Value of Options(1)
Jeffrey Bailey	$ —
John Golubieski	$ —
Mary Anne Heino	$ —
Cesare Orlandi	$ —
Michael Duffy	$ 312,373
Don Kiepert (former President and CEO)	$ —
Jeffrey Young	$ —

(1) The aggregate dollar value is the difference between the fair market value of shares of common stock on December 31, 2013 based upon an internal valuation model and the per share exercise price of each option, multiplied by the number of shares subject to the unvested option.

Director Compensation

The compensation paid to Messrs. Bailey and Kiepert, our current and former Presidents and CEOs and Directors, is reported in the Summary Plan Compensation Table as they were paid only as named executive officers. We do not compensate our board members with per meeting fees. Our directors are reimbursed for any expenses incurred in connection with their services and as detailed in the table and notes below.

Name	Fees Earned or Paid in Cash ($)	All Other Compensation ($)	Total ($)
Brian Markison(1)	$ 126,056	$ 80,829	$ 206,885
David Burgstahler(2)	$ —	$ —	$ —
Samuel Leno(3)	$ 81,250	$ 45,324	$ 126,574
Dr. Patrick O'Neill(4)	$ 62,500	$ 33,824	$ 96,324
Sriram Venkataraman(2)	$ —	$ —	$ —

(1) On January 23, 2013, Mr. Markison was appointed Non-Executive Chairman of the Board. For 2013, Mr. Markison was compensated with an annual retainer for his services on the Board of Directors of $100,000, paid in quarterly increments. In addition, Mr. Markison receives $10,000, paid in quarterly increments for his service on the Compensation Committee. In connection with that appointment, (i) his annual director compensation was increased to $100,000 effective as of January 23, 2013, (ii) 4,760 shares of his previous 12,500 option grant were deemed to be vested with the balance of 7,740 shares terminated as forfeitures, (iii) he received a new grant of 35,765 time vesting option shares that have a ten-year term and vest monthly over a 12-month basis, and (iv) on each anniversary date of his appointment, in consideration of his services as Chairman and for so long as he serves in that capacity, he will be granted a stock option to purchase $200,000 worth of common stock, calculated as the multiple of the then fair market value times the number of shares necessary to equal $200,000.

(2) Messrs. Burgstahler and Venkataraman are Principals of Avista and do not receive any direct compensation for their services as Directors. We pay Avista a management fee of $1,000,000 annually pursuant to the Advisory Services and Management Agreement, dated as of January 8, 2008. See "Item 13—Certain Relationships and Related Party Transactions, and Director Independence—Transactions with Related Persons—Advisory and Monitoring Services Agreement."

(3) Samuel Leno is compensated with an annual retainer for his services on the Board of Directors of $50,000, paid in quarterly increments. In addition, Mr. Leno receives $15,000, paid in quarterly increments for his role as Chairman of the Audit Committee. Mr. Leno received a grant of 19,706 stock options in Holdings in 2013. These options have a ten-year term and are Time Vesting Options vesting in full on the first anniversary of grant. On each anniversary date of his appointment, in consideration of his services as a Director of Holdings and for so long as he serves in that capacity, he will be granted a stock option to purchase $100,000 worth of common stock of Holdings, calculated as the multiple of the then fair market value times the number of shares necessary to equal $100,000.

(4) Dr. Patrick O'Neill is compensated with an annual retainer for his services on the Board of Directors of $50,000, paid in quarterly increments. Dr. O'Neill received a grant of 50,000 stock options in Holdings in 2008. These options have a ten-year term and are Time Vesting Options. 20% of the shares subject to the Time Vesting Options vested on each anniversary of the grant in 2008 - 2012. The remaining shares subject to the Time Vesting Options were vested in full on January 8, 2013. Dr. O'Neill received a grant of 14,706 stock options in Holdings in 2013. These

options have a ten-year term and are Time Vesting Options vesting in full on the first anniversary of grant. On each anniversary date of his appointment, in consideration of his services as a Director of Holdings and for so long as he serves in that capacity, he will be granted a stock option to purchase $100,000 worth of common stock of Holdings, calculated as the multiple of the then fair market value times the number of shares necessary to equal $100,000.

Compensation Committee Interlocks and Insider Participation

During 2013, the members of our Compensation Committee were Messrs. Burgstahler and Markison. Mr. Burgstahler is the President of Avista. Mr. Markison is a Healthcare Industry Executive with Avista. Avista provides us with advisory services pursuant to the Advisory Services and Monitoring Agreement (as defined below) and has entered into other transactions with us. See "Item 13—Certain Relationships and Related Person Transactions, and Director Independence—Transactions with Related Persons—Advisory and Monitoring Services Agreement."

Compensation Committee Report

Our Compensation Committee has reviewed and discussed the "Item 11—Executive Compensation—Compensation Discussion and Analysis" section with our management. Based upon this review and discussion, the Compensation Committee recommended to the Board of Directors that the "Item 11—Executive Compensation—Compensation Discussion and Analysis" section be included in this Annual Report on Form 10-K for the fiscal year ended December 31, 2013.

Respectfully submitted by the Compensation Committee of the Board of Directors.

David Burgstahler
Brian Markison

The information contained in the foregoing report shall not be deemed to be "filed" or to be "soliciting material" with the Commission, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933 or the Exchange Act, except to the extent that we specifically incorporate it by reference in a filing.

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

Principal Stockholders

Holdings indirectly owns all of our issued and outstanding capital stock through its direct subsidiary and our direct parent, Lantheus Intermediate. Avista Capital Partners, L.P., Avista Capital Partners (Offshore), L.P. and ACP-Lantern Co-Invest, LLC, or, together, the AvistaEntities, collectively own approximately 99.5% of Holdings' issued and outstanding capital stock. Avista Capital Partners GP, LLC ultimately exercises voting and dispositive power over the shares held by Avista Capital Partners, L.P., Avista Capital Partners (Offshore), L.P. and ACP-Lantern Co-Invest, LLC. Voting and disposition decisions at Avista Capital Partners GP, LLC with respect to such shares are made by an investment committee, the members of which are Thompson Dean, Steven Webster, David Burgstahler and David Durkin. In connection with the Acquisition, certain members of management purchased shares of Holdings' common stock equaling approximately 0.5% of Holdings' issued and outstanding capital stock.

Securities Authorized for Issuance Under Equity Compensation Plans

The following table gives information as of December 31, 2013 about the common stock that may be issued under all of our existing equity compensation plans.

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 Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity compensation plans approved by security holders	4,639,892	$ 4.62	965,823
Equity compensation plans not approved by security holders(1)	—	—	—
Total	4,639,892	$ 4.62	965,823

(1) Represents the Lantheus MI Holdings, Inc. 2008 and 2013 Equity Incentive Plans.

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

The Board of Directors has the responsibility to review and approve all transactions or series of related financial transactions, arrangements or relationships between us and any related party if the amount involved exceeds $120,000. We do not otherwise have any policies or procedures for the review, approval or ratification of such transactions.

Transactions with Related Persons

Shareholders Agreements

In connection with the Acquisition, Holdings entered into (i) a Shareholders Agreement with the Avista Entities and Don Kiepert, as Management Shareholder, dated January 8, 2008 and subsequently amended on February 26, 2008, or the Initial Shareholders Agreement, and (ii) an Employee Shareholders Agreement with the Avista Entities and certain employee shareholders named therein, dated as of May 30, 2008, or the Employee Shareholders Agreement and, collectively with the Initial Shareholders Agreement, the Shareholders Agreements. Messrs. Markison, Bailey and Leno and Dr. O'Neill have joined as parties to the Initial Shareholders Agreement. The Shareholders Agreements govern the parties' respective rights, duties and obligations with respect to the ownership of Holdings securities. Pursuant to the Shareholders Agreements, Avista has designation rights with respect to the composition of the Holdings board of directors and Avista is entitled to majority representation on any committee that the board creates. In addition, the Management Shareholder and the employee shareholders must vote their shares in such a manner that is consistent with the composition of the board designed by the Avista Entities. Pursuant to the option award agreements between Holdings and its options holders, as a condition to a valid exercise of any such options, the optionee is obligated to join either the Initial Shareholders Agreement or the Employee Shareholders Agreement, as applicable, with respect to the shares of Holdings it is to receive upon exercise of any such option.

Advisory and Monitoring Services Agreement

In connection with the closing of the Acquisition, we entered into an advisory services and monitoring agreement with Avista Capital Holdings, L.P., or Avista Capital Holdings, dated as of January 8, 2008, or the Advisory Services and Monitoring Agreement, pursuant to which ACP Lantern Acquisition, Inc. (a corporation which was merged into us as part of the Acquisition), paid Avista Capital Holdings a one-time fee equal to $10 million for the consulting and advisory and monitoring

services to us, our subsidiaries and our parent companies, in connection with the Acquisition. In addition, the agreement provides for the payment of an annual fee equal to $1 million as consideration for ongoing advisory services. To the extent of any future transaction entered into by us or our affiliates, Avista Capital Holdings will receive an additional fee that is reasonable and customary for the services it provides in connection with such future transaction. In addition, we will pay directly, or reimburse Avista Capital Holdings for, its out-of-pocket expenses in connection with its performance of services under the Advisory Services and Monitoring Agreement. The Advisory Services and Monitoring Agreement has a seven-year term and automatically renews on each anniversary of its execution date such that it has a seven-year term from the date of each such renewal. In connection with the termination of the Advisory Services and Monitoring Agreement, the Company would be obligated to pay to Avista all amounts that would otherwise be payable to Avista under the agreement for the remainder of the term.

INC Research Master Services Agreement

In the third quarter of 2012, we entered into a Master Contract Research Organization Services Agreement with INC Research, LLC ("INC") to provide clinical development services in connection with the flurpiridaz F 18 Phase 3 program. The agreement has a term of five years, and we incurred costs associated with this agreement of approximately $0.5 million and $0.9 million in the years ended December 31, 2013 and 2012, respectively. Avista Capital Partners and its affiliates are principal owners of both INC and the Company.

VWR Scientific Purchases

We purchase inventory supplies from VWR Scientific, VWR . Avista Capital Partners and certain affiliates are principal owners of both VWR and us. We made purchases of approximately $0.3 million during each of the years ended December 31, 2013, 2012 and 2011.

Director Independence

As disclosed in "Item 10—Directors, Executive Officers and Corporate Governance," although not formally considered by the Board of Directors of Holdings because our securities are not registered or traded on any national securities exchange, we believe that Mr. Markison, Mr. Leno and Dr. O'Neill would be considered independent for our Boards of Directors, that Mr. Leno would be considered independent for our Audit Committee and that Mr. Markison would be considered independent for our Compensation Committee, based upon the listing standards of the New York Stock Exchange.

Item 14. Principal Accountant Fees and Services

Deloitte & Touche LLP, or Deloitte, serves as our independent registered public accounting firm. The following table presents fees paid for the audit of our annual consolidated financial statements and all other professional services rendered by Deloitte for the years ended December 31, 2013 and 2012:

	Year Ended December 31,	
	2013	2012
Audit Fees	$ 1,439,170	$ 1,443,412
Audit-Related Fees	—	52,400
Tax Fees	—	31,750
Total Fees	$ 1,439,170	$ 1,527,562

Audit Fees

These are fees related to professional services rendered in connection with the audit of our annual financial statements, the reviews of the interim financial statements included in each of our quarterly reports on Form 10-Q, and other professional services provided by our independent registered public accounting firm in connection with statutory or regulatory filings or engagements. All other fees consist primarily of the reimbursement of expenses associated with completion of services noted above.

Audit-Related Fees

These are fees for assurance and related services that are reasonably related to performance of the audit and review of our financial statements, and which are not reported under "Audit Fees." These services consisted primarily of attestation services for such matters as required for consents related to financings, registration statements and other filings with the Commission.

Tax Fees

These are fees billed for professional services for tax compliance, tax advice and tax planning services.

Pre-Approval Policies

The services provided by Deloitte were pre-approved by the Audit Committee. The Audit Committee has considered whether the provision of the above-noted services is compatible with maintaining the independence of the independent registered public accounting firm and has determined that the provision of such services has not adversely affected Deloitte's independence. The Audit Committee approved 100% of the services covered by audit-related fees, tax fees and all other similar fees.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a)(1) Financial Statements

Included in Part II of this annual report:

(a)(2) Schedules

None.

(a)(3) Exhibits

Exhibit	Description
3.1	Certificate of Incorporation of Lantheus Medical Imaging, Inc., as amended (incorporated by reference to Exhibit 3.1 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
3.2	Second Amended and Restated By-Laws of Lantheus Medical Imaging, Inc (incorporated by reference to Exhibit 3.2 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
4.1	Indenture, dated as of May 10, 2010, among Lantheus Medical Imaging, Inc., Lantheus MI Intermediate, Inc. and Lantheus MI Real Estate, LLC as guarantors, and Wilmington Trust FSB, as trustee (incorporated by reference to Exhibit 4.1 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
4.2	First Supplemental Indenture, dated as of March 14, 2011, among Lantheus Medical Imaging, Inc., Lantheus MI Intermediate, Inc. and Lantheus MI Real Estate, LLC as guarantors, and Wilmington Trust FSB, as trustee (incorporated by reference to Exhibit 4.1 to Lantheus Medical Imaging, Inc.'s Current Report on Form 8-K filed with the Commission on March 16, 2011 (file number 333-169785)).
4.3	Second Supplemental Indenture, dated as of March 21, 2011, among Lantheus Medical Imaging, Inc., Lantheus MI Intermediate, Inc. and Lantheus MI Real Estate, LLC as guarantors, and Wilmington Trust FSB, as trustee (incorporated by reference to Exhibit 4.1 to Lantheus Medical Imaging, Inc.'s Current Report on Form 8-K filed with the Commission on March 21, 2011 (file number 333-169785)).
4.4	Registration Rights Agreement, dated May 10, 2010, by and among Lantheus Medical Imaging, Inc., Lantheus MI Intermediate, Inc. and Lantheus MI Real Estate, LLC, as guarantors, and Jefferies & Company, Inc. (incorporated by reference to Exhibit 4.2 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
4.5	Registration Rights Agreement, dated March 21, 2011, by and among Lantheus Medical Imaging, Inc., Jefferies & Company, Inc., as representative of the initial purchasers and the guarantors party thereto (incorporated by reference to Exhibit 4.2 to Lantheus Medical Imaging, Inc.'s Current Report on Form 8-K filed with the Commission on March 21, 2011 (file number 333-169785)).
4.6	Form of 9.750% Senior Notes due 2017 (included in Exhibit 4.1).
10.1	Advisory Services and Monitoring Agreement, dated January 8, 2007, by and between ACP Lantern Acquisition, Inc. (now known as Lantheus Medical Imaging, Inc.) and Avista Capital Holdings, L.P. (incorporated by reference to Exhibit 10.3 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
10.2	Amended and Restated Shareholders Agreement, dated as of February 26, 2008 among Lantheus MI Holdings, Inc., Avista Capital Partners, L.P., Avista Capital Partners (Offshore), L.P., ACP-Lantern Co-Invest, LLC and certain management shareholders named therein (incorporated by reference to Exhibit 10.4 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).

Exhibit	Description
10.3	Employee Shareholders Agreement, dated as of May 8, 2008, among Lantheus MI Holdings, Inc., Avista Capital Partners, L.P., Avista Capital Partners (Offshore), L.P., ACP-Lantern Co-Invest, LLC and certain employee shareholders named therein (incorporated by reference to Exhibit 10.5 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
10.4†	Sales Agreement, dated as of April 1, 2009, between Lantheus Medical Imaging, Inc. and NTP Radioisotopes (Pty) Ltd. (incorporated by reference to Exhibit 10.9 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on December 23, 2010 (file number 333-169785)).
10.5†	Amendment No. 1 to Sales Agreement, dated as of January 1, 2010, between Lantheus Medical Imaging, Inc. and NTP Radioisotopes (Pty) Ltd. (incorporated by reference to Exhibit 10.10 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on December 1, 2010 (file number 333-169785)).
10.6†	Amendment No. 2 to Sales Agreement, dated as of January 1, 2010, between Lantheus Medical Imaging, Inc. and NTP Radioisotopes (Pty) Ltd. (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2011 (file number 333-169785)).
10.7†	Purchase and Supply Agreement, dated as of April 1, 2010, between Lantheus Medical Imaging, Inc. and Nordion (Canada) Inc. (formerly known as MDS Nordion, a division of MDS (Canada) Inc.) (incorporated by reference to Exhibit 10.12 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on December 23, 2010 (file number 333-169785)).
10.8†	Amendment No. 1 to the Purchase and Supply Agreement, dated as of December 1, 2010, between Lantheus Medical Imaging, Inc. and Nordion (Canada) Inc. (incorporated by reference to Exhibit 10.13 to Lantheus Medical Imaging, Inc.'s Annual Report on Form 10-K for the fiscal year ended December 31, 2010 (file number 333-169785)).
10.9†	Amended and Restated Cardiolite License and Supply Agreement, dated January 1, 2004, by and between Lantheus Medical Imaging, Inc. and Cardinal Health 414, LLC (incorporated by reference to Exhibit 10.13 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on December 23, 2010 (file number 333-169785)).
10.10†	Amendment No. 1 to the Amended and Restated Supply Agreement (Thallium and Generators), dated as of December 29, 2009 between Lantheus Medical Imaging, Inc. and Cardinal Health 414, LLC (incorporated by reference to Exhibit 10.26 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on December 1, 2010 (file number 333-169785)).
10.11†	Amended and Restated Supply Agreement (Thallium and Generators), dated October 1, 2004, by and between Lantheus Medical Imaging, Inc. and Cardinal Health 414, LLC (incorporated by reference to Exhibit 10.14 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on December 23, 2010 (file number 333-169785)).

Exhibit	Description
10.12†	Distribution Agreement, dated as of October 31, 2001, by and between Bristol-Myers Squibb Pharma Company (now known as Lantheus Medical Imaging, Inc.) and Medi-Physics Inc., doing business as Amersham Health (incorporated by reference to Exhibit 10.16 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on December 29, 2010 (file number 333-169785)).
10.13†	First Amendment to Distribution Agreement, dated as of January 1, 2005, by and between Bristol-Myers Squibb Medical Imaging, Inc. (formerly known as Bristol-Myers Squibb Pharma Company and now known as Lantheus Medical Imaging, Inc.) and Medi-Physics Inc., doing business as G.E. Healthcare (incorporated by reference to Exhibit 10.17 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on December 1, 2010 (file number 333-169785)).
10.14†	Manufacturing and Supply Agreement, dated as of April 6, 2009, by and between Lantheus Medical Imaging, Inc., and Mallinckrodt Inc. (a subsidiary of Covidien PLC) (incorporated by reference to Exhibit 10.27 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on December 23, 2010 (file number 333-169785)).
10.15†	Amendment No. 1 to the Manufacturing and Supply Agreement, dated as of August 2, 2010, by and between Lantheus Medical Imaging, Inc. and Mallinckrodt Inc. (a subsidiary of Covidien PLC) (incorporated by reference to Exhibit 10.28 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on December 1, 2010 (file number 333-169785)).
10.16†	Amendment No. 2 to the Manufacturing and Supply Agreement, dated as of August 2, 2010, by and between Lantheus Medical Imaging, Inc. and Mallinckrodt Inc. (a subsidiary of Covidien PLC) (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2011 (file number 333-169785)).
10.17	Lantheus MI Holdings, Inc. 2008 Equity Incentive Plan (incorporated by reference to Exhibit 10.18 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
10.18	Amendment No. 1 to Lantheus MI Holdings, Inc. 2008 Equity Incentive Plan (incorporated by reference to Exhibit 10.19 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
10.19	Amendment No. 2 to Lantheus MI Holdings, Inc. 2008 Equity Incentive Plan (incorporated by reference to Exhibit 10.20 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
10.20	Form of Option Grant Award Agreement (incorporated by reference to Exhibit 10.21 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
10.21	Lantheus Medical Imaging, Inc. Employee Bonus Plan—2009 (incorporated by reference to Exhibit 10.22 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).

Exhibit	Description
10.22	Lantheus Medical Imaging, Inc. 2010 Executive Leadership Team Incentive Bonus Plan (incorporated by reference to Exhibit 10.31 to Lantheus Medical Imaging, Inc.'s Annual Report on Form 10-K for the fiscal year ended December 31, 2010 (file number 333-169785)).
10.23	Lantheus Medical Imaging, Inc. Severance Plan Policy (incorporated by reference to Exhibit 10.24 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
10.24	Employment Agreement, dated March 10, 2008, by and between Lantheus Medical Imaging, Inc. and Michael Duffy (incorporated by reference to Exhibit 10.21 to Lantheus Medical Imaging, Inc.'s Annual Report on Form 10 K for the fiscal year ended December 31, 2011 (file number 333-169785)).
10.25†	Second Amendment, effective as of January 1, 2012, to the Distribution Agreement, dated as of October 31, 2001, by and between Lantheus Medical Imaging, Inc., formerly known as Bristol-Myers Squibb Medical Imaging, Inc., and Medi-Physics, Inc., doing business as G.E. Healthcare Inc. (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2012 (file number 333-169785)).
10.26†	Manufacturing and Supply Agreement, dated as of February 1, 2012, for the manufacture of DEFINITY® by and between Lantheus Medical Imaging, Inc. and Jubilant HollisterStier LLC (incorporated by reference to Exhibit 10.2 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2012 (file number 333-169785)).
10.27†	Amendment No. 1, effective as of February 9, 2012, to the Amended and Restated Cardiolite License and Supply Agreement by and between Lantheus Medical Imaging, Inc. and Cardinal Health 414, LLC entered into as of January 1, 2009 and effective as of January 1, 2004 (incorporated by reference to Exhibit 10.3 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2012(file number 333-169785)).
10.28†	Settlement and Mutual Release Agreement, effective as of March 20, 2012, by and between Ben Venue Laboratories, Inc. and Lantheus Medical Imaging, Inc. (incorporated by reference to Exhibit 10.4 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2012 (file number 333-169785)).
10.29†	Transition Services Agreement, effective as of March 20, 2012, by and between Ben Venue Laboratories, Inc. and Lantheus Medical Imaging, Inc. (incorporated by reference to Exhibit 10.5 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2012 (file number 333-169785)).
10.30†	Manufacturing and Service Contract for Commercial Products, entered into as of March 20, 2012, by and between Ben Venue Laboratories, Inc. and Lantheus Medical Imaging, Inc. (incorporated by reference to Exhibit 10.6 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2012 (file number 333-169785)).

Exhibit	Description
10.31†	First Amendment to Manufacturing and Supply Agreement, dated as of May 3, 2012, for the manufacture of DEFINITY® by and between Lantheus Medical Imaging, Inc. and Jubilant HollisterStier LLC (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2012 (file number 333-169785)).
10.32†	Manufacturing and Supply Agreement, dated as of May 3, 2012, for the manufacture of Cardiolite® by and between Lantheus Medical Imaging, Inc. and Jubilant HollisterStier LLC (incorporated by reference to Exhibit 10.2 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2012 (file number 333-169785)).
10.33†	Manufacturing and Supply Agreement, dated as of May 3, 2012, for the manufacture of Neurolite® by and between Lantheus Medical Imaging, Inc. and Jubilant HollisterStier LLC (incorporated by reference to Exhibit 10.3 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2012 (file number 333-169785)).
10.34†	Amendment No. 2, dated as of October 15, 2012, to the Purchase and Supply Agreement between Lantheus Medical Imaging, Inc. and Nordion (Canada) Inc. (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2012 (file number 333-169785)).
10.35†	Amendment No. 3, effective as of October 1, 2012, to Sales Agreement between Lantheus Medical Imaging, Inc. and NTP Radioisotopes (Pty) Ltd. (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2012 (file number 333-169785)).
10.36†	Amendment No. 2, effective as of December 27, 2012, to the Amended and Restated Supply Agreement (Thallium and Generators) between Lantheus Medical Imaging, Inc. and Cardinal Health 414, LLC (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2012 (file number 333-169785)).
10.37†	Amendment No. 2, effective as of December 27, 2012, to the Amended and Restated Cardiolite® License and Supply Agreement by and between Lantheus Medical Imaging, Inc. and Cardinal Health 414, LLC (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2012 (file number 333-169785)).
10.38†	License and Distribution Agreement, effective as of January 1, 2013, by and between Lantheus Medical Imaging, Inc. and FUJIFILM RI Pharma Co., Ltd. (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2012 (file number 333-169785)).
10.39	Separation Agreement, dated February 19, 2013, by and between Lantheus Medical Imaging, Inc. and Don Kiepert (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2012 (file number 333-169785)).
10.40	Fission Mo-99 Supply Agreement, effective January 1, 2013, by and between Lantheus Medical Imaging, Inc. and the Institut National des Radioelements (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2013 (file number 333-169785)).

Exhibit	Description
10.41	Lantheus MI Holdings, Inc. 2013 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Current Report on Form 8-K filed with the Commission on May 6, 2013 (file number 333-169785)).
10.42	Form of Employee Option Grant Award Agreement (incorporated by reference to Exhibit 10.2 to Lantheus Medical Imaging, Inc.'s Current Report on Form 8-K filed with the Commission on May 6, 2013 (file number 333-169785)).
10.43	Form of Non-Employee Director Option Grant Award Agreement (incorporated by reference to Exhibit 10.3 to Lantheus Medical Imaging, Inc.'s Current Report on Form 8-K filed with the Commission on May 6, 2013 (file number 333-169785)).
10.44	Employment Agreement, dated May 8, 2013, by and between Lantheus Medical Imaging, Inc. and Jeffrey Bailey (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2013 (file number 333-169785).
10.45	Amended and Restated Credit Agreement date as of July 3, 2013, by and among Lantheus Medical Imaging Inc., Lantheus MI Intermediate Inc., Lantheus MI Real Estate, LLC, the lenders from time to time party thereto, and Well Fargo Bank, National Association collateral agent and administrative agent and as sole lead arranger, back runner and syndication agent (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2013 (file number 333-169785)).
10.46*	Consulting Agreement, dated July 24, 2013, by and between Lantheus Medical Imaging, Inc. and John Golubieski.
10.47*	Employment Agreement, effective August 12, 2013, by and between Lantheus Medical Imaging, Inc. and Mary Anne Heino.
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14.2	Lantheus Medical Imaging, Inc. Compliance Code. (incorporated by reference to Exhibit 14.2 to Lantheus Medical Imaging, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2010 (file number 333-169785)).
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ended December 31, 2010 (file number 333-169785)).

Exhibit	Description
24.1*	Power of Attorney (included as part of the signature page hereto).
31.1*	Certification of Chief Executive Officer pursuant to Rule 13a-14 Securities Exchange Act Rules 13a-14(a) and 15d-14(a), pursuant to section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Chief Financial Officer pursuant to Rule 13a-14 Securities Exchange Act Rules 13a-14(a) and 15d-14(a), pursuant to section 302 of the Sarbanes-Oxley Act of 2002.
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* Filed herewith.

** Furnished herewith.

† Confidential treatment requested as to certain portions, which portions have been filed separately with the Securities and Exchange Commission.

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.

LANTHEUS MEDICAL IMAGING, INC.

By: /s/ JEFFREY BAILEY

Name: Jeffrey Bailey
Title: *President and Chief Executive Officer*
Date: March 11, 2014

We, the undersigned directors and officers of Lantheus Medical Imaging, Inc., hereby severally constitute and appoint Jeffrey Bailey, John Golubieski and Michael P. Duffy, and each of them individually, with full powers of substitution and resubstitution, our true and lawful attorneys, with full powers to them and each of them to sign for us, in our names and in the capacities indicated below, any and all amendments to this Annual Report on Form 10-K filed with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, each acting alone, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming that any such attorney-in-fact and agent, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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.

Signature	Title	Date
/s/ JEFFREY BAILEY Jeffrey Bailey	President, Chief Executive Officer and Director (Principal Executive Officer)	March 11, 2014
/s/ JOHN GOLUBIESKI John Golubieski	Interim Chief Financial Officer (Principal Financial Officer)	March 11, 2014
/s/ BRIAN MARKISON Brian Markison	Chairman of the Board of Directors	March 11, 2014
/s/ DAVID BURGSTAHLER David Burgstahler	Director	March 11, 2014
/s/ SAMUEL R. LENO Sam R. Leno	Director	March 11, 2014

Signature	Title	Date
/s/ PATRICK J. O'NEILL Patrick J. O'Neill	Director	March 11, 2014
/s/ SRIRAM VENKATARAMAN Sriram Venkataraman	Director	March 11, 2014

EXHIBIT INDEX

Exhibit	Description
3.1	Certificate of Incorporation of Lantheus Medical Imaging, Inc., as amended (incorporated by reference to Exhibit 3.1 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
3.2	Second Amended and Restated By-Laws of Lantheus Medical Imaging, Inc (incorporated by reference to Exhibit 3.2 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
4.1	Indenture, dated as of May 10, 2010, among Lantheus Medical Imaging, Inc., Lantheus MI Intermediate, Inc. and Lantheus MI Real Estate, LLC as guarantors, and Wilmington Trust FSB, as trustee (incorporated by reference to Exhibit 4.1 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
4.2	First Supplemental Indenture, dated as of March 14, 2011, among Lantheus Medical Imaging, Inc., Lantheus MI Intermediate, Inc. and Lantheus MI Real Estate, LLC as guarantors, and Wilmington Trust FSB, as trustee (incorporated by reference to Exhibit 4.1 to Lantheus Medical Imaging, Inc.'s Current Report on Form 8-K filed with the Commission on March 16, 2011 (file number 333-169785)).
4.3	Second Supplemental Indenture, dated as of March 21, 2011, among Lantheus Medical Imaging, Inc., Lantheus MI Intermediate, Inc. and Lantheus MI Real Estate, LLC as guarantors, and Wilmington Trust FSB, as trustee (incorporated by reference to Exhibit 4.1 to Lantheus Medical Imaging, Inc.'s Current Report on Form 8-K filed with the Commission on March 21, 2011 (file number 333-169785)).
4.4	Registration Rights Agreement, dated May 10, 2010, by and among Lantheus Medical Imaging, Inc., Lantheus MI Intermediate, Inc. and Lantheus MI Real Estate, LLC, as guarantors, and Jefferies & Company, Inc. (incorporated by reference to Exhibit 4.2 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
4.5	Registration Rights Agreement, dated March 21, 2011, by and among Lantheus Medical Imaging, Inc., Jefferies & Company, Inc., as representative of the initial purchasers and the guarantors party thereto (incorporated by reference to Exhibit 4.2 to Lantheus Medical Imaging, Inc.'s Current Report on Form 8-K filed with the Commission on March 21, 2011 (file number 333-169785)).
4.6	Form of 9.750% Senior Notes due 2017 (included in Exhibit 4.1).
10.1	Advisory Services and Monitoring Agreement, dated January 8, 2007, by and between ACP Lantern Acquisition, Inc. (now known as Lantheus Medical Imaging, Inc.) and Avista Capital Holdings, L.P. (incorporated by reference to Exhibit 10.3 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
10.2	Amended and Restated Shareholders Agreement, dated as of February 26, 2008 among Lantheus MI Holdings, Inc., Avista Capital Partners, L.P., Avista Capital Partners (Offshore), L.P., ACP-Lantern Co-Invest, LLC and certain management shareholders named therein (incorporated by reference to Exhibit 10.4 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).

Exhibit	Description
10.3	Employee Shareholders Agreement, dated as of May 8, 2008, among Lantheus MI Holdings, Inc., Avista Capital Partners, L.P., Avista Capital Partners (Offshore), L.P., ACP-Lantern Co-Invest, LLC and certain employee shareholders named therein (incorporated by reference to Exhibit 10.5 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
10.4†	Sales Agreement, dated as of April 1, 2009, between Lantheus Medical Imaging, Inc. and NTP Radioisotopes (Pty) Ltd. (incorporated by reference to Exhibit 10.9 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on December 23, 2010 (file number 333-169785)).
10.5†	Amendment No. 1 to Sales Agreement, dated as of January 1, 2010, between Lantheus Medical Imaging, Inc. and NTP Radioisotopes (Pty) Ltd. (incorporated by reference to Exhibit 10.10 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on December 1, 2010 (file number 333-169785)).
10.6†	Amendment No. 2 to Sales Agreement, dated as of January 1, 2010, between Lantheus Medical Imaging, Inc. and NTP Radioisotopes (Pty) Ltd. (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2011 (file number 333-169785)).
10.7†	Purchase and Supply Agreement, dated as of April 1, 2010, between Lantheus Medical Imaging, Inc. and Nordion (Canada) Inc. (formerly known as MDS Nordion, a division of MDS (Canada) Inc.) (incorporated by reference to Exhibit 10.12 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on December 23, 2010 (file number 333-169785)).
10.8†	Amendment No. 1 to the Purchase and Supply Agreement, dated as of December 1, 2010, between Lantheus Medical Imaging, Inc. and Nordion (Canada) Inc. (incorporated by reference to Exhibit 10.13 to Lantheus Medical Imaging, Inc.'s Annual Report on Form 10-K for the fiscal year ended December 31, 2010 (file number 333-169785)).
10.9†	Amended and Restated Cardiolite License and Supply Agreement, dated January 1, 2004, by and between Lantheus Medical Imaging, Inc. and Cardinal Health 414, LLC (incorporated by reference to Exhibit 10.13 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on December 23, 2010 (file number 333-169785)).
10.10†	Amendment No. 1 to the Amended and Restated Supply Agreement (Thallium and Generators), dated as of December 29, 2009 between Lantheus Medical Imaging, Inc. and Cardinal Health 414, LLC (incorporated by reference to Exhibit 10.26 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on December 1, 2010 (file number 333-169785)).
10.11†	Amended and Restated Supply Agreement (Thallium and Generators), dated October 1, 2004, by and between Lantheus Medical Imaging, Inc. and Cardinal Health 414, LLC (incorporated by reference to Exhibit 10.14 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on December 23, 2010 (file number 333-169785)).

Exhibit	Description
10.12†	Distribution Agreement, dated as of October 31, 2001, by and between Bristol-Myers Squibb Pharma Company (now known as Lantheus Medical Imaging, Inc.) and Medi-Physics Inc., doing business as Amersham Health (incorporated by reference to Exhibit 10.16 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on December 29, 2010 (file number 333-169785)).
10.13†	First Amendment to Distribution Agreement, dated as of January 1, 2005, by and between Bristol-Myers Squibb Medical Imaging, Inc. (formerly known as Bristol-Myers Squibb Pharma Company and now known as Lantheus Medical Imaging, Inc.) and Medi-Physics Inc., doing business as G.E. Healthcare (incorporated by reference to Exhibit 10.17 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on December 1, 2010 (file number 333-169785)).
10.14†	Manufacturing and Supply Agreement, dated as of April 6, 2009, by and between Lantheus Medical Imaging, Inc., and Mallinckrodt Inc. (a subsidiary of Covidien PLC) (incorporated by reference to Exhibit 10.27 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on December 23, 2010 (file number 333-169785)).
10.15†	Amendment No. 1 to the Manufacturing and Supply Agreement, dated as of August 2, 2010, by and between Lantheus Medical Imaging, Inc. and Mallinckrodt Inc. (a subsidiary of Covidien PLC) (incorporated by reference to Exhibit 10.28 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on December 1, 2010 (file number 333-169785)).
10.16†	Amendment No. 2 to the Manufacturing and Supply Agreement, dated as of August 2, 2010, by and between Lantheus Medical Imaging, Inc. and Mallinckrodt Inc. (a subsidiary of Covidien PLC) (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2011 (file number 333-169785)).
10.17	Lantheus MI Holdings, Inc. 2008 Equity Incentive Plan (incorporated by reference to Exhibit 10.18 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
10.18	Amendment No. 1 to Lantheus MI Holdings, Inc. 2008 Equity Incentive Plan (incorporated by reference to Exhibit 10.19 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
10.19	Amendment No. 2 to Lantheus MI Holdings, Inc. 2008 Equity Incentive Plan (incorporated by reference to Exhibit 10.20 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
10.20	Form of Option Grant Award Agreement (incorporated by reference to Exhibit 10.21 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
10.21	Lantheus Medical Imaging, Inc. Employee Bonus Plan—2009 (incorporated by reference to Exhibit 10.22 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).

Exhibit	Description
10.22	Lantheus Medical Imaging, Inc. 2010 Executive Leadership Team Incentive Bonus Plan (incorporated by reference to Exhibit 10.31 to Lantheus Medical Imaging, Inc.'s Annual Report on Form 10-K for the fiscal year ended December 31, 2010 (file number 333-169785)).
10.23	Lantheus Medical Imaging, Inc. Severance Plan Policy (incorporated by reference to Exhibit 10.24 to Lantheus Medical Imaging, Inc.'s Registration Statement on Form S-4 filed with the Commission on October 6, 2010 (file number 333-169785)).
10.24	Employment Agreement, dated March 10, 2008, by and between Lantheus Medical Imaging, Inc. and Michael Duffy (incorporated by reference to Exhibit 10.21 to Lantheus Medical Imaging, Inc.'s Annual Report on Form 10 K for the fiscal year ended December 31, 2011 (file number 333-169785)).
10.25†	Second Amendment, effective as of January 1, 2012, to the Distribution Agreement, dated as of October 31, 2001, by and between Lantheus Medical Imaging, Inc., formerly known as Bristol-Myers Squibb Medical Imaging, Inc., and Medi-Physics, Inc., doing business as G.E. Healthcare Inc. (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2012 (file number 333-169785)).
10.26†	Manufacturing and Supply Agreement, dated as of February 1, 2012, for the manufacture of DEFINITY® by and between Lantheus Medical Imaging, Inc. and Jubilant HollisterStier LLC (incorporated by reference to Exhibit 10.2 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2012 (file number 333-169785)).
10.27†	Amendment No. 1, effective as of February 9, 2012, to the Amended and Restated Cardiolite License and Supply Agreement by and between Lantheus Medical Imaging, Inc. and Cardinal Health 414, LLC entered into as of January 1, 2009 and effective as of January 1, 2004 (incorporated by reference to Exhibit 10.3 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2012(file number 333-169785)).
10.28†	Settlement and Mutual Release Agreement, effective as of March 20, 2012, by and between Ben Venue Laboratories, Inc. and Lantheus Medical Imaging, Inc. (incorporated by reference to Exhibit 10.4 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2012 (file number 333-169785)).
10.29†	Transition Services Agreement, effective as of March 20, 2012, by and between Ben Venue Laboratories, Inc. and Lantheus Medical Imaging, Inc. (incorporated by reference to Exhibit 10.5 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2012 (file number 333-169785)).
10.30†	Manufacturing and Service Contract for Commercial Products, entered into as of March 20, 2012, by and between Ben Venue Laboratories, Inc. and Lantheus Medical Imaging, Inc. (incorporated by reference to Exhibit 10.6 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2012 (file number 333-169785)).

Exhibit	Description
10.31†	First Amendment to Manufacturing and Supply Agreement, dated as of May 3, 2012, for the manufacture of DEFINITY® by and between Lantheus Medical Imaging, Inc. and Jubilant HollisterStier LLC (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2012 (file number 333-169785)).
10.32†	Manufacturing and Supply Agreement, dated as of May 3, 2012, for the manufacture of Cardiolite® by and between Lantheus Medical Imaging, Inc. and Jubilant HollisterStier LLC (incorporated by reference to Exhibit 10.2 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2012 (file number 333-169785)).
10.33†	Manufacturing and Supply Agreement, dated as of May 3, 2012, for the manufacture of Neurolite® by and between Lantheus Medical Imaging, Inc. and Jubilant HollisterStier LLC (incorporated by reference to Exhibit 10.3 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2012 (file number 333-169785)).
10.34†	Amendment No. 2, dated as of October 15, 2012, to the Purchase and Supply Agreement between Lantheus Medical Imaging, Inc. and Nordion (Canada) Inc. (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2012 (file number 333-169785)).
10.35†	Amendment No. 3, effective as of October 1, 2012, to Sales Agreement between Lantheus Medical Imaging, Inc. and NTP Radioisotopes (Pty) Ltd. (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2012 (file number 333-169785)).
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10.37†	Amendment No. 2, effective as of December 27, 2012, to the Amended and Restated Cardiolite® License and Supply Agreement by and between Lantheus Medical Imaging, Inc. and Cardinal Health 414, LLC (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2012 (file number 333-169785)).
10.38†	License and Distribution Agreement, effective as of January 1, 2013, by and between Lantheus Medical Imaging, Inc. and FUJIFILM RI Pharma Co., Ltd. (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2012 (file number 333-169785)).
10.39	Separation Agreement, dated February 19, 2013, by and between Lantheus Medical Imaging, Inc. and Don Kiepert (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2012 (file number 333-169785)).
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10.41	Lantheus MI Holdings, Inc. 2013 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Current Report on Form 8-K filed with the Commission on May 6, 2013 (file number 333-169785)).
10.42	Form of Employee Option Grant Award Agreement (incorporated by reference to Exhibit 10.2 to Lantheus Medical Imaging, Inc.'s Current Report on Form 8-K filed with the Commission on May 6, 2013 (file number 333-169785)).
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10.44	Employment Agreement, dated May 8, 2013, by and between Lantheus Medical Imaging, Inc. and Jeffrey Bailey (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2013 (file number 333-169785).
10.45	Amended and Restated Credit Agreement date as of July 3, 2013, by and among Lantheus Medical Imaging Inc., Lantheus MI Intermediate Inc., Lantheus MI Real Estate, LLC, the lenders from time to time party thereto, and Well Fargo Bank, National Association collateral agent and administrative agent and as sole lead arranger, back runner and syndication agent (incorporated by reference to Exhibit 10.1 to Lantheus Medical Imaging, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2013 (file number 333-169785)).
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** Furnished herewith.

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Exhibit 10.46

CONSULTING AGREEMENT

Contract Number: CONLMI07201302

Mr. John Golubieski (the Consultant")
22 Tulsa Court
Monmouth Junction, NJ 08852

This Consulting Agreement (this "Agreement"), effective on the date on which both parties have fully executed the Agreement, is between the Consultant named above and Lantheus Medical Imaging, Inc., with a place of business at 331 Treble Cove Road, N. Billerica, MA 01862 (including its subsidiaries and affiliates, "LMI").

1. Term: The term of this Agreement shall be month-to-month, commencing on the effective date, unless otherwise terminated as provided herein.

2. Services: Consultant shall provide the services to LMI described in Attachment A.

3. Compensation: As full compensation for the satisfactory performance of Consultant's services, LMI will pay Consultant the fees set forth in Attachment A.

4. Independent Contractor: For the purpose of this Agreement, Consultant will be deemed an independent contractor and not an employee or agent of LMI. Nothing in this Agreement shall be construed to create an employment relationship between Consultant and LMI. It is accordingly understood that LMI will not withhold any amounts in respect of taxes from the compensation of Consultant hereunder, and that by reason of services provided under this Agreement, Consultant shall not be entitled to receive, nor shall such services make Consultant eligible to participate in, any benefits or privileges given or extended to LMI employees.

5. Representations, Warranties, and Covenants: Consultant represents and warrants that he will perform all such services in a manner commensurate with the highest professional standards applicable to the industry. Consultant will also comply, in all material respects, with all federal and state laws, regulations and orders applicable to the services. Consultant represents and warrants that he has not been debarred or otherwise excluded, and to the best of Consultant's knowledge is not under consideration to be debarred or otherwise excluded, by the U.S. Food and Drug Administration or similar agencies from working in or providing consulting services to any pharmaceutical or device company. Consultant is under no contractual or other obligation or restriction which is inconsistent with Consultant's execution of this Agreement or the performance of the services and, during the term of this Agreement, Consultant will not enter into any agreement, either written or oral, in conflict with Consultant's obligations under this Agreement. Consultant also agrees not to make any use of any funds, materials, documents, personnel, facilities, equipment, information, intellectual property or other resources of a third party in performing the services, or to take any other action that would result in a third party owning or having a right in the results of the services or LMI's intellectual property or information.

6. Confidentiality: It is understood that during the course of the services, Consultant may be exposed to materials and information which are confidential or proprietary to LMI. All such material and information, written or verbal (including, but not limited to, financial or strategic information), made available, disclosed, or otherwise made known to Consultant as a result of its services under this Agreement, shall be considered confidential, and shall be the sole property of LMI and shall be used by Consultant only for the benefit of LMI and shall not be disclosed to any third party without LMI's prior written approval. In accordance with the terms of the Confidential Disclosure Agreement dated as of June 27 2013, Consultant agrees not to, directly or indirectly, use or disclose any of LMI's confidential information without the prior written consent of LMI.

This Agreement does not, and shall not be construed to, grant to Consultant any license or other right to the patent, trademark, copyright or other intellectual property of LMI, whether or not related to confidential information.

7. Proprietary Information:

7.1 All documentation, information, and other materials owned or controlled by LMI and furnished to Consultant and all associated intellectual property rights are and will remain the exclusive property of LMI. Consultant shall use such materials only as necessary to perform the services and shall not transfer the materials to any third party without the prior written consent of LMI. In using the materials, Consultant will also comply with the standard operating procedures and other written instructions provided by LMI.

7.2 Consultant acknowledges that any and all writings, documents, designs, discoveries, inventions, improvements, specifications, data and other materials that Consultant makes, conceives or develops at any time as a result of or in connection with Consultant's performance of the services or exposure to any confidential information, together with any associated patent, copyright, trademark, trade secret and other intellectual property rights (collectively, "Works"), shall be deemed "works made for hire", shall be the sole and exclusive property of LMI, and shall be treated as LMI's confidential information.. Consultant shall and hereby does assign and transfer to LMI any and all of Consultant's rights, title and interest in and to the Works. Consultant shall execute and deliver any and all instruments and other documents and take such other actions as may be necessary or reasonably requested by LMI to document the aforesaid assignment and transfer of the Works to LMI, or to enable LMI to secure, register, maintain, enforce or otherwise fully protect its rights in and to the Works. If LMI is unable because of Consultant's unavailability, refusal, dissolution or for any other reason to secure a signature by or on behalf of Consultant to apply for or to pursue any application, registration, filing or other instrument for intellectual property rights covering the Works, then Consultant hereby irrevocably designates and appoints LMI and its duly authorized officers and agents as Consultant's agent and attorney in fact, to act for and on Consultant' s behalf and stead to execute and file any such application, registration, filing or other instrument, and to do all other lawfully permitted acts to further the prosecution and issuance of such intellectual property rights, with the same legal force and effect as if executed by Consultant.

7.3 Consultant shall keep accurate and complete records relating to the services. All such records, whether paper or electronic, shall be the sole property of LMI and subject to LMI' review at a mutually agreeable time. Promptly upon the termination or expiration of this Agreement, all such records, whether they were prepared by Consultant solely or jointly with others, all such information, any other property of LMI and any materials provided to Consultant by LMI, or its designee shall be turned over by Consultant to LMI.

8. Termination: Each party may terminate this Agreement at any time, with or without cause, upon at least ten (10) days prior written notice to the other party, and Consultant shall immediately stop performing the services described herein. In the event this Agreement is terminated, LMI shall be under no further obligation to Consultant other than to pay any monies then due and owing because of any properly completed services hereunder. In the event of expiration or termination of this Agreement, Consultant agrees to provide LMI with all reports, materials or deliverable items in whatever state of completion as of the date of termination. All rights granted to LMI under this Agreement that are expressly indicated to survive termination or expiration of this Agreement or by their nature should survive the termination or expiration of this Agreement shall survive the termination or expiration of this Agreement, including, without limitation, Sections 5, 6, 7, 8, 9, 10, and 11.

9. Entire Agreement; Assignment: This Agreement, together with the Confidential Disclosure Agreement dated as of June 27, 2013, constitutes the entire agreement between the parties with respect to the subject matter and shall supersede and prevail over any other prior or contemporaneous arrangements as to the services, whether written or oral. This Agreement may be modified in writing only and is binding upon the parties hereto and their successors, but is not otherwise assignable, except that LMI may assign this Agreement, without consent, for the benefit of any lenders under any financing arrangement or in connection with a merger, acquisition, recapitalization, reorganization, change of control or sale of all or substantially all of its assets or business so long as the successor party as of the date of such event agrees to be bound by the terms and provisions hereof as if an initial party hereto.

10. Choice of Law: This Agreement shall be construed under and governed by the substantive laws of the Commonwealth of Massachusetts, United States of America, without giving effect to the conflicts of laws provision thereof. Any disputes arising between the parties relating to this Agreement shall be subject to the exclusive jurisdiction and venue of the state and federal courts located in the Commonwealth of Massachusetts, and the parties hereby waive any objection which they may have now or hereafter to the laying of venue of any proceedings in said courts and to any claim that such proceedings have been brought in an inconvenient forum, and further irrevocably agree that a judgment or order in any such proceedings shall be conclusive and binding upon each of them and may be enforced in the courts of any other jurisdiction.

11. No Publicity: Consultant acknowledges and agrees to maintain the existence of this Agreement, together with the terms of this Agreement, confidential. Consultant shall not issue, make, release, distribute or authorize for distribution any press release, information, statement, letters or materials (irrespective of medium) that makes mention of or uses LMI's name(s), logos, trademarks, or goodwill in any manner whatsoever.

12. Counterparts; Electronic Signatures: This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same original. Signatures to this Agreement may be delivered by facsimile, by electronic mail (e.g., a ".pdf" file) or by any other electronic means that is intended to preserve the original appearance of the document, and such delivery will have the same effect as the delivery of the paper document bearing the actual, hand-written signatures

Signature Page to Follow

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives as set forth below.

CONSULTANT		LANTHEUS MEDICAL IMAGING, INC.	
By:	/s/ John Golubieski	By:	/s/ Michael Duffy
Name:	John Golubieski	Name:	Michael Duffy
Title:	Independent Consultant	Title:	Vice President and Secretary
Date:	7/10/13	Date:	July 24, 2013

Attachment A

Services:

John Golubieski shall provide consulting services relating to general business matters, including services relating to accounting, financial reporting, treasury, risk management, SEC compliance, and information system management, as such services are requested by LMI and, effective as of August 9, 2013, shall provide services in his role as the Company's interim Chief Financial Officer.

Compensation:

As full compensation for the satisfactory performance of Consultant's services, LMI agrees to pay Consultant a rate of Twenty Five Thousand Dollars ($25,000) per month (or pro rata portions thereof), which shall be paid on a monthly basis. No minimum number of months or days of services is promised or guaranteed in any way by LMI. In addition, in accordance with its standard travel and expense policies for non-employees, LMI agrees to reimburse Consultant for any reasonable and necessary travel expenses related to the services. Consultant shall provide invoices to LMI on a monthly basis or as otherwise directed by LMI.

Exhibit 10.47

EMPLOYMENT AGREEMENT

EMPLOYMENT AGREEMENT (the "**Agreement**") dated as of August, 2013 by and between Lantheus Medical Imaging, Inc., a Delaware corporation (the "**Company**") and **Mary Anne Heino** ("**Executive**").

The Company desires to employ Executive and to enter into an agreement embodying the terms of such employment;

Executive desires to accept such employment and enter into such an Agreement.

In consideration of the premises and mutual covenants herein and for other good and valuable consideration, the parties agree as follows:

1. At-Will Employment. Executive's employment with the Company commenced as of April 15, 2013. This agreement was subsequently put in place as of August 12, 2013 (the "**Effective Date**"). Such employment shall be "at-will" employment. Subject to the terms of this Agreement, the Company may terminate Executive's employment and this Agreement for any reason at any time, with or without prior notice and with or without Cause (as defined herein), but subject to certain terms set forth in Section 8 below. Similarly, subject to the terms of this Agreement, Executive may terminate his employment at any time, subject to Section 8 below.

2. Position.

a. Commencing as of the Effective Date, Executive shall serve as the Company's Chief Commercial Officer and shall report to the Chief Executive Officer of the Company (the "**CEO**") or such CEO's designee. Executive shall have such duties and responsibilities as are consistent with such title and position and/or such other duties and responsibilities as may be assigned from time to time by the CEO or the Board of Directors of Lantheus MI Holdings, Inc. (the "**Board**"). If requested, Executive shall serve as an officer or a member of the Board of Directors of any of the Company's subsidiaries or affiliates without additional compensation.

b. Executive will devote Executive's full business time and best efforts to the performance of Executive's duties hereunder and will not engage in any other business, profession or occupation for compensation or otherwise which would conflict or interfere with the rendition of such services either directly or indirectly, without the prior written consent of the Board; provided that nothing herein shall preclude Executive, subject to the prior approval of the Board, from accepting appointment to or continuing to serve on any board of directors or trustees of any business corporation or any charitable organization; provided in each case, and in the aggregate, that such activities do not conflict or interfere with the performance of Executive's duties hereunder or conflict with Section 9.

3. Base Salary. During Executive's employment hereunder, the Company shall pay Executive a base salary at the annualized rate of $340,000, payable in regular installments in accordance with the Company's payment practices from time to time. Executive shall be entitled to annual performance and salary review, and any increase in base salary shall be in the sole

discretion of the Compensation Committee of the Board. Executive's annual base salary, as in effect from time to time, is hereinafter referred to as the "**Base Salary**".

4. Annual Bonus. With respect to each full fiscal year ending during Executive's employment hereunder, Executive shall be eligible to earn an annual bonus award of forty five percent (45%) of Executive's Base Salary (the " **Target**") based upon achievement of annual EBITDA and/or other performance targets established by the Compensation Committee of the Board within the first three months of each fiscal year (the " **Annual Bonus**"). The Annual Bonus, if any, shall be paid to Executive at the same time as an annual bonus is paid to other similarly situated executives; provided, that Executive is an active employee in good standing with the Company on such date of payment.

5. Equity. Executive shall be eligible to receive future equity awards from time to time pursuant to the Lantheus MI Holdings, Inc. 2013 Equity Incentive Plan, commensurate with Executive's level of responsibilities and the level of awards for similarly situated executives, as determined by the Compensation Committee of the Board in its sole discretion. The terms and conditions of any such equity awards shall be set forth in a separate award agreement.

6. Employee Benefits. During Executive's employment hereunder, Executive shall be entitled to participate in the Company's health, life and disability insurance, and retirement and fringe employee benefit plans as in effect from time to time (collectively " **Employee Benefits**"), on the same basis as those benefits are generally made available to other similarly situated executives of the Company.

7. Business Expenses. During Executive's employment hereunder, reasonable business expenses incurred by Executive in the performance of Executive's duties hereunder shall be reimbursed by the Company in accordance with Company policies.

8. Termination of Employment.

(a) Termination By the Company Without Cause. If Executive's employment is terminated by the Company without Cause, executive shall receive the following, subject to Section 8(g):

(i) an amount equal to Executive's Base Salary on the date of termination, less taxes and withholdings, payable in substantially equal installments over a period of 12 months in accordance with the Company's normal payroll practices, with payments commencing with the Company's first payroll after the sixtieth (60th) day following Executive's termination of employment, and such first payment shall include any such amounts that would otherwise be due prior thereto;

(ii) a pro rata portion of the Target Annual Bonus amount that Executive would have been eligible to receive pursuant to Section 4 hereof in such year of termination, based upon the percentage of the fiscal year that shall have elapsed through the date of Executive's termination of employment, less taxes and withholdings, payable in substantially equal installments over a period of 12 months in accordance with the Company's normal payroll practices, with payments commencing with the Company's first payroll after the sixtieth (60th) day following Executive's termination of employment, and such first payment shall include any such amounts that would be otherwise due prior thereto;

(iii) provided that Executive elects to purchase continued healthcare coverage under COBRA, an amount equal to the Company's portion of the premium for medical and dental benefits under the Company's group medical and dental plans that the Company was paying on Executive's behalf on the date of termination (which subsidy will be treated as imputed income) for a period of 12 months, with the first payment commencing on the Company's first payroll date after the 60th day following Executive's termination of employment, and such first payment shall include any such amounts that would otherwise be due prior thereto;

(iv) a lump sum amount equal to any earned, but unpaid, Annual Cash Bonus, if any, for the year prior to the year of termination, less taxes and withholdings, which shall be payable on the 60th day following Executive's termination of employment;

(v) a lump sum amount equal to any earned, but unpaid, Base Salary, if any, through the date of Executive's termination of employment, less taxes and withholdings, which shall be payable with the Company's first payroll after Executive's termination of employment; and

(vi) a lump sum amount equal to any unreimbursed business expenses, if any, pursuant to and in accordance with Section 7, incurred through the date of Executive's termination of employment.

(b) Termination Without Cause or For Good Reason following a Change of Control. If, within 12 months following the occurrence of a Change of Control (as defined in the Shareholders Agreement) of Holdings, Executive terminates his employment for Good Reason or the Company terminates Executive's employment with the Company without Cause, Executive shall receive the following, subject to Section 8(g):

(i) an amount equal to the Executive's Base Salary on the date of termination, less taxes and withholdings, payable in substantially equal installments over a period of 12 months in accordance with the Company's normal payroll practices, with payments commencing with the Company's first payroll after the sixtieth (60th) day following Executive's termination of employment, and such first payment shall include any such amounts that would otherwise be due prior thereto;

(ii) an amount equal to the full Target Bonus for the year of termination, less taxes and withholdings, payable in substantially equal installments over a period of 12 months in accordance with the Company's normal payroll practices, with payments commencing with the Company's first payroll after the sixtieth (60th) day following Executive's termination of employment, and such first payment shall include any such amounts that would otherwise be due prior thereto;

(iii) provided that Executive elects to purchase continued healthcare coverage under COBRA, an amount equal to the Company's portion of the premium for medical and dental benefits under the Company's group medical and dental plans that the Company was paying on Executive's behalf on the date of termination (which subsidy will be treated as imputed income) for a period of 12 months, with the first payment commencing on the Company's first payroll date after the 60th day following Executive's termination of employment, and such first payment shall include any such amounts that would otherwise be due prior thereto;

(iv) a lump sum amount equal to any earned, but unpaid, Annual Cash Bonus, if any, for the year prior to the year of termination, less taxes and withholdings, which shall be payable on the 60th day following Executive's termination of employment;

(v) a lump sum amount equal to any earned, but unpaid, Base Salary, if any, through the date of Executive's termination of employment, less taxes and withholdings, which shall be payable on the first payroll date after Executive's termination of employment; and

(vi) a lump sum amount equal to any unreimbursed business expenses, if any, pursuant to and in accordance with Section 7, incurred through the date of Executive's termination of employment. Executive acknowledges and agrees that, in connection with any Change of Control transaction, except as otherwise provided in a separate agreement, Executive shall not be entitled to receive, and shall not be paid, any transaction, success, sale or similar bonus or payment.

(c) Termination Due to Death or Permanent Disability. Executive's employment with the Company shall terminate automatically on Executive's death. In the event of Executive's Permanent Disability, the Company shall be entitled to terminate his employment.

For purposes of this Agreement, the "**Permanent Disability**" of Executive shall mean Executive's inability, because of mental or physical illness or incapacity, whether total or partial, to perform one or more of the material functions of Executive's position with or without reasonable accommodation, for a period of: (i) 90 consecutive calendar days or (ii) an aggregate of 120 days out of any consecutive 12 month period, and which entitles Executive to receive benefits under a disability plan provided by the Company.

In the event of a termination of employment under this section, Executive shall be entitled to following, subject to Section 8(g):

(i) a lump sum amount equal to any earned, but unpaid, Annual Cash Bonus, if any, for the year prior to the year of termination, less taxes and withholdings, payable on the sixtieth (60th) day following Executive's termination of employment;

(ii) a lump sum amount equal to any earned, but unpaid, Base Salary, if any, through the date of Executive's termination of employment, less taxes and withholdings, which shall be payable on the first payroll date after Executive's termination of employment;

(iii) a lump sum amount equal to any unreimbursed business expenses, if any, pursuant to and in accordance with Section 7, incurred through the date of Executive's termination of employment; and

(iv) a pro rata portion of any Annual Cash Bonus, to the extent earned based on actual performance by the Company, that Executive would have been eligible to receive hereunder in the year of termination, based on the percentage of the fiscal year that shall have elapsed through the date of Executive's termination of employment, payable at such time as any such Annual Cash Bonuses are paid to active senior executives of the Company.

(d) Other Terminations. Executive shall not be entitled to the post-termination benefits set forth in Section 8(a), Section 8(b) or Section 8(c) above if his employment with the Company ceases for any reason other than his termination by the Company without Cause, his resignation for Good Reason or his termination as a result of his death or Permanent Disability; it being understood that if Executive's employment with the Company ceases or terminates for any other reason, he will not be entitled to any severance or post-termination benefits or payments, whether

hereunder or pursuant to any policy of the Company, other than a lump sum amount equal to any earned, but unpaid, Base Salary, if any, through the date of Executive's termination of employment, less taxes and withholdings (payable on the first payroll date after Executive's termination of employment), and a lump sum amount equal to any unreimbursed business expenses, if any, pursuant to and in accordance with Section 3(e), incurred through the date of Executive's termination of employment; provided, that this paragraph shall not alter Executive's rights or obligations he may have or be subject to in connection with or with respect to his equity interests in Holdings, and Executive's indemnification rights shall continue to be governed in accordance with any Directors and Officers Liability Insurance Policy that the Company may maintain and/or with the Company's certificate of incorporation or by-bylaws or similar governing document, and otherwise in accordance with Section 7.

(e) Cause Definition. For purposes of this Agreement, "**Cause**" means (i) material failure by Executive to perform Executive's employment duties (other than as a consequence of any illness, accident or disability), (ii) continued, willful failure of Executive to carry out any reasonable lawful direction of the Company, (iii) material failure of Executive to comply with any of the applicable rules of the Company contained in its Employee Handbook or any other Company policy, (iv) fraud, willful malfeasance, gross negligence or recklessness of Executive in the performance of employment duties, (v) willful failure of Executive to comply with any of the material terms of this Agreement, (vi) other serious, willful misconduct of Executive which causes material injury to the Company or its reputation, including, but not limited to, willful or gross misconduct toward any of the Company's other employees, and (vii) conviction of a crime (or a pleading of guilty or nolo contendere), other than one which in the opinion of the Board does not affect Executive's position as an employee of the Company.

(f) Good Reason Definition. For purposes of this Agreement, "Good Reason" shall mean, without the Executive's Consent, (A) the failure of the Company to pay, or cause to be paid, Executive's Base Salary or Bonus, as the case may be, when due, (B) a permanent decrease in the Executive's Base Salary, or a failure by the Company to pay material compensation or provide material benefits due and payable to the Executive under his Employment Agreement, (C) the Company requiring the Executive to be based at any office or location that is more than 50 miles from the Company's current headquarters in Billerica, Massachusetts, or (D) the failure of the Company to cause the transferee or successor to all or substantially all of the assets of the Company to assume by operation of law or contractually the Company's obligations hereunder, and provided further that any of the events described in clauses (A) or (D) of this section shall constitute Good Reason only if the Company fails to cure such event within 30 days after receipt from Executive of written notice of the event which constitutes Good Reason, and provided further, that Good Reason shall cease to exist for an event on the 30 th day following the later of its occurrence or Executive's knowledge thereof, unless Executive has given the Company written notice thereof prior to such date ; For the avoidance of doubt, (x) a change in Executive's reporting relationships, including but not limited to a change in the number of direct or indirect reports to Executive, shall not constitute a material and adverse reduction in Executive's responsibilities, and (y) commensurate with Executive performing his duties Executive will be expected to work at the Company's headquarters in North Billerica, Massachusetts, as necessitated by business demands or as reasonably requested by the Company.

(g) Separation Agreement and General Release. The payments and benefits set forth in Sections 8(a), 8(b) and 8(c) above shall be expressly conditioned upon Executive's (or his estate or legal representatives, in the case of Section 4(c)) execution and delivery to the Company of a Separation Agreement and General Release in a form that is acceptable to the Company (the "**Separation Agreement**") and such Separation Agreement becoming irrevocable within sixty (60) days following Executive's termination of employment; provided, that any payments or benefits otherwise due prior to such sixtieth (60th) day shall be paid on such sixtieth (60th) day. For the avoidance of doubt, the payments and benefits set forth in Sections 8(a), 8(b) and 8(c) above shall be forfeited if such Separation Agreement has not been executed, delivered and become irrevocable within such sixty (60) day period. Such Separation Agreement shall contain release language substantially similar to the language set forth in Exhibit A attached hereto.

e. Board/Committee Resignation. Upon termination of Executive's employment for any reason, Executive agrees to resign, as of the date of such termination and to the extent applicable, from the Board (and any committees thereof) and the Board of Directors (and any committees thereof) of any of the Company's subsidiaries or affiliates.

9. Non-Competition.

a. Executive acknowledges and recognizes the highly competitive nature of the businesses of the Company and its affiliates and accordingly agrees as follows:

(1) During Executive's employment with the Company and, for a period of one year following the date Executive ceases to be employed by the Company (the **"Restricted Period**"), Executive will not, whether on Executive's own behalf or on behalf of or in conjunction with any person, firm, partnership, joint venture, association, corporation or other business organization, entity or enterprise whatsoever (" **Person**"), directly or indirectly solicit or assist in soliciting in competition with the Company, the business of any client or prospective client:

(i) with whom Executive had personal contact or dealings on behalf of the Company during the one-year period preceding Executive's termination of employment;

(ii) with whom employees reporting to Executive had personal contact or dealings on behalf of the Company during the one year immediately preceding the Executive's termination of employment; or

(iii) for whom Executive had direct or indirect responsibility during the one year immediately preceding Executive's termination of employment.

(2) During the Restricted Period, Executive will not directly or indirectly:

(i) engage in any business that competes with the business or businesses of the Company or any of its affiliates, namely in the testing, development and manufacturing services for the development, manufacture, distribution, marketing or sale of radiopharmaceutical products, contrast imaging agents and/or radioactive generators for the global medical imaging and pharmaceutical industries, and including, without limitation, businesses which the Company or its affiliates have specific plans to conduct in the future and as to which Executive is aware of such planning (a **"Competitive Business**");

(ii) enter the employ of, or render any services to, any Person (or any division or controlled or controlling affiliate of any Person) who or which engages in a Competitive Business;

(iii) acquire a financial interest in, or otherwise become actively involved with, any Competitive Business, directly or indirectly, as an individual, partner, shareholder, officer, director, principal, agent, trustee or consultant; or

(iv) interfere with, or attempt to interfere with, business relationships (whether formed before, on or after the date of this Agreement) between the Company or any of its affiliates and customers, clients, suppliers, partners, members or investors of the Company or its affiliates.

(3) Notwithstanding anything to the contrary in this Agreement, Executive may, directly or indirectly, own, solely as an investment, securities of any Person engaged in the business of the Company or its affiliates which are publicly traded on a national or regional stock exchange or on the over-the-counter market if Executive (i) is not a controlling person of, or a member of a group which controls, such Person and (ii) does not, directly or indirectly, own 5% or more of any class of securities of such Person.

(4) During the Restricted Period, Executive will not, whether on Executive's own behalf or on behalf of or in conjunction with any Person, directly or indirectly:

i. solicit or encourage any employee or consultant of the Company or its affiliates to leave the employment of, or cease providing services to, the Company or its affiliates; or

ii. hire any such employee or consultant who was employed by or providing services to the Company or its affiliates as of the date of Executive's termination of employment with the Company or who left the employment of or ceased providing services to the Company or its affiliates coincident with, or within one year prior to or after, the termination of Executive's employment with the Company.

iii. It is expressly understood and agreed that although Executive and the Company consider the restrictions contained in this Section 9 to be reasonable, if a final judicial determination is made by a court of competent jurisdiction that the time or territory or any other restriction contained in this Agreement is an unenforceable restriction against Executive, the provisions of this Agreement shall not be rendered void but shall be deemed

amended to apply as to such maximum time and territory and to such maximum extent as such court may judicially determine or indicate to be enforceable. Alternatively, if any court of competent jurisdiction finds that any restriction contained in this Agreement is unenforceable, and such restriction cannot be amended so as to make it enforceable, such finding shall not affect the enforceability of any of the other restrictions contained herein.

The provisions of this Section 9 shall survive the termination of this Agreement and Executive's employment for any reason.

10. Non-Disparagement. The Executive shall not at any time (whether during or after Executive's employment with the Company) make, or cause to be made, any statement or communicate any information (whether oral or written) that disparages or reflects negatively on the Company or any of its affiliates, except for truthful statements that may be made pursuant to legal process, including without limitation in litigation, arbitration or similar dispute resolution proceedings. This Section 10 shall survive the termination of this Agreement and Executive's employment for any reason.

11. Confidentiality; Intellectual Property .

a. Confidentiality.

(i) Executive will not at any time (whether during or after Executive's employment with the Company) (x) retain or use for the benefit, purposes or account of Executive or any other Person; or (y) disclose, divulge, reveal, communicate, share, transfer or provide access to any Person outside the Company (other than its professional advisers who are bound by confidentiality obligations), any non-public, proprietary or confidential information - including, without limitation, trade secrets, know-how, research and development, software, databases, inventions, processes, formulae, technology, designs and other intellectual property, information concerning finances, investments, profits, pricing, costs, products, services, vendors, customers, clients, partners, investors, personnel, compensation, recruiting, training, advertising, sales, marketing, promotions, government and regulatory activities and approvals - concerning the past, current or future business, activities and operations of the Company, its subsidiaries or affiliates and/or any third party that has disclosed or provided any of same to the Company on a confidential basis **("Confidential Information")** without the prior written authorization of the Board.

(ii) Confidential Information shall not include any information that is (A) generally known to the industry or the public other than as a result of Executive's breach of this covenant or any breach of other confidentiality obligations by third parties; (B) made legitimately available to Executive by a third party without breach of any confidentiality obligation; or (C) required by law to be disclosed; provided that Executive shall give prompt written notice to the Company of such requirement, disclose no more information than is so required, and cooperate with any attempts by the Company to obtain a protective order or similar treatment.

(iii) Except as required by law, Executive will not disclose to anyone, other than Executive's immediate family and legal or financial advisors, the existence or contents of this Agreement; provided that Executive may disclose to any prospective future employer the provisions of Sections 9, 10 and 11 of this Agreement provided they agree to maintain the confidentiality of such terms.

(iv) Upon termination of Executive's employment with the Company for any reason, Executive shall (x) cease and not thereafter commence use of any Confidential Information or intellectual property (including without limitation, any patent, invention, copyright, trade secret, trademark, trade name, logo, domain name or other source indicator) owned or used by the Company, its subsidiaries or affiliates; (y) immediately return to the Company all Company property and destroy, delete, or return to the Company, at the Company's option, all originals and copies in any form or medium (including memoranda, books, papers, plans, computer files, letters and other data) in Executive's possession or control (including any of the foregoing stored or located in Executive's office, home, laptop or other computer, whether or not Company property) that contain Confidential Information or otherwise relate to the business of the Company, its affiliates and subsidiaries, except that Executive may retain only those portions of any personal notes, notebooks and diaries that do not contain any Confidential Information; and (z) notify and fully cooperate with the Company regarding the delivery or destruction of any other Confidential Information of which Executive is or becomes aware and promptly return any other Company property in Executive's possession.

b. Intellectual Property.

(i) If Executive has created, invented, designed, developed, contributed to or improved any works of authorship, inventions, intellectual property, materials, documents or other work product (including without limitation, research, reports, software, databases, systems, applications, presentations, textual works, content, or audiovisual materials) ("**Works**"), either alone or with third parties, prior to Executive's employment by the Company, that are relevant to or implicated by such employment ("**Prior Works**"), Executive hereby grants the Company a perpetual, nonexclusive, royalty-free, worldwide, assignable, sublicensable license under all rights and intellectual property rights (including rights under patent, industrial property, copyright, trademark, trade secret, unfair competition and related laws) therein for all purposes in connection with the Company's current and future business. A list of all such material Works as of the date hereof is attached hereto as Exhibit B.

(ii) If Executive creates, invents, designs, develops, contributes to or improves any Works, either alone or with third parties, at any time during Executive's employment by the Company and within the scope of such employment and/or with the use of any Company resources ("**Company Works**"), Executive shall promptly and fully disclose such works to the Company and hereby irrevocably assigns, transfers and conveys, to the maximum extent permitted by applicable law, all rights and intellectual property rights therein (including rights under patent, industrial property, copyright, trademark, trade secret, unfair competition and related laws) to the Company

to the extent ownership of any such rights does not vest originally in the Company.

(iii) Executive agrees to keep and maintain adequate and current written records (in the form of notes, sketches, drawings, and any other form or media requested by the Company) of all Company Works. The records will be available to and remain the sole property and intellectual property of the Company at all times.

(iv) Executive shall take all requested actions and execute all requested documents (including any licenses or assignments required by a government contract) at the Company's expense (but without further remuneration) to assist the Company in validating, maintaining, protecting, enforcing, perfecting, recording, patenting or registering any of the Company's rights in the Prior Works and Company Works. If the Company is unable for any other reason to secure Executive's signature on any document for this purpose, then Executive hereby irrevocably designates and appoints the Company and its duly authorized officers and agents as Executive's agent and attorney-in-fact, to act for and on Executive's behalf to execute any documents and to do all other lawfully permitted acts in connection with the foregoing.

(v) Executive shall not improperly use for the benefit of, bring to any premises of, divulge, disclose, communicate, reveal, transfer or provide access to, or share with the Company any confidential, proprietary or non-public information or intellectual property relating to a former employer or other third party without the prior written permission of such third party. Executive hereby indemnifies, holds harmless and agrees to defend the Company and its officers, directors, partners, employees, agents and representatives from any breach of the foregoing covenant. Executive shall comply with all relevant policies and guidelines of the Company, including regarding the protection of confidential information and intellectual property and potential conflicts of interest. Executive acknowledges that the Company may amend any such policies and guidelines from time to time, and that Executive remains at all times bound by their most current version.

c. The provisions of this Section 11 shall survive the termination of this Agreement and Executive's employment for any reason.

12. Specific Performance. ·Executive acknowledges and agrees that the Company's remedies at law for a breach or threatened breach of any of the provisions of Section 9, Section 10 or Section 11 would be inadequate and the Company would suffer irreparable damages as a result of such breach or threatened breach. In recognition of this fact, Executive agrees that, in the event of such a breach or threatened breach, in addition to any remedies at law, the Company, without posting any bond, shall be entitled to cease making any payments or providing any benefit otherwise required by this Agreement and obtain equitable relief in the form of specific performance, temporary restraining order, temporary or permanent injunction or any other equitable remedy which may then be available.

13. Miscellaneous.

a. Governing Law. This Agreement shall be governed by, construed and interpreted in all respects, in accordance with the laws of the State of New York, without regard to conflicts of laws principles thereof.

b. Entire Agreement/Amendments. This Agreement contains the entire understanding of the parties with respect to the employment of Executive by the Company and supersedes all prior agreements, understandings, discussions, negotiations and undertakings, whether written or oral between the Executive and the Company or any of its affiliates with respect to the Executive's employment. There are no restrictions, agreements, promises, warranties, covenants or undertakings between the parties with respect to the subject matter herein other than those expressly set forth herein. This Agreement may not be altered, modified, or amended except by written instrument signed by the parties hereto.

c. No Waiver. The failure of a party to insist upon strict adherence to any term of this Agreement on any occasion shall not be considered a waiver of such party's rights or deprive such party of the right thereafter to insist upon strict adherence to that term or any other term of this Agreement.

d. Severability. In the event that any one or more of the provisions of this Agreement shall be or become invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions of this Agreement shall not be affected thereby.

e. Assignment. This Agreement, and all of Executive's rights and duties hereunder, shall not be assignable or delegable by Executive. Any purported assignment or delegation by Executive in violation of the foregoing shall be null and void ab initio and of no force and effect. This Agreement may be assigned by the Company to a person or entity which is an affiliate or a successor in interest to substantially all of the business operations of the Company. Upon such assignment, the rights and obligations of the Company hereunder shall become the rights and obligations of such affiliate or successor person or entity.

f. Set Off. The Company's obligation to pay Executive the amounts provided and to make the arrangements provided hereunder shall be subject to set-off, counterclaim or recoupment of amounts owed by Executive to the Company or its affiliates.

g. Dispute Resolution. Except with respect to Sections 9, 10, 11 and 12 hereof, any controversy or claim arising out of or related to any provision of this Agreement that cannot be mutually resolved by the parties hereto shall be settled by final, binding and nonappealable arbitration in New York, NY by a single mutually-acceptable arbitrator. Subject to the following provisions, the arbitration shall be conducted in accordance with

the applicable rules of American Arbitration Association then in effect. Any award entered by the arbitrator shall be final, binding and nonappealable and judgment may be entered thereon by either party in accordance with applicable law in any court of competent jurisdiction. This arbitration provision shall be specifically enforceable. The arbitrator shall have no authority to modify any provision of this Agreement or to award a remedy for a dispute involving this Agreement other than a benefit specifically provided under or by virtue of the Agreement. Each party shall be responsible for its own expenses relating to the conduct of the arbitration or litigation (including attorney's fees and expenses) and shall share the fees of the American Arbitration Association and the arbitrator equally.

h. Compliance with Section 409A of the Code. The parties acknowledge and agree that the interpretation of Section 409 A of the Code and its application to the terms of this Agreement is uncertain and may be subject to change as additional guidance and interpretations become available. Anything to the contrary herein notwithstanding, all benefits or payments provided by the Company to the Executive that would be deemed to constitute "nonqualified deferred compensation" within the meaning of Section 409A of the Code are intended to comply with Section 409A of the Code. If, however, any such benefit or payment is deemed to not comply with Section 409A of the Code, the Company and the Executive agree to renegotiate in good faith any such benefit or payment (including, without limitation, as to the timing of any severance payments payable hereunder), if possible, so that either (i) Section 409A of the Code will not apply or (ii) compliance with Section 409A ofthe Code will be achieved. The Company shall consult with Executive in good faith regarding the implementation of the provisions of this Section 13(h); provided that neither the Company nor any of its employees or representatives shall have any liability to Executive with respect to thereto.

i. Successors; Binding Agreement. This Agreement shall inure to the benefit of and be binding upon personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees of the parties hereto.

j. Notice. For the purpose of this Agreement, notices and all other communications provided for in the Agreement shall be in writing and shall be deemed to have been duly given when delivered by hand or overnight courier or three days after it has been mailed by United States registered mail, return receipt requested, postage prepaid, addressed to the respective addresses set forth below in this Agreement, or to such other address as either party may have furnished to the other in writing in accordance herewith, except that notice of change of address shall be effective only upon receipt.

If to the Company:

Lantheus Medical Imaging, Inc.
331 Treble Cove Rd.
Bldg. 600-2
N. Billerica, MA 01862
Attention: Michael Duffy,
Vice President and General Counsel
Email: Michael.Duffy@lantheus.com

If to Executive: To Executive's address on file with the Company

k. Executive Representation. Executive hereby represents to the Company that (i) Executive has been provided with sufficient opportunity to review this Agreement and has been advised by the Company to conduct such review with an attorney of his choice, and (ii) the execution and delivery of this Agreement by Executive and the Company and the performance by Executive of Executive's duties hereunder shall not constitute a breach of, or otherwise contravene, the terms of any employment agreement or other agreement or policy to which Executive is a party or otherwise bound.

1. Cooperation. Executive shall provide Executive's reasonable cooperation in connection with any action or proceeding (or any appeal from any action or proceeding) which relates to events occurring during Executive's employment hereunder. This provision shall survive any termination of this Agreement or Executive's employment.

m. Withholding Taxes. The Company may withhold from any amounts payable under this Agreement such Federal, state and local taxes as may be required to be withheld pursuant to any applicable law or regulation.

n. Counterparts. This Agreement may be signed in counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

[Signatures on following page]

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the day and year fIrst above written.

Lantheus Medical Imaging, Inc.

/s/ Jeffrey Bailey	/s/ Mary Anne Heino
By: Jeffrey Bailey	Mary Anne Heino
Title: President and Chief Executive Officer	

EXHIBIT A
RELEASE

This RELEASE ("**Release**") dated as of , 20 between Lantheus Medical Imaging, Inc., a Delaware corporation (the " **Company**"), and (the "**Executive**").

WHEREAS, the Company and the Executive previously entered into an employment agreement dated March , 2008 (the " **Employment Agreement**"); and

WHEREAS, the Executive's employment with the Company has terminated effective , 20 ;

NOW, THEREFORE, in consideration of the premises and mutual agreements contained herein and in the Employment Agreement, the Company and the Executive agree as follows:

1. Executive agrees to and does waive any claims he may have for employment by the Company and agrees not to seek such employment or reemployment by the Company in the future. The Executive, on his own behalf and on behalf of his heirs, estate and beneficiaries, further does hereby release the Company, and in such capacities, any of its subsidiaries or affiliates, and each of their respective past, present and future officers, directors, agents, employees, shareholders, investors, employee benefit plans and their administrators or fiduciaries, insurers of any such entities, and its and their successors and assigns and others related to such entities from any and all claims made, to be made, or which might have been made of whatever nature, whether known or unknown, from the beginning of time, including those that arose as a consequence of his employment with the Company, or arising out of the separation from the Company, the severance of such employment relationship, or any act committed or omitted during or after the existence of such employment relationship, all up through and including the date on which this Release is executed, including, but not limited to, those which were, could have been or could be the subject of an administrative or judicial proceeding filed by the Executive or on his behalf under federal, state or local law, whether by statute, regulation, in contract or tort, and including, but not limited to, every claim for front pay, back pay, wages, bonus, fringe benefit, any form of discrimination, wrongful termination, tort, emotional distress, pain and suffering, breach of contract, fraud, defamation, compensatory or punitive damages, interest, attorney's fees, reinstatement or reemployment, and any rights or claims under the Civil Rights Act of 1866, the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. sec. 621, et seq., the Americans with Disabilities Act, the Family and Medical Leave Act, the Civil Rights Act of 1964, Title VII, as amended, the Civil Rights Act of 1991, the Employee Retirement Income Security Act of 1974, as amended, the Equal Pay Act, the Worker Adjustment and Retraining Notification Act, the New York State Human Rights Law, the New York City Human Rights Law, the Massachusetts Civil Rights Act, the Massachusetts Equal Pay and Maternity Benefits Law, the Massachusetts Equal Rights for Elderly and Disabled Law, the Massachusetts Small Necessities Leave Act, the Massachusetts Age Discrimination Law, or any other federal, state or local law relating to employment, discrimination in employment, termination of employment, wages, benefits or otherwise. The Executive acknowledges and agrees that even though claims and facts in addition to those now known or believed by him to exist may subsequently be discovered, it is his intention to fully settle and release all claims he may have against the Company and the persons and entities described above, whether known, unknown or suspected. Employee does not waive his right to have

a charge filed with the Equal Employment Opportunity Commission (" **EEOC**") or any state civil rights agency or to participate in an investigation conducted by the EEOC or any state civil rights agency; however, Employee expressly waives his right to recover any monetary relief should any administrative agency, including but not limited to the EEOC, pursue any claim on Employee's behalf.

2. The Company and the Executive acknowledge and agree that the release contained in Paragraph 1 does not, and shall not be construed to, release or limit the scope of any existing obligation of the Company and/or any of its subsidiaries or affiliates (i) to indemnify the Executive for his acts as an officer or director of the Company and/or its subsidiaries or affiliates in accordance with their respective charters or bylaws or under an indemnification agreement to which the Executive and the Company or any of its subsidiaries are parties or under any applicable Directors and Officers insurance policies or under any applicable law or (ii) to the Executive and his eligible, participating dependents or beneficiaries under any existing group welfare (excluding severance), equity, or retirement plan of the Company in which the Executive and/or such dependents are participants.

3. The Executive acknowledges that before entering into this Release, he has had the opportunity to consult with any attorney or other advisor of the Executive's choice, and the Executive is hereby advised to consult with an attorney. The Executive further acknowledges that by signing this Release, he does so of his own free will and act, that it is his intention to be legally bound by its terms, and that no promises or representations have been made to the Executive by any person to induce the Executive to enter into this Release other than the express terms set forth herein. The Executive further acknowledges that he has carefully read this Release, knows and understands its contents and its binding legal effect, including the waiver and release of claims set forth in Paragraph 1 above.

4. The Executive acknowledges that he has been provided at least 21 days to review the Release. In the event the Executive elects to sign this Release prior to this 21 day period, he agrees that it is a knowing and voluntary waiver of his right to wait the full 21 days. The Executive further understand that he has 7 days after the signing hereof to revoke this Release by so notifying the Company, Lantheus Medical Imaging, Inc., 331 Treble Cove Rd., Bldg. 600-2, N. Billerica, MA 01862, Attention: Michael Duffy in writing, such notice to be received by the Company within the 7 day period. This Release shall not become effective or enforceable, and no payments or benefits under Sections 8(c)(ii)(B),(C) and (D) of the Employment Agreement, as applicable, shall be made or provided, until this seven (7) day revocation period expires without the Executive having revoked this Release.

IN WITNESS WHEREOF, the parties have executed this Release on the date first above written.

Lantbeus Medical Imaging, Inc.

By: _____

Name:
Title:

_____

Employee Name

EXHIBIT B
PRIOR WORKS

[None]

Exhibit 10.48

EMPLOYMENT AGREEMENT

EMPLOYMENT AGREEMENT (the "**Agreement**") dated as of August, 2013 by and between Lantheus Medical Imaging, Inc., a Delaware corporation (the "**Company**") and **Cesare Orlandi** ("**Executive**").

The Company desires to employ Executive and to enter into an agreement embodying the terms of such employment;

Executive desires to accept such employment and enter into such an Agreement.

In consideration of the premises and mutual covenants herein and for other good and valuable consideration, the parties agree as follows:

1. At-Will Employment. Executive's employment with the Company commenced as of March 4, 2013. This agreement was subsequently put in place as of August 12, 2013 (the "**Effective Date**"). Such employment shall be "at-will" employment. Subject to the terms of this Agreement, the Company may terminate Executive's employment and this Agreement for any reason at any time, with or without prior notice and with or without Cause (as defined herein), but subject to certain terms set forth in Section 8 below. Similarly, subject to the terms of this Agreement, Executive may terminate his employment at any time, subject to Section 8 below.

2. Position.

a. Commencing as of the Effective Date, Executive shall serve as the Company's Chief Medical Officer and shall report to the Chief Executive Officer of the Company (the "**CEO**") or such CEO's designee. Executive shall have such duties and responsibilities as are consistent with such title and position and/or such other duties and responsibilities as may be assigned from time to time by the CEO or the Board of Directors of Lantheus MI Holdings, Inc. (the "**Board**"). If requested, Executive shall serve as an officer or a member of the Board of Directors of any of the Company's subsidiaries or affiliates without additional compensation.

b. Executive will devote Executive's full business time and best efforts to the performance of Executive's duties hereunder and will not engage in any other business, profession or occupation for compensation or otherwise which would conflict or interfere with the rendition of such services either directly or indirectly, without the prior written consent of the Board; provided that nothing herein shall preclude Executive, subject to the prior approval of the Board, from accepting appointment to or continuing to serve on any board of directors or trustees of any business corporation or any charitable organization; provided in each case, and in the aggregate, that such activities do not conflict or interfere with the performance of Executive's duties hereunder or conflict with Section 9.

3. Base Salary. During Executive's employment hereunder, the Company shall pay Executive a base salary at the annualized rate of $365,000, payable in regular installments in accordance with the Company's payment practices from time to time. Executive shall be entitled to annual performance and salary review, and any increase in base salary shall be in the sole

discretion of the Compensation Committee of the Board. Executive's annual base salary, as in effect from time to time, is hereinafter referred to as the "**Base Salary**".

4. Annual Bonus. With respect to each full fiscal year ending during Executive's employment hereunder, Executive shall be eligible to earn an annual bonus award of forty percent (40%) of Executive's Base Salary (the "**Target**") based upon achievement of annual EBITDA and/or other performance targets established by the Compensation Committee of the Board within the first three months of each fiscal year (the "**Annual Bonus**"). The Annual Bonus, if any, shall be paid to Executive at the same time as an annual bonus is paid to other similarly situated executives; provided, that Executive is an active employee in good standing with the Company on such date of payment.

5. Equity. Executive shall be eligible to receive future equity awards from time to time pursuant to the Lantheus MI Holdings, Inc. 2013 Equity Incentive Plan, commensurate with Executive's level of responsibilities and the level of awards for similarly situated executives, as determined by the Compensation Committee of the Board in its sole discretion. The terms and conditions of any such equity awards shall be set forth in a separate award agreement.

6. Employee Benefits. During Executive's employment hereunder, Executive shall be entitled to participate in the Company's health, life and disability insurance, and retirement and fringe employee benefit plans as in effect from time to time (collectively "**Employee Benefits**"), on the same basis as those benefits are generally made available to other similarly situated executives of the Company.

7. Business Expenses. During Executive's employment hereunder, reasonable business expenses incurred by Executive in the performance of Executive's duties hereunder shall be reimbursed by the Company in accordance with Company policies.

8. Termination of Employment.

(a) Termination By the Company Without Cause. If Executive's employment is terminated by the Company without Cause, executive shall receive the following, subject to Section 8(g):

(i) an amount equal to Executive's Base Salary on the date of termination, less taxes and withholdings, payable in substantially equal installments over a period of 12 months in accordance with the Company's normal payroll practices, with payments commencing with the Company's first payroll after the sixtieth (60th) day following Executive's termination of employment, and such first payment shall include any such amounts that would otherwise be due prior thereto;

(ii) a pro rata portion of the Target Annual Bonus amount that Executive would have been eligible to receive pursuant to Section 4 hereof in such year of termination, based upon the percentage of the fiscal year that shall have elapsed through the date of Executive's termination of employment, less taxes and withholdings, payable in substantially equal installments over a period of 12 months in accordance with the Company's normal payroll practices, with payments commencing with the Company's first payroll after the sixtieth (60th) day following Executive's termination of employment, and such first payment shall include any such amounts that would be otherwise due prior thereto;

(iii) provided that Executive elects to purchase continued healthcare coverage under COBRA, an amount equal to the Company's portion of the premium for medical and dental benefits under the Company's group medical and dental plans that the Company was paying on Executive's behalf on the date of termination (which subsidy will be treated as imputed income) for a period of 12 months, with the first payment commencing on the Company's first payroll date after the 60th day following Executive's termination of employment, and such first payment shall include any such amounts that would otherwise be due prior thereto;

(iv) a lump sum amount equal to any earned, but unpaid, Annual Cash Bonus, if any, for the year prior to the year of termination, less taxes and withholdings, which shall be payable on the 60th day following Executive's termination of employment;

(v) a lump sum amount equal to any earned, but unpaid, Base Salary, if any, through the date of Executive's termination of employment, less taxes and withholdings, which shall be payable with the Company's first payroll after Executive's termination of employment; and

(vi) a lump sum amount equal to any unreimbursed business expenses, if any, pursuant to and in accordance with Section 7, incurred through the date of Executive's termination of employment.

(b) Termination Without Cause or For Good Reason following a Change of Control. If, within 12 months following the occurrence of a Change of Control (as defined in the Shareholders Agreement) of Holdings, Executive terminates his employment for Good Reason or the Company terminates Executive's employment with the Company without Cause, Executive shall receive the following, subject to Section 8(g):

(i) an amount equal to the Executive's Base Salary on the date of termination, less taxes and withholdings, payable in substantially equal installments over a period of 12 months in accordance with the Company's normal payroll practices, with payments commencing with the Company's first payroll after the sixtieth (60th) day following Executive's termination of employment, and such first payment shall include any such amounts that would otherwise be due prior thereto;

(ii) an amount equal to the full Target Bonus for the year of termination, less taxes and withholdings, payable in substantially equal installments over a period of 12 months in accordance with the Company's normal payroll practices, with payments commencing with the Company's first payroll after the sixtieth (60th) day following Executive's termination of employment, and such first payment shall include any such amounts that would otherwise be due prior thereto;

(iii) provided that Executive elects to purchase continued healthcare coverage under COBRA, an amount equal to the Company's portion of the premium for medical and dental benefits under the Company's group medical and dental plans that the Company was paying on Executive's behalf on the date of termination (which subsidy will be treated as imputed income) for a period of 12 months, with the first payment commencing on the Company's first payroll date after the 60th day following Executive's termination of employment, and such first payment shall include any such amounts that would otherwise be due prior thereto;

(iv) a lump sum amount equal to any earned, but unpaid, Annual Cash Bonus, if any, for the year prior to the year of termination, less taxes and withholdings, which shall be payable on the 60th day following Executive's termination of employment;

(v) a lump sum amount equal to any earned, but unpaid, Base Salary, if any, through the date of Executive's termination of employment, less taxes and withholdings, which shall be payable on the first payroll date after Executive's termination of employment; and

(vi) a lump sum amount equal to any unreimbursed business expenses, if any, pursuant to and in accordance with Section 7, incurred through the date of Executive's termination of employment. Executive acknowledges and agrees that, in connection with any Change of Control transaction, except as otherwise provided in a separate agreement, Executive shall not be entitled to receive, and shall not be paid, any transaction, success, sale or similar bonus or payment.

(c) Termination Due to Death or Permanent Disability. Executive's employment with the Company shall terminate automatically on Executive's death. In the event of Executive's Permanent Disability, the Company shall be entitled to terminate his employment.

For purposes of this Agreement, the "**Permanent Disability**" of Executive shall mean Executive's inability, because of mental or physical illness or incapacity, whether total or partial, to perform one or more of the material functions of Executive's position with or without reasonable accommodation, for a period of: (i) 90 consecutive calendar days or (ii) an aggregate of 120 days out of any consecutive 12 month period, and which entitles Executive to receive benefits under a disability plan provided by the Company.

In the event of a termination of employment under this section, Executive shall be entitled to following, subject to Section 8(g):

(i) a lump sum amount equal to any earned, but unpaid, Annual Cash Bonus, if any, for the year prior to the year of termination, less taxes and withholdings, payable on the sixtieth (60th) day following Executive's termination of employment;

(ii) a lump sum amount equal to any earned, but unpaid, Base Salary, if any, through the date of Executive's termination of employment, less taxes and withholdings, which shall be payable on the first payroll date after Executive's termination of employment;

(iii) a lump sum amount equal to any unreimbursed business expenses, if any, pursuant to and in accordance with Section 7, incurred through the date of Executive's termination of employment; and

(iv) a pro rata portion of any Annual Cash Bonus, to the extent earned based on actual performance by the Company, that Executive would have been eligible to receive hereunder in the year of termination, based on the percentage of the fiscal year that shall have elapsed through the date of Executive's termination of employment, payable at such time as any such Annual Cash Bonuses are paid to active senior executives of the Company.

(d) Other Terminations. Executive shall not be entitled to the post-termination benefits set forth in Section 8(a), Section 8(b) or Section 8(c) above if his employment with the Company ceases for any reason other than his termination by the Company without Cause, his resignation for Good Reason or his termination as a result of his death or Permanent Disability; it being understood that if Executive's employment with the Company ceases or terminates for any other reason, he will not be entitled to any severance or post-termination benefits or payments, whether

hereunder or pursuant to any policy of the Company, other than a lump sum amount equal to any earned, but unpaid, Base Salary, if any, through the date of Executive's termination of employment, less taxes and withholdings (payable on the first payroll date after Executive's termination of employment), and a lump sum amount equal to any unreimbursed business expenses, if any, pursuant to and in accordance with Section 3(e), incurred through the date of Executive's termination of employment; provided, that this paragraph shall not alter Executive's rights or obligations he may have or be subject to in connection with or with respect to his equity interests in Holdings, and Executive's indemnification rights shall continue to be governed in accordance with any Directors and Officers Liability Insurance Policy that the Company may maintain and/or with the Company's certificate of incorporation or by-bylaws or similar governing document, and otherwise in accordance with Section 7.

(e) Cause Definition. For purposes of this Agreement, "**Cause**" means (i) material failure by Executive to perform Executive's employment duties (other than as a consequence of any illness, accident or disability), (ii) continued, willful failure of Executive to carry out any reasonable lawful direction of the Company, (iii) material failure of Executive to comply with any of the applicable rules of the Company contained in its Employee Handbook or any other Company policy, (iv) fraud, willful malfeasance, gross negligence or recklessness of Executive in the performance of employment duties, (v) willful failure of Executive to comply with any of the material terms of this Agreement, (vi) other serious, willful misconduct of Executive which causes material injury to the Company or its reputation, including, but not limited to, willful or gross misconduct toward any of the Company's other employees, and (vii) conviction of a crime (or a pleading of guilty or nolo contendere), other than one which in the opinion of the Board does not affect Executive's position as an employee of the Company.

(f) Good Reason Definition. For purposes of this Agreement, "Good Reason" shall mean, without the Executive's Consent, (A) the failure of the Company to pay, or cause to be paid, Executive's Base Salary or Bonus, as the case may be, when due, (B) a permanent decrease in the Executive's Base Salary, or a failure by the Company to pay material compensation or provide material benefits due and payable to the Executive under his Employment Agreement, (C) the Company requiring the Executive to be based at any office or location that is more than 50 miles from the Company's current headquarters in Billerica, Massachusetts, or (D) the failure of the Company to cause the transferee or successor to all or substantially all of the assets of the Company to assume by operation of law or contractually the Company's obligations hereunder, and provided further that any of the events described in clauses (A) or (D) of this section shall constitute Good Reason only if the Company fails to cure such event within 30 days after receipt from Executive of written notice of the event which constitutes Good Reason, and provided further, that Good Reason shall cease to exist for an event on the 30 th day following the later of its occurrence or Executive's knowledge thereof, unless Executive has given the Company written notice thereof prior to such date ; For the avoidance of doubt, (x) a change in Executive's reporting relationships, including but not limited to a change in the number of direct or indirect reports to Executive, shall not constitute a material and adverse reduction in Executive's responsibilities, and (y) commensurate with Executive performing his duties Executive will be expected to work at the Company's headquarters in North Billerica, Massachusetts, as necessitated by business demands or as reasonably requested by the Company.

(g) Separation Agreement and General Release. The payments and benefits set forth in Sections 8(a), 8(b) and 8(c) above shall be expressly conditioned upon Executive's (or his estate or legal representatives, in the case of Section 4(c)) execution and delivery to the Company of a Separation Agreement and General Release in a form that is acceptable to the Company (the "**Separation Agreement**") and such Separation Agreement becoming irrevocable within sixty (60) days following Executive's termination of employment; provided, that any payments or benefits otherwise due prior to such sixtieth (60th) day shall be paid on such sixtieth (60th) day. For the avoidance of doubt, the payments and benefits set forth in Sections 8(a), 8(b) and 8(c) above shall be forfeited if such Separation Agreement has not been executed, delivered and become irrevocable within such sixty (60) day period. Such Separation Agreement shall contain release language substantially similar to the language set forth in Exhibit A attached hereto.

e. Board/Committee Resignation. Upon termination of Executive's employment for any reason, Executive agrees to resign, as of the date of such termination and to the extent applicable, from the Board (and any committees thereof) and the Board of Directors (and any committees thereof) of any of the Company's subsidiaries or affiliates.

9. Non-Competition.

a. Executive acknowledges and recognizes the highly competitive nature of the businesses of the Company and its affiliates and accordingly agrees as follows:

(1) During Executive's employment with the Company and, for a period of one year following the date Executive ceases to be employed by the Company (the **"Restricted Period**"), Executive will not, whether on Executive's own behalf or on behalf of or in conjunction with any person, firm, partnership, joint venture, association, corporation or other business organization, entity or enterprise whatsoever (" **Person**"), directly or indirectly solicit or assist in soliciting in competition with the Company, the business of any client or prospective client:

(i) with whom Executive had personal contact or dealings on behalf of the Company during the one-year period preceding Executive's termination of employment;

(ii) with whom employees reporting to Executive had personal contact or dealings on behalf of the Company during the one year immediately preceding the Executive's termination of employment; or

(iii) for whom Executive had direct or indirect responsibility during the one year immediately preceding Executive's termination of employment.

(2) During the Restricted Period, Executive will not directly or indirectly:

(i) engage in any business that competes with the business or businesses of the Company or any of its affiliates, namely in the testing, development and manufacturing services for the development, manufacture, distribution, marketing or sale of radiopharmaceutical products, contrast imaging agents and/or radioactive generators for the global medical imaging and pharmaceutical industries, and including, without limitation, businesses which the Company or its affiliates have specific plans to conduct in the future and as to which Executive is aware of such planning (a **"Competitive Business**");

(ii) enter the employ of, or render any services to, any Person (or any division or controlled or controlling affiliate of any Person) who or which engages in a Competitive Business;

(iii) acquire a financial interest in, or otherwise become actively involved with, any Competitive Business, directly or indirectly, as an individual, partner, shareholder, officer, director, principal, agent, trustee or consultant; or

(iv) interfere with, or attempt to interfere with, business relationships (whether formed before, on or after the date of this Agreement) between the Company or any of its affiliates and customers, clients, suppliers, partners, members or investors of the Company or its affiliates.

(3) Notwithstanding anything to the contrary in this Agreement, Executive may, directly or indirectly, own, solely as an investment, securities of any Person engaged in the business of the Company or its affiliates which are publicly traded on a national or regional stock exchange or on the over-the-counter market if Executive (i) is not a controlling person of, or a member of a group which controls, such Person and (ii) does not, directly or indirectly, own 5% or more of any class of securities of such Person.

(4) During the Restricted Period, Executive will not, whether on Executive's own behalf or on behalf of or in conjunction with any Person, directly or indirectly:

i. solicit or encourage any employee or consultant of the Company or its affiliates to leave the employment of, or cease providing services to, the Company or its affiliates; or

ii. hire any such employee or consultant who was employed by or providing services to the Company or its affiliates as of the date of Executive's termination of employment with the Company or who left the employment of or ceased providing services to the Company or its affiliates coincident with, or within one year prior to or after, the termination of Executive's employment with the Company.

iii. It is expressly understood and agreed that although Executive and the Company consider the restrictions contained in this Section 9 to be reasonable, if a final judicial determination is made by a court of competent jurisdiction that the time or territory or any other restriction contained in this Agreement is an unenforceable restriction against Executive, the provisions of this Agreement shall not be rendered void but shall be deemed

amended to apply as to such maximum time and territory and to such maximum extent as such court may judicially determine or indicate to be enforceable. Alternatively, if any court of competent jurisdiction finds that any restriction contained in this Agreement is unenforceable, and such restriction cannot be amended so as to make it enforceable, such finding shall not affect the enforceability of any of the other restrictions contained herein.

The provisions of this Section 9 shall survive the termination of this Agreement and Executive's employment for any reason.

10. Non-Disparagement. The Executive shall not at any time (whether during or after Executive's employment with the Company) make, or cause to be made, any statement or communicate any information (whether oral or written) that disparages or reflects negatively on the Company or any of its affiliates, except for truthful statements that may be made pursuant to legal process, including without limitation in litigation, arbitration or similar dispute resolution proceedings. This Section 10 shall survive the termination of this Agreement and Executive's employment for any reason.

11. Confidentiality; Intellectual Property .

a. Confidentiality.

(i) Executive will not at any time (whether during or after Executive's employment with the Company) (x) retain or use for the benefit, purposes or account of Executive or any other Person; or (y) disclose, divulge, reveal, communicate, share, transfer or provide access to any Person outside the Company (other than its professional advisers who are bound by confidentiality obligations), any non-public, proprietary or confidential information - including, without limitation, trade secrets, know-how, research and development, software, databases, inventions, processes, formulae, technology, designs and other intellectual property, information concerning finances, investments, profits, pricing, costs, products, services, vendors, customers, clients, partners, investors, personnel, compensation, recruiting, training, advertising, sales, marketing, promotions, government and regulatory activities and approvals - concerning the past, current or future business, activities and operations of the Company, its subsidiaries or affiliates and/or any third party that has disclosed or provided any of same to the Company on a confidential basis **("Confidential Information")** without the prior written authorization of the Board.

(ii) Confidential Information shall not include any information that is (A) generally known to the industry or the public other than as a result of Executive's breach of this covenant or any breach of other confidentiality obligations by third parties; (B) made legitimately available to Executive by a third party without breach of any confidentiality obligation; or (C) required by law to be disclosed; provided that Executive shall give prompt written notice to the Company of such requirement, disclose no more information than is so required, and cooperate with any attempts by the Company to obtain a protective order or similar treatment.

(iii) Except as required by law, Executive will not disclose to anyone, other than Executive's immediate family and legal or financial advisors, the existence or contents of this Agreement; provided that Executive may disclose to any prospective future employer the provisions of Sections 9, 10 and 11 of this Agreement provided they agree to maintain the confidentiality of such terms.

(iv) Upon termination of Executive's employment with the Company for any reason, Executive shall (x) cease and not thereafter commence use of any Confidential Information or intellectual property (including without limitation, any patent, invention, copyright, trade secret, trademark, trade name, logo, domain name or other source indicator) owned or used by the Company, its subsidiaries or affiliates; (y) immediately return to the Company all Company property and destroy, delete, or return to the Company, at the Company's option, all originals and copies in any form or medium (including memoranda, books, papers, plans, computer files, letters and other data) in Executive's possession or control (including any of the foregoing stored or located in Executive's office, home, laptop or other computer, whether or not Company property) that contain Confidential Information or otherwise relate to the business of the Company, its affiliates and subsidiaries, except that Executive may retain only those portions of any personal notes, notebooks and diaries that do not contain any Confidential Information; and (z) notify and fully cooperate with the Company regarding the delivery or destruction of any other Confidential Information of which Executive is or becomes aware and promptly return any other Company property in Executive's possession.

b. Intellectual Property.

(i) If Executive has created, invented, designed, developed, contributed to or improved any works of authorship, inventions, intellectual property, materials, documents or other work product (including without limitation, research, reports, software, databases, systems, applications, presentations, textual works, content, or audiovisual materials) (" **Works**"), either alone or with third parties, prior to Executive's employment by the Company, that are relevant to or implicated by such employment (" **Prior Works**"), Executive hereby grants the Company a perpetual, nonexclusive, royalty-free, worldwide, assignable, sublicensable license under all rights and intellectual property rights (including rights under patent, industrial property, copyright, trademark, trade secret, unfair competition and related laws) therein for all purposes in connection with the Company's current and future business. A list of all such material Works as of the date hereof is attached hereto as Exhibit B.

(ii) If Executive creates, invents, designs, develops, contributes to or improves any Works, either alone or with third parties, at any time during Executive's employment by the Company and within the scope of such employment and/or with the use of any Company resources (" **Company Works**"), Executive shall promptly and fully disclose such works to the Company and hereby irrevocably assigns, transfers and conveys, to the maximum extent permitted by applicable law, all rights and intellectual property rights therein (including rights under patent, industrial property, copyright, trademark, trade secret, unfair competition and related laws) to the Company

to the extent ownership of any such rights does not vest originally in the Company.

(iii) Executive agrees to keep and maintain adequate and current written records (in the form of notes, sketches, drawings, and any other form or media requested by the Company) of all Company Works. The records will be available to and remain the sole property and intellectual property of the Company at all times.

(iv) Executive shall take all requested actions and execute all requested documents (including any licenses or assignments required by a government contract) at the Company's expense (but without further remuneration) to assist the Company in validating, maintaining, protecting, enforcing, perfecting, recording, patenting or registering any of the Company's rights in the Prior Works and Company Works. If the Company is unable for any other reason to secure Executive's signature on any document for this purpose, then Executive hereby irrevocably designates and appoints the Company and its duly authorized officers and agents as Executive's agent and attorney-in-fact, to act for and on Executive's behalf to execute any documents and to do all other lawfully permitted acts in connection with the foregoing.

(v) Executive shall not improperly use for the benefit of, bring to any premises of, divulge, disclose, communicate, reveal, transfer or provide access to, or share with the Company any confidential, proprietary or non-public information or intellectual property relating to a former employer or other third party without the prior written permission of such third party. Executive hereby indemnifies, holds harmless and agrees to defend the Company and its officers, directors, partners, employees, agents and representatives from any breach of the foregoing covenant. Executive shall comply with all relevant policies and guidelines of the Company, including regarding the protection of confidential information and intellectual property and potential conflicts of interest. Executive acknowledges that the Company may amend any such policies and guidelines from time to time, and that Executive remains at all times bound by their most current version.

c. The provisions of this Section 11 shall survive the termination of this Agreement and Executive's employment for any reason.

12. Specific Performance. ·Executive acknowledges and agrees that the Company's remedies at law for a breach or threatened breach of any of the provisions of Section 9, Section 10 or Section 11 would be inadequate and the Company would suffer irreparable damages as a result of such breach or threatened breach. In recognition of this fact, Executive agrees that, in the event of such a breach or threatened breach, in addition to any remedies at law, the Company, without posting any bond, shall be entitled to cease making any payments or providing any benefit otherwise required by this Agreement and obtain equitable relief in the form of specific performance, temporary restraining order, temporary or permanent injunction or any other equitable remedy which may then be available.

13. Miscellaneous.

a. Governing Law. This Agreement shall be governed by, construed and interpreted in all respects, in accordance with the laws of the State of New York, without regard to conflicts of laws principles thereof.

b. Entire Agreement/Amendments. This Agreement contains the entire understanding of the parties with respect to the employment of Executive by the Company and supersedes all prior agreements, understandings, discussions, negotiations and undertakings, whether written or oral between the Executive and the Company or any of its affiliates with respect to the Executive's employment. There are no restrictions, agreements, promises, warranties, covenants or undertakings between the parties with respect to the subject matter herein other than those expressly set forth herein. This Agreement may not be altered, modified, or amended except by written instrument signed by the parties hereto.

c. No Waiver. The failure of a party to insist upon strict adherence to any term of this Agreement on any occasion shall not be considered a waiver of such party's rights or deprive such party of the right thereafter to insist upon strict adherence to that term or any other term of this Agreement.

d. Severability. In the event that any one or more of the provisions of this Agreement shall be or become invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions of this Agreement shall not be affected thereby.

e. Assignment. This Agreement, and all of Executive's rights and duties hereunder, shall not be assignable or delegable by Executive. Any purported assignment or delegation by Executive in violation of the foregoing shall be null and void ab initio and of no force and effect. This Agreement may be assigned by the Company to a person or entity which is an affiliate or a successor in interest to substantially all of the business operations of the Company. Upon such assignment, the rights and obligations of the Company hereunder shall become the rights and obligations of such affiliate or successor person or entity.

f. Set Off. The Company's obligation to pay Executive the amounts provided and to make the arrangements provided hereunder shall be subject to set-off, counterclaim or recoupment of amounts owed by Executive to the Company or its affiliates.

g. Dispute Resolution. Except with respect to Sections 9, 10, 11 and 12 hereof, any controversy or claim arising out of or related to any provision of this Agreement that cannot be mutually resolved by the parties hereto shall be settled by final, binding and nonappealable arbitration in New York, NY by a single mutually-acceptable arbitrator. Subject to the following provisions, the arbitration shall be conducted in accordance with

the applicable rules of American Arbitration Association then in effect. Any award entered by the arbitrator shall be final, binding and nonappealable and judgment may be entered thereon by either party in accordance with applicable law in any court of competent jurisdiction. This arbitration provision shall be specifically enforceable. The arbitrator shall have no authority to modify any provision of this Agreement or to award a remedy for a dispute involving this Agreement other than a benefit specifically provided under or by virtue of the Agreement. Each party shall be responsible for its own expenses relating to the conduct of the arbitration or litigation (including attorney's fees and expenses) and shall share the fees of the American Arbitration Association and the arbitrator equally.

h. Compliance with Section 409A of the Code. The parties acknowledge and agree that the interpretation of Section 409 A of the Code and its application to the terms of this Agreement is uncertain and may be subject to change as additional guidance and interpretations become available. Anything to the contrary herein notwithstanding, all benefits or payments provided by the Company to the Executive that would be deemed to constitute "nonqualified deferred compensation" within the meaning of Section 409A of the Code are intended to comply with Section 409A of the Code. If, however, any such benefit or payment is deemed to not comply with Section 409A of the Code, the Company and the Executive agree to renegotiate in good faith any such benefit or payment (including, without limitation, as to the timing of any severance payments payable hereunder), if possible, so that either (i) Section 409A of the Code will not apply or (ii) compliance with Section 409A ofthe Code will be achieved. The Company shall consult with Executive in good faith regarding the implementation of the provisions of this Section 13(h); provided that neither the Company nor any of its employees or representatives shall have any liability to Executive with respect to thereto.

i. Successors; Binding Agreement. This Agreement shall inure to the benefit of and be binding upon personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees of the parties hereto.

j. Notice. For the purpose of this Agreement, notices and all other communications provided for in the Agreement shall be in writing and shall be deemed to have been duly given when delivered by hand or overnight courier or three days after it has been mailed by United States registered mail, return receipt requested, postage prepaid, addressed to the respective addresses set forth below in this Agreement, or to such other address as either party may have furnished to the other in writing in accordance herewith, except that notice of change of address shall be effective only upon receipt.

If to the Company: Lantheus Medical Imaging, Inc.
331 Treble Cove Rd.
Bldg. 600-2
N. Billerica, MA 01862
Attention: Michael Duffy,
Vice President and General Counsel
Email: Michael.Duffy@lantheus.com

If to Executive: To Executive's address on file with the Company

k. Executive Representation. Executive hereby represents to the Company that (i) Executive has been provided with sufficient opportunity to review this Agreement and has been advised by the Company to conduct such review with an attorney of his choice, and (ii) the execution and delivery of this Agreement by Executive and the Company and the performance by Executive of Executive's duties hereunder shall not constitute a breach of, or otherwise contravene, the terms of any employment agreement or other agreement or policy to which Executive is a party or otherwise bound.

1. Cooperation. Executive shall provide Executive's reasonable cooperation in connection with any action or proceeding (or any appeal from any action or proceeding) which relates to events occurring during Executive's employment hereunder. This provision shall survive any termination of this Agreement or Executive's employment.

m. Withholding Taxes. The Company may withhold from any amounts payable under this Agreement such Federal, state and local taxes as may be required to be withheld pursuant to any applicable law or regulation.

n. Counterparts. This Agreement may be signed in counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

[Signatures on following page]

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the day and year fIrst above written.

Lantheus Medical Imaging, Inc.

/s/ Jeffrey Bailey	/s/ Cesare Orlandi
By: Jeffrey Bailey	Cesare Orlandi
Title: President and Chief Executive Officer	

EXHIBIT A
RELEASE

This RELEASE ("**Release**") dated as of , 20 between Lantheus Medical Imaging, Inc., a Delaware corporation (the " **Company**"), and (the "**Executive**").

WHEREAS, the Company and the Executive previously entered into an employment agreement dated March , 2008 (the " **Employment Agreement**"); and

WHEREAS, the Executive's employment with the Company has terminated effective , 20 ;

NOW, THEREFORE, in consideration of the premises and mutual agreements contained herein and in the Employment Agreement, the Company and the Executive agree as follows:

1. Executive agrees to and does waive any claims he may have for employment by the Company and agrees not to seek such employment or reemployment by the Company in the future. The Executive, on his own behalf and on behalf of his heirs, estate and beneficiaries, further does hereby release the Company, and in such capacities, any of its subsidiaries or affiliates, and each of their respective past, present and future officers, directors, agents, employees, shareholders, investors, employee benefit plans and their administrators or fiduciaries, insurers of any such entities, and its and their successors and assigns and others related to such entities from any and all claims made, to be made, or which might have been made of whatever nature, whether known or unknown, from the beginning of time, including those that arose as a consequence of his employment with the Company, or arising out of the separation from the Company, the severance of such employment relationship, or any act committed or omitted during or after the existence of such employment relationship, all up through and including the date on which this Release is executed, including, but not limited to, those which were, could have been or could be the subject of an administrative or judicial proceeding filed by the Executive or on his behalf under federal, state or local law, whether by statute, regulation, in contract or tort, and including, but not limited to, every claim for front pay, back pay, wages, bonus, fringe benefit, any form of discrimination, wrongful termination, tort, emotional distress, pain and suffering, breach of contract, fraud, defamation, compensatory or punitive damages,interest, attorney's fees, reinstatement or reemployment, and any rights or claims under the Civil Rights Act of 1866, the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. sec. 621, et seq., the Americans with Disabilities Act, the Family and Medical Leave Act, the Civil Rights Act of 1964, Title VII, as amended, the Civil Rights Act of 1991, the Employee Retirement Income Security Act of 1974, as amended, the Equal Pay Act, the Worker Adjustment and Retraining Notification Act, the New York State Human Rights Law, the New York City Human Rights Law, the Massachusetts Civil Rights Act, the Massachusetts Equal Pay and Maternity Benefits Law, the Massachusetts Equal Rights for Elderly and Disabled Law, the Massachusetts Small Necessities Leave Act, the Massachusetts Age Discrimination Law, or any other federal, state or local law relating to employment, discrimination in employment, termination of employment, wages, benefits or otherwise. The Executive acknowledges and agrees that even though claims and facts in addition to those now known or believed by him to exist may subsequently be discovered, it is his intention to fully settle and release all claims he may have against the Company and the persons and entities described above, whether known, unknown or suspected. Employee does not waive his right to have

a charge filed with the Equal Employment Opportunity Commission (" **EEOC**") or any state civil rights agency or to participate in an investigation conducted by the EEOC or any state civil rights agency; however, Employee expressly waives his right to recover any monetary relief should any administrative agency, including but not limited to the EEOC, pursue any claim on Employee's behalf.

2. The Company and the Executive acknowledge and agree that the release contained in Paragraph 1 does not, and shall not be construed to, release or limit the scope of any existing obligation of the Company and/or any of its subsidiaries or affiliates (i) to indemnify the Executive for his acts as an officer or director of the Company and/or its subsidiaries or affiliates in accordance with their respective charters or bylaws or under an indemnification agreement to which the Executive and the Company or any of its subsidiaries are parties or under any applicable Directors and Officers insurance policies or under any applicable law or (ii) to the Executive and his eligible, participating dependents or beneficiaries under any existing group welfare (excluding severance), equity, or retirement plan of the Company in which the Executive and/or such dependents are participants.

3. The Executive acknowledges that before entering into this Release, he has had the opportunity to consult with any attorney or other advisor of the Executive's choice, and the Executive is hereby advised to consult with an attorney. The Executive further acknowledges that by signing this Release, he does so of his own free will and act, that it is his intention to be legally bound by its terms, and that no promises or representations have been made to the Executive by any person to induce the Executive to enter into this Release other than the express terms set forth herein. The Executive further acknowledges that he has carefully read this Release, knows and understands its contents and its binding legal effect, including the waiver and release of claims set forth in Paragraph 1 above.

4. The Executive acknowledges that he has been provided at least 21 days to review the Release. In the event the Executive elects to sign this Release prior to this 21 day period, he agrees that it is a knowing and voluntary waiver of his right to wait the full 21 days. The Executive further understand that he has 7 days after the signing hereof to revoke this Release by so notifying the Company, Lantheus Medical Imaging, Inc., 331 Treble Cove Rd., Bldg. 600-2, N. Billerica, MA 01862, Attention: Michael Duffy in writing, such notice to be received by the Company within the 7 day period. This Release shall not become effective or enforceable, and no payments or benefits under Sections 8(c)(ii)(B),(C) and (D) of the Employment Agreement, as applicable, shall be made or provided, until this seven (7) day revocation period expires without the Executive having revoked this Release.

IN WITNESS WHEREOF, the parties have executed this Release on the date first above written.

Lantbeus Medical Imaging, Inc.

By: _____

Name:
Title:

_____

Employee Name

EXHIBIT B
PRIOR WORKS

[None]

Exhibit 10.49

CONFIDENTIAL TREATMENT REQUESTED

INFORMATION FOR WHICH CONFIDENTIAL TREATMENT HAS BEEN REQUESTED IS OMITTED AND NOTED WITH "**". AN UNREDACTED VERSION OF THIS DOCUMENT HAS ALSO BEEN PROVIDED TO THE SECURITIES AND EXCHANGE COMMISSION.**

CONFIDENTIAL *Execution Version*

MANUFACTURING AND SUPPLY AGREEMENT

This Manufacturing and Supply Agreement (this "Agreement"), dated as of November 12, 2013 (the "Effective Date"), is hereby entered into by and between **Lantheus Medical Imaging, Inc.**, a corporation organized and existing under the laws of Delaware with its principal place of business at 331 Treble Cove Road, North Billerica, MA 01862 ("LMI"), and **Pharmalucence, Inc.**, a corporation organized and existing under the laws of Delaware with a place of business at 29 Dunham Road, Billerica, MA 01862 ("CMO"). LMI and CMO are referred to herein individually as a "Party" and collectively as the "Parties".

RECITALS

WHEREAS, CMO is experienced in the manufacture and supply of products;

WHEREAS, LMI desires that CMO manufacture the Product(s) (as defined below) for and supply the Product(s) to LMI on the terms and conditions set forth in this Agreement; and

WHEREAS, CMO is willing to manufacture the Product(s) for and supply the Product(s) to LMI on the terms and conditions set forth in this Agreement;

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained herein, the Parties, intending to be legally bound, hereby agree as follows:

1. DEFINITIONS

1.1 *Defined terms*. As used herein, the following terms shall have the following meanings:

(a) "Affiliate" means any corporation or other entity which controls, is controlled by, or is under common control with, a Party to this Agreement. A corporation or other entity shall be regarded as in control of another corporation or entity if it owns or directly or indirectly controls more than fifty percent (50%) of the voting stock or other ownership interest of the other corporation or entity, or if it possesses, directly or indirectly, the power to direct or cause the direction of the management and policies of the corporation or other entity or the power to elect or appoint fifty percent (50%) or more of the members of the governing body of the corporation or other entity. For the avoidance of doubt, none of Avista Capital Partners, its associated companies and

entities, their respective successors and assigns, or their own direct and indirect investments (other than Lantheus MI Holdings, Inc. and its direct and indirect subsidiaries) shall be deemed to be Affiliates of LMI.

(b) "API" means, with respect to any Product, the pharmacologically active drug substance described on the applicable Proposal, which can be used to manufacture such Product pursuant to Product's NDA.

(c) "Batch" means a specific quantity of the applicable Product that is intended to have uniform character and quality, within specified limits, and is produced according to a single manufacturing order during the same cycle of manufacture.

(d) "cGMPs" means all applicable current good manufacturing practices, as may be amended or supplemented from time to time, including the current good manufacturing practices required by the FDA pursuant to 21 CFR Parts 210 and 211 and ICH Q7, each as amended from time to time.

(e) "CMC" means (i) manufacturing process development for all presentations of Product; (ii) all chemistry, manufacturing and control procedures necessary for the manufacturing, testing and quality control release of all presentations of the Product; and (iii) sourcing and testing of all raw materials and components used in the production of all presentations of the applicable Product.

(f) "Calendar Quarter" means any period of three consecutive calendar months commencing with the first day of any January, April, July, or October.

(g) "DMF" means a Drug Master File as described in 21 CFR 14.420.

(h) "FDA" means the United States Food and Drug Administration or any successor entity thereto and similar health regulatory agencies in other countries in the Territory.

(i) "Intellectual Property" means all right, title and interest in or relating to intellectual property, whether protected, created or arising under the laws of the United States or any other jurisdiction, including: (i) all patents and applications therefor, including all continuations, divisionals, and continuations-in-part thereof and patents issuing thereon, along with all reissues, reexaminations and extensions thereof; (ii) all copyrights and all mask work, database and design rights, whether or not registered or published, all registrations and recordations thereof and all applications in connection therewith, along with all reversions, extensions and renewals thereof; (iii) all trade secrets; and (iv) all other intellectual property rights arising from or relating to Technology.

(j) "LMI Materials" means the materials supplied by LMI to CMO, as identified in the Proposal(s) (including, but not limited to, the applicable API), which shall be used to manufacture the applicable Product pursuant to the applicable Product NDA.

(k) "Lot" means, with respect to any Product, a Batch, or a specific identified portion of a Batch, which consists of at least the number of vials of such Product set forth on the applicable Proposal.

(l) "NDA" means the New Drug Application and similar regulatory approvals filed with the FDA or other agencies for the applicable Product, and any amendments or Supplemental New Drug Applications thereto, or documents incorporated by reference.

(m) "Product" means the final finished dosage form presentations of any of the product(s) named and described on any of the Proposal(s), which is manufactured pursuant to the applicable Product NDA and suitable for distribution in commerce in the Territory.

(n) "Proposals" means proposals and quotations submitted by CMO to LMI and mutually accepted by both Parties in writing, copies of which shall be attached hereto and shall be automatically deemed incorporated herein by reference. In the event of any conflict between the Proposal(s) and this Agreement, the terms of this Agreement shall control.

(o) "Specifications" means the written specifications for the applicable Product separately agreed to by the Parties in writing, as the same may be amended from time-to-time pursuant to the provisions of Section 2.7, and the quality standards, including tests, analytical procedures and acceptance criteria, that are established to confirm the quality of such Product which are mutually agreed to in writing and contained or referenced in the Master Batch Record for such Product or as otherwise mutually agreed to in writing by the Parties.

(p) "Technology" means, collectively, all information, designs, formulae, algorithms, procedures, methods, techniques, ideas, know-how, research and development, technical data, programs, subroutines, tool design, material specifications, processes, inventions (whether patentable or unpatentable and whether or not reduced to practice), apparatus, design, creations, improvements, works of authorship and other similar materials, and all recordings, graphs, drawings, reports, analyses, and other writings, and other tangible embodiments of the foregoing, in any form whether or not specifically listed herein, and all related technology, that are used in, incorporated in, embodied in, displayed by or relate to, or are used in connection with the foregoing.

(q) "Territory" means all countries or regions in the world.

1.2 *Terms Defined Elsewhere in this Agreement.* For purposes of this Agreement, the following terms have meanings set forth in the sections indicated:

Term	Section
Act	5.1
Agreement	Preamble
CMO	Preamble
Dispute	8.1(a)
DMF	3.4(b)

Force Majeure Event	9.5
Forecast	2.2(a)
Improvements	6.1(a)
Indemnitee	7.3
Indemnitor	7.3
Initial Forecast	2.2(a)
Information	6.2(a)
Liability	7.1
LMI	Preamble
Manufacturing Defect	7.1
Party or Parties	Preamble
Pre-existing Intellectual Property	6.1(a)
Quality Agreements	5.7
Rejection Notice	5.6
Senior Executive	8.1(a)
Subsequent Forecast	2.2(a)
Term	3.1
terminal supply	3.3(c)
TPM EHS Assessment Program	5.8(b)
Transfer Notice	2.5

1.3 *Interpretation.* References in this Agreement to the singular include references to the plural and vice versa. Unless the context otherwise requires, references in this Agreement to Articles, Sections, and Exhibits shall be deemed references to Articles and Sections of, and Exhibits to, this Agreement. Unless the context otherwise requires, the words "hereof", "hereby" and "herein" and words of similar meaning when used in this Agreement refer to this Agreement (together with any Proposal(s)) in its entirety and not to any particular Article, Section or provision of this Agreement. Any reference to any federal, state or local statute or law shall be deemed also to refer to all rules and regulations promulgated thereunder, unless the context requires otherwise.

2. SERVICES

2.1 *Services*.

(a) *Development*. CMO shall perform development services in support of the manufacture of Product(s) as defined by the Proposal(s) and for the pricing set forth for such development services in the Proposal(s). CMO hereby represents and warrants that it has the experience, capability and resources, including but not limited to sufficient personnel and supervisors, to efficiently and expeditiously perform such development services in a professional, competent and timely manner. CMO further represents and warrants that it will at all times devote the necessary personnel and supervisors to perform such development services and that, in fulfilling its obligations, CMO shall assign only persons with the appropriate training and qualifications to perform such services. LMI and CMO shall use commercially reasonable efforts to qualify CMO as a

supplier of the Product named and defined in Proposal #1 dated as of the date hereof under the applicable Product NDA.

(b) *No Debarment*. CMO represents and warrants that neither it, nor any of its employees, agents or consultants performing services under this Agreement, have been debarred, suspended, or otherwise excluded by the FDA or any other regulatory authority from conducting business and, to the best of its knowledge after due inquiry, are not under consideration to be debarred, suspended or otherwise excluded. CMO agrees to notify LMI as soon as practicable upon CMO's learning of the occurrence of any such debarment, conviction, investigation or inquiry relating to a potential debarment, suspension or exclusion, of any person performing services pursuant to this Agreement, agrees that said person shall be immediately prohibited from performing services under this Agreement and agrees that LMI shall have the right to terminate this Agreement therefor immediately upon written notice.

(c) *No Conflict*. CMO warrants and represents that no trade secrets or other confidential information of any other person, firm, corporation, institution or other entity will be wrongfully disclosed by it to LMI or any third party in connection with any of the services called for hereunder. CMO further warrants and represents that none of the provisions of this Agreement, nor the services which will be performed by CMO pursuant to the work to be performed hereunder, contravenes or is in conflict with any agreement of CMO or its Affiliates with, or obligation to, any other person, firm, corporation, institution or other entity including, without limiting the generality of the foregoing, employment agreements, consulting agreements, service agreements, disclosure agreements or agreements for assignment of inventions. CMO shall not subcontract with any third party or use Affiliates or agents to perform any of its obligations hereunder without the prior written consent of LMI (not to be unreasonably withheld, delayed or conditioned). CMO shall cause all of its employees and any permitted subcontractor, agent or Affiliate to be bound by, and to comply with, all confidentiality, quality assurance, regulatory and other obligations and requirements as set forth in this Agreement.

2.2 *Purchase and Sale*. CMO shall manufacture, sell and deliver to LMI, and LMI shall purchase from CMO, the Product(s) on the terms and conditions set forth in this Agreement. The following provisions shall apply with respect to the Product(s):

(a) *Forecasts; Orders*. LMI shall send to CMO a twelve (12) month forecast (the "Initial Forecast") for the type and quantities of Product(s) which LMI expects to have delivered from CMO during such 12-month period. LMI shall provide the Initial Forecast for Product(s) to CMO within **** (****) days after CMO is approved as a supplier of Product(s) under the NDA. LMI shall thereafter update such forecast at least one day prior to the first business day of each calendar quarter thereafter (a "Subsequent Forecast", and together with the Initial Forecast, a "Forecast"), providing CMO with a rolling **** (****) month forecast for Product(s). Each Forecast shall include an estimated number of Batches for each month during the ****-month period covered by such Forecast. Amounts set forth in a Forecast are estimates, to be used for planning purposes only, and Forecasts shall not constitute binding purchase orders, except that the

first **** (****) months of each Forecast shall be binding upon LMI and LMI shall place purchase orders corresponding to the binding portion of such Forecast. CMO will use all commercially reasonable efforts to accommodate any changes in quantities of Product(s) ordered by LMI.

(b) *Purchase Orders; Rejection of Orders*. LMI will provide CMO with a firm purchase order (specifying location(s) of delivery and requested delivery date(s)) at least **** (****) days prior to the earliest delivery date specified in such purchase order. All purchase orders will be sent by facsimile or electronic mail to the address specified by CMO. CMO shall accept each purchase order and confirm the date of manufacturing and shipment within **** (****) business days of receipt thereof. Such purchase order shall be deemed accepted by CMO if CMO does not reject a purchase order within the **** business-day period. In addition, CMO will use all commercially reasonable efforts to ****.

(c) *Prices*. Pricing for Product(s) supplied by CMO shall be as set forth in the applicable Proposal.

(d) *Taxes.* Such prices do not include sales, use, value added or other excise tax. LMI will pay (or, if paid by CMO, reimburse CMO) for all such taxes arising under this Agreement (but not any taxes based upon CMO's income). In lieu thereof, LMI may provide to CMO a tax or other levy exemption certificate acceptable to the taxing or other levying authority.

(e) *Superiority of Agreement*. The terms of this Agreement and of the Quality Agreements shall prevail over any inconsistent terms in any Proposal, purchase order, acknowledgment or invoice, and no additional terms (other than those set forth in this Agreement and the Quality Agreements or allowed pursuant to the terms of this Section 2.2) in a purchase order, acknowledgement or invoice shall be binding on either Party.

2.3 *Delivery*.

(a) *Schedule; Quantities*. CMO will ship, and LMI will take delivery, of all Product(s) within **** (****) days of the applicable delivery date(s) set forth in the applicable accepted purchase order; provided that LMI and CMO may mutually agree to modify any such delivery date(s) at any time prior to actual shipment by CMO; and provided further that, in the event that LMI (or its designee) fails to take delivery of Product(s) within **** (****) days of the originally specified delivery date(s) (other than because Product(s) are appropriately rejected pursuant to Section 5.6), then CMO shall store such Product(s) at a mutually agreed upon storage facility (such agreement not to be unreasonably withheld, conditioned or delayed) at LMI's cost. In the event that CMO, at any time during the term of this Agreement, has reason to believe that it will be unable to perform any of the services under this Agreement or meet the requested delivery date(s) specified in the purchase orders, CMO shall promptly notify LMI in writing of such delay(s) within **** (****) business days of such determination. To the extent that (i) a Lot is delivered **** (****) or more days after the specified delivery date which had previously been accepted by CMO and (ii) such delay is due to CMO's breach,

negligence or willful misconduct, then LMI shall have the right to purchase such Lot if it so desires at **** (****%) of the applicable Batch price.

(b) *Terms of Delivery.* Delivery terms shall be DDP North Billerica, MA (or any other location designated by LMI in writing), at which time risk of loss and responsibility for the Product(s) will transfer to LMI. DDP has the meaning assigned it in the ICC Incoterms, 2010. CMO shall ship the Product(s) using LMI's designated carrier in accordance with LMI's instructions regarding destination, delivery date, temperature control and such other factors as LMI reasonably believes are relevant for purposes of the delivery. CMO shall ship all Product to the locations designated by LMI.

2.4 *Payment Terms.* Invoices will reflect actual quantities and types of Product(s) properly delivered in accordance with the applicable purchase order. All undisputed portions of invoices issued by CMO to LMI shall be paid within **** (****) days after the date of receipt of the corresponding invoice (or as otherwise agreed to by the Parties in writing if prompt payment discounts are made available to LMI by CMO). Such payments shall be made in U.S. dollars by check or wire transfer or by such other method as CMO and LMI shall reasonably designate from time to time. In no event shall LMI be responsible for any payments related to Product(s) for which CMO was unable to satisfy its obligations under this Agreement, whether by Force Majeure Event or otherwise. Interest shall be payable on all undisputed amounts not paid on the due date at a rate of ****% for each month the amounts remain unpaid. If any amount on an undisputed invoice is not paid when due hereunder, without prejudice to any other rights or remedies CMO may have, CMO will be entitled to (i) suspend the manufacturing and delivery of Product(s) until it has received payment in full for all past due amounts and (ii) recover from LMI the costs and expenses incurred in connection with collecting the same (including reasonable and documented costs of investigation and attorneys' fees).

2.5 *Transfer Notice*. LMI shall have the right to qualify itself, any Affiliate or any third party as a manufacturer of any of the Product(s), and to seek and obtain regulatory approval(s) of such manufacturing site or sites. If LMI requires CMO's assistance in connection with such activities, LMI shall notify CMO in writing, specifying the Technology to be transferred ("Transfer Notice"). Upon receipt of such Transfer Notice, the Parties will agree in good faith upon a schedule for commencement and completion of the transfer. Any transfer of Technology under this provision will be pursuant to a protocol established by LMI and shall include the delivery of all applicable Product-specific documents required to carry out the transfer. CMO hereby agrees to perform such transfer in accordance with the protocol and mutually agreed upon schedule in return for reasonable compensation, commensurate with level of effort, market comparables and as agreed between the Parties.

2.6 *Inventory; Packaging Information*. CMO shall, at all times during the Term, maintain inventory levels of components and raw materials required to manufacture the volume of Product(s) forecasted by LMI for **** pursuant to Section 2.2(a) of this Agreement. At CMO's option, within **** (****) **** of the end of each calendar year, LMI shall purchase from CMO, at ****, such raw materials and components in good, saleable condition purchased by CMO in reliance on Forecasts (as set forth above) for the applicable Calendar Quarters that could not be returned to the original supplier by CMO or used by CMO in the supply of Product(s) to LMI during such calendar year due to lower orders of Product(s) than Forecast

through no fault of CMO, unless the Parties reasonably believe that such materials will be used in ****. LMI shall provide CMO with all packaging and labeling information and designs, if applicable, including without limitation, all art work and usage instructions to be applied to each Product (which are the property of LMI, only to be used as set forth herein and returned to LMI upon termination of this Agreement) at least **** (****) days in advance of any requirement that any Product be delivered in packaged form to enable CMO to obtain the necessary packaging materials and meet such delivery requirements (provided, however, CMO shall use all commercially reasonable efforts to accommodate any changes requested by LMI with less than ****-days advance notice). LMI will be fully responsible and liable for the content and format of all labeling and artwork provided by LMI and used in connection with the supply of any Product hereunder. CMO shall be solely responsible for ensuring that the content and format of all labeling and artwork used in connection with the supply of the Product(s), as provided by LMI, are accurately and consistently produced in accordance with the Specifications. The Parties shall cooperate to ensure that all packaging and labeling information and materials are compatible with CMO's equipment and specifications.

2.7 *Changes in Manufacturing Processes*. Any process changes requested by the CMO after establishment of commercial Product supply under a Proposal shall be made by CMO at its cost, but in all instances subject to LMI's prior written approval and the other procedures and requirements set forth in the Quality Agreement. CMO agrees to notify LMI in advance of any such change or improvement that it desires to implement pursuant to the Quality Agremeent in order to assess the impact of such change. Process changes requested by LMI after establishment of commercial Product supply under a Proposal shall be subject to CMO fees in accordance with ****. The Parties will in all events reasonably cooperate with the other Party in effecting any process changes or improvements reasonably requested by such Party and, to the extent such changes constitute Intellectual Property, the Parties shall reasonably cooperate in connection with the preparation, filing and prosecution of any patent applications/patents relating thereto, any such changes and any such patents/applications to constitute Improvements to LMI's Pre-Existing Intellectual Property and Technology pursuant to Section 6.

2.8 *API and Other LMI Materials.*

(a) LMI will supply, at its expense, sufficient quantities of the LMI Materials to CMO's facility **** to enable CMO to meet its obligations hereunder. CMO will provide LMI with an inventory report for the LMI Materials on a **** basis (or as otherwise agreed to by the Parties). All such LMI Materials shall conform to the specifications agreed to by CMO and LMI.

(b) Title to the LMI Materials shall remain at all times with LMI, and CMO shall and hereby does agree to enter into any form of warehouseman or bailee agreement required by a then-current lender to LMI. If any of the LMI Materials are lost or damaged as a result of CMO's acts or omissions (including, but not limited to, in-process failures determined to be the fault of the CMO), at LMI's option, CMO shall (i) reimburse LMI for ****, or (ii) allow LMI a purchase price credit equal to ****, which purchase price credit shall be applied, at LMI's direction, against future purchase orders of any product manufactured by CMO for LMI. Any credits hereunder not settled within

**** (****)**** of issuance, or within **** (****) days of the effective date of any termination or expiration of this Agreement, will be refunded to LMI.

3. TERM; TERMINATION

3.1 *Term; Renewal.* Unless terminated sooner in accordance with the terms of this Agreement, this Agreement shall commence on the Effective Date and shall have an initial term of five (5) years. LMI shall have the right to extend this Agreement for an additional five (5) year period upon written notice to CMO; provided that each Party shall have the right to terminate this Agreement for any or no reason at any time during such additional five (5) year period by providing the other Party at least thirty (30) months advance written notice of such termination. The initial term and any additional period shall be referred to collectively as the "Term".

3.2 *Termination by Mutual Agreement.* This Agreement may be terminated by mutual written agreement of CMO and LMI at any time.

3.3 *Termination for Cause.* This Agreement may be terminated by a Party as follows:

(a) If a Party files a petition or similar action for its protection or is the subject of an involuntary petition or similar action not dismissed within ninety (90) days, under bankruptcy, insolvency, reorganization or receivership law, or such Party is placed in receivership or makes an assignment for benefit of creditors, the other Party may elect to terminate this Agreement immediately by written notice to the first Party without prejudice to any right or remedy the other Party may have under the Agreement, including damages for breach, if any.

(b) In the event that a Party materially defaults under or materially breaches any of the provisions of this Agreement or the Quality Agreements, the other Party shall have the right to terminate this Agreement upon sixty (60) days' prior written notice, unless such material default or breach is cured during such sixty (60) day period (or in the event any breach is incapable of being cured in such time period, the other Party presents a plan to attempt cure of such breach and prevent similar breaches, which plan is reasonably acceptable to the terminating Party), in which event this Agreement shall continue in full force and effect.

(c) If LMI is the Party with the right to terminate this Agreement in accordance with Sections 3.3(b) due to the uncured material breach of CMO, LMI shall have the option to delay the termination and continue to have CMO supply LMI under this Agreement upon written notice to CMO detailing the same, until such time as (i) the Technology transfer described in Section 2.5 is complete and LMI has qualified and obtained regulatory approval for itself, an Affiliate or a third party as manufacturer of Product(s) or (ii) CMO delivers a terminal supply of Product(s) (at ****) under Section 3.4(d) of this Agreement. For purposes of this Agreement, "terminal supply" means the amount of Product(s) reasonably requested by LMI so as to avoid any disruption to LMI's supply or sale of Product (s), including during any commercially reasonable

Technology transfer period described in Section 2.5. CMO shall be responsible for any costs or expenses reasonably incurred by LMI as a result of CMO's breach.

3.4 *Effect of Expiration or Termination; Accrued Rights; Surviving Obligations*. Upon any expiration or termination of this Agreement:

(a) *Product on Hand*. CMO shall notify LMI of the amount and type of Product(s) it has on hand as of the effective date of any termination or expiration as a result of purchase orders placed by LMI, and LMI shall purchase such Product(s) at the applicable price as set forth in the applicable Proposal, but LMI shall not be required to purchase any Product(s) (i) that fail to meet Specifications, (ii) for which CMO is unable to provide the certificates of analysis specified in Section 5.4 of this Agreement, (iii) for which CMO is unable to provide the certificates of manufacturing compliance specified in Section 5.5, or (iv) that are appropriately rejected by LMI pursuant to Section 5.6. In addition LMI shall purchase from CMO, within **** (****) days of CMO's request, at ****, unused raw materials or components (such as vials, stoppers, sealers) purchased by CMO pursuant to the inventory requirements described in Section 2.6 to the extent such materials or components are in good, saleable condition and cannot be returned to the original supplier by CMO (if such return is requested by LMI).

(b) *Regulatory Information*. On and as of the effective date of any termination or expiration, or such earlier date as LMI may reasonably request prior to an upcoming termination or expiration, CMO shall promptly transfer to LMI or its nominee all information and Technology in CMO's possession and used in connection with the manufacture of the Product(s), all information and Technology relevant to specific methods of applicable Product manufacture or applicable Product characterization or testing, all information relevant to obtaining an FDA regulatory approval and any other applicable regulatory approval of the Product(s), all information contained in CMO's regulatory submissions in connection with the development and approval of the Product (s), and all other information relating to the manufacture of the Product(s), which is useful to enable LMI or a third party to manufacture and obtain regulatory approval for the Product(s). LMI has the right to use such information in regulatory submissions in order to gain or maintain approval to sell products containing the Product(s) or to aid in investigations. CMO will cooperate with LMI in providing reasonably necessary assistance to LMI in support of LMI's efforts to obtain or maintain approval to sell products containing the Product(s) and to aid in investigations. LMI and its nominees may only use any Information of CMO received pursuant to this Section 3.4(b) in connection with the Product(s). Upon request by LMI, CMO will prepare and file a Drug Master File (" DMF") in CMO's name for the manufacture of the Product(s). In the event that CMO is unable for any reason to supply LMI's requirements of Product(s), then LMI may use CMO's batch records and DMF solely for the purpose of making or having made Product(s). In such event, such batch records and DMF may be disclosed to third parties by LMI, but only subject to written agreements obligating such third parties to keep such batch records and DMF in confidence in accordance with the terms of this Agreement. In such event, CMO will cooperate with LMI and any such third party to optimize the ability and speed of LMI and any such third party to successfully manufacture Product(s).

(c) *Orders in Progress.* In the event of any termination or expiration of this Agreement, CMO shall, unless such termination has occurred because of a material uncured breach or default by LMI under this Agreement, notwithstanding the effective date of any termination or expiration, upon written request of LMI, complete any purchase orders for Product(s) that were placed by LMI and accepted by CMO prior to such date and LMI shall pay CMO for any Product(s) produced in accordance with such purchase orders at the applicable price and on the terms set forth in this Agreement.

(d) *Terminal Supply; Post-Termination or Expiration Acceptance of Orders*. Unless CMO terminates this Agreement pursuant to Sections 3.3(b), upon LMI's request, CMO shall use commercially reasonable efforts to provide LMI with a terminal supply of Product(s) (at ****) so as to minimize disruption of LMI's supply or sale of Product(s). Any acceptance by CMO of any purchase order from LMI or the sale of any Product(s) by CMO to LMI after the delivery of notice of termination or after the expiration or termination of the Term shall not be construed as a renewal or extension of this Agreement or as a waiver of termination thereof.

(e) *Prior Obligations*. Termination or expiration of this Agreement, in whole or in part, for any reason shall be without prejudice to any rights which shall have accrued to the benefit of either Party prior to such termination or expiration, and such termination or expiration shall not relieve either Party from obligations which are expressly indicated to survive termination or expiration of the Term.

4. REGULATORY ISSUES.

4.1 *Regulatory Obligations*. Unless otherwise noted in the Quality Agreement, all obligations relating to the NDA shall, at all times during the Term, remain with LMI, including without limitation (a) the obligation to prepare and make any updates or amendments to the NDA or CMC, (b) to pay any fees or other costs associated with such filings, or (c) to collect, investigate and report to the FDA and other appropriate regulatory authorities any NDA-related adverse experience reports, quality reports, and complaint reports. CMO shall provide LMI with access to any such information reasonably required to enable LMI to comply with its obligations under this Section 4.1. CMO shall remain solely responsible, at CMO's expense (except as provided in the following sentence), for compliance with (i) cGMPs (including any comparable requirements imposed by foreign authorities, but limited to those jurisdictions that are within the Territory as set forth in any amendment to this Agreement); (ii) obtaining or maintaining establishment registrations and all other required permits and licenses for all relevant facilities; and (iii) the preparation and submission of all records and reports required by FDA and other appropriate regulatory authorities in connection with the manufacture and sale to LMI of the Product, including, without limitation, updating the DMF in countries or regions within the Territory and providing LMI with the necessary DMF Authorization Letters, if applicable. The allocation of **** shall be mutually determined by the Parties reasonably and in good faith, taking into consideration ****. All information, documents and updates with regard to, relating to, or otherwise affecting, the Product or the manufacture, testing or shipping of Product which are required or requested by any governmental agency shall be provided by CMO to such agency in a timely manner (in each case, after providing LMI with (x) such information, documents and updates, (y) a reasonable opportunity to confer and comment on such information, documents

and updates and (z) good faith consideration of any such conference and comments, in each case, reasonably in advance of submitting such information, documents and updates to such agency), and CMO shall submit to all inquiries and inspections by any such agencies (and notify, confer with, and in good fath consider the comments of, LMI reasonably in advance of (or, if not possible, immediately following) any such inquiries and inspections). CMO agrees to notify LMI of (and provide LMI with copies of any documentation relating to, and summaries of any unwritten communications relating to) any regulatory, civil or criminal proceedings, investigations, warnings or other adverse actions relating to any actual or alleged violations of applicable laws or regulations relating to, arising out of or, or otherwise in connection with, its manufacture of the Product. CMO shall keep records of the manufacture, testing and shipping of the Product(s), and retain samples of such Product(s) that are necessary to comply with manufacturing regulatory requirements as well as to assist with resolving product complaints and other similar investigations. Copies of such records and samples shall be made available to LMI upon its request and shall be retained by CMO and be available to LMI for a period of **** (****) years following the date of manufacture, or longer if required by law.

4.2 *Product Recalls*.

(a) If either Party reasonably decides such Party is required to initiate a Product recall, withdrawal or field correction with respect to, or if there is any governmental seizure of, the Product(s), then the Parties will initiate and conduct any such recall pursuant to the terms set forth in the Quality Agreement.

(b) To the extent that any such recall, withdrawal, field correction or seizure occurs due to (i) failure of any Product(s) produced by CMO hereunder to conform to Specifications (including being adulterated or misbranded, but excluding the failure of any LMI Materials to conform to their respective specifications other than due to CMO's fault) or any warranty or other requirement set forth in this Agreement (it being acknowledged and agreed by the Parties that compliance with release Specifications followed by a legitimate field complaint shall not be deemed to be a failure to conform to Specifications), (ii) the failure of CMO to comply in all material respects with any applicable law, rule, regulation, guideline, standard, court order or decree or (iii) the negligent or intentional wrongful act or omission of CMO in connection with the production of Product(s) hereunder, then CMO shall bear the cost and expense of any such seizure, recall, withdrawal or field correction (including reimbursement for any purchase price payments made to CMO and related taxes or credits to the extent related to such recalled Product(s)). To the extent that any such recall, withdrawal, field correction or seizure occurs due to any reason other than that set forth in the immediately preceding sentence, then LMI shall bear the cost and expense of any such seizure, recall, withdrawal or field correction with respect to the Product(s) recalled by LMI. If both CMO and other factors contribute to the cause of a seizure, recall, withdrawal or field correction, then the cost and expense thereof will be shared in proportion to CMO's and such other factors' respective contributions to the problem with respect to the Product(s) recalled by LMI. For the purposes of this Agreement, the expenses of any recall, withdrawal, field correction or seizure shall include, without limitation, the out-of-pocket expenses of notification and destruction or return of the recalled Product(s) and all other out-of-pocket costs or credits incurred in connection with such recall.

4.3 *Sharing of Information*. CMO shall promptly advise LMI of any information of which it obtains knowledge that may affect the safety, efficacy or labelling of the Product(s) and any actions in response to such information.

4.4. *Adverse Events and Product Quality Complaints*. The Parties agree to the following provisions regarding adverse events and complaints:

(a) LMI shall be responsible to report adverse events involving the products sold by LMI to the FDA and other regulatory authorities, and (b) respond to quality complaints and medical and technical inquiries, respecting such LMI products.

(b) In the event CMO (i) receives information regarding any adverse event relating to the products sold by LMI, (ii) receives any complaints relating to the Products sold by LMI, (iii) receives any medical or technical inquiry relating to the Products sold by LMI, (iv) discovers or is notified of any material defect in the Products sold by LMI, it shall immediately notify LMI, through its agent for global pharmacovigilance, or (iv) discovers or is notified of any facts, circumstances or occurrences that do or could adversely affect the Product manufactured on LMI's behalf, as follows (or to such other address, contact person, telephone number, facsimile number or e mail address as may be specified by LMI):

Prior to January 1, 2014*:*

Phone	Fax	Email
#-###-###-#### or ###-###-####	#-###-###-#### or ###-###-####	****

On and following January 1, 2014:

To the address, contact person, telephone number, facsimile number or email address that LMI will specify pursuant to a separate written notice after the date of this Agreement.

CMO shall also conduct an investigation of such event pursuant to the requirements set forth in the Quality Agreement. The Parties shall reasonably cooperate with and assist each other in connection with any such matter. In addition, CMO will ensure that all relevant personnel are sufficiently informed and trained on the terms and procedures outlined in this Agreement, including without limitation, the process for the receipt, recordation, exchange, communication and submission of safety data for the Product(s) and all relevant regulations and laws thereto. CMO agrees to document the training activities, including the training material(s) used, and make these documents reasonably accessible to LMI upon request.

5. WARRANTIES AND QUALITY ASSURANCE

5.1 *CMO Warranties.* CMO represents and warrants that it has the full right and authority to enter into this Agreement, and that it is not aware of any impediment that would inhibit its ability to perform its obligations hereunder. CMO further represents and warrants that

all Product delivered to LMI: (a) will have been manufactured, packaged, labeled, tested and/or re-tested in compliance with applicable provisions of the Federal Food, Drug and Cosmetic Act (the "Act"), regulations thereunder, and any other comparable laws and regulations applicable in the Territory where the Product(s) are being distributed, relating to development, manufacture and supply under this Agreement, and in compliance with the specific U.S. or other applicable regulatory approvals regarding the Product(s); (b) shall conform to the Specifications; (c) shall comply with the Quality Agreement, the Master Batch Record and the cGMPs where the Product(s) are being distributed; and (d) will, at the time of such delivery, not be adulterated within the meaning of the Act or other applicable law where the Product(s) are being distributed, as such Act or law is constituted and effective at the time of delivery, and will not be an article which may not, under the provisions of such Act, be introduced into interstate commerce. CMO further represents and warrants that there are no outstanding regulatory, civil or criminal proceedings, investigations, warnings or other adverse actions relating to any actual or alleged violations of applicable laws or regulations relating to, arising out of or, or otherwise in connection with, its manufacture of the Product. CMO further represents and warrants that its facility shall conform to cGMP and other applicable laws of such jurisdictions in the Territory where Product(s) are being distributed and regulations and that the services provided by CMO and the use, practice or exploitation of the Technology or Intellectual Property provided by CMO shall not infringe, violate or misappropriate the intellectual property rights of any third party and that CMO holds all patents, trademarks and licenses necessary to manufacture and supply the Product(s) and that CMO's performance under this Agreement will not infringe upon the patent, trademark, licensing or other rights of anyone. At the time of delivery, the Product(s) shall have a minimum shelf life of not less than **** (****) **** less than the maximum shelf life set forth in the Specifications.

5.2 *LMI Warranties.* LMI represents, warrants and covenants that:

(a) it has the full right and authority to enter into this Agreement, and that it is not aware of any impediment that would inhibit its ability to perform its obligations hereunder;

(b) the marketing, distribution and sale of Product(s) shall comply with the Act and all other applicable laws, rules and regulations; and

(c) all laboratory, scientific, technical and/or other data submitted by LMI to CMO relating to the Product(s) shall be complete and correct and shall not contain any material misrepresentation or omission.

5.3 ***DISCLAIMER OF ALL OTHER WARRANTIES***. THE WARRANTIES SET FORTH IN THIS AGREEMENT ARE THE PARTIES' ONLY WARRANTIES WITH RESPECT TO THE SUBJECT MATTER OF THIS AGREEMENT AND ARE MADE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, WHICH ARE HEREBY DISCLAIMED, INCLUDING ANY IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, ORARISING FROM THE COURSE OF PERFORMANCE, COURSE OF DEALING OR USAGE OF TRADE OR OTHERWISE.

5.4 *Certificates of Analysis*. CMO shall perform, or cause to be performed, sample tests on each Lot or Batch of Product(s) supplied pursuant to this Agreement and Quality Agreement before delivery to LMI (or its designee), and shall produce a test report setting forth the results of such testing. Each test report shall set forth, for each Lot or Batch of Product(s) delivered hereunder, the items tested, specifications and test results in a certificate of analysis, containing the types of information reasonably agreed upon by CMO and LMI. CMO shall send such certificates to LMI (and its designee, as applicable) concurrent with delivery of each Lot or Batch of Product.

5.5 *Certificates of Manufacturing Compliance*. CMO shall perform such quality control and quality assurance testing and review as is specified in the applicable Proposal(s) or otherwise agreed to by the Parties in writing to ensure that the Product(s) comply with all manufacturing requirements and specifications. CMO shall provide or cause to be provided for each Lot or Batch of Product(s) purchased under this Agreement a certificate of manufacturing compliance, containing the type of information reasonably agreed upon by CMO and LMI, per the Quality Agreement which will certify that each Lot or Batch of Product(s) was manufactured in accordance with the Specifications and cGMP, including without limitation 21 CFR 210 and 211 and ICH Q7, as the same may be amended from time to time. CMO shall send such certificates to LMI (and its designee, as applicable) concurrent with delivery of each Lot or Batch of Product(s). CMO agrees that it shall maintain all of the facilities used for the manufacture of the Product(s) in material compliance with all applicable state, local, federal or international laws and regulations and shall permit the relevant governmental agencies to inspect the manufacturing facilities used for the manufacture of the Product(s) whenever deemed necessary by such agencies. CMO shall advise LMI **** if an authorized agent of the FDA or other governmental agency visits any of CMO's facilities where any Product is being manufactured, or where any component of any Product is manufactured, processed or controlled, or of any official contact concerning any Product; provided, however, that LMI shall have the right to be present for all scheduled inspections relating to the manufacture of any Product. CMO shall furnish to LMI the portion of the report by such agency that relates to such visit to the extent that such report relates to any Product, within (i) **** of CMO's receipt of such report if such report relates to urgent matters such as a recall of any Product, facility shutdown or similar events and (ii) **** after CMO's receipt of such report for other matters. In addition to the observation rights set forth herein and in the applicable Proposal(s), upon reasonable advance notice to CMO, CMO shall allow LMI and its consultants (subject to entering into suitable confidentially agreements reasonably acceptable to CMO) reasonable access during normal business hours throughout the Term to any of CMO's facilities where any Product is being manufactured, or where any component of any Product is manufactured, processed or controlled to verify compliance with CMO's obligations under this Agreement or the Quality Agreement. Notwithstanding anything to the contrary hereunder, LMI shall have the right to postpone all pending and future purchase orders hereunder (and adjust all Forecasts accordingly), without penalty, in the event of (i) any such notices, observations or communications; (ii) any regulatory or other concerns under the applicable laws or regulations; (iii) any material issues with the supply of Product(s) hereunder (including, but not limited to, atypical manufacturing deviations of the sort requiring investigation); (iv) any consent decree; or (v) violations of any of any Product quality provisions of this Agreement or the Quality Agreement.

5.6 *Acceptance*.

(a) LMI shall have **** (****) days from the date of receipt of the shipment of any Product, the corresponding certificate of analysis and the corresponding certificate of manufacturing compliance to confirm conformance with the applicable Specifications and to claim any shortage in quantity of any shipment of any Product. Any notice of rejection or shortage of any shipment of any Product must be given in writing ("Rejection Notice"), must contain a report of the reason for such rejection or shortage and be received by CMO within said **** (****) day period or such shipment will be deemed to have been accepted; provided, however that this limitation shall not apply to hidden or latent defects, it being understood that in that case, LMI shall have **** (****) days from the date it becomes aware of any hidden or latent defect to reject any Product in accordance with applicable terms and conditions hereof. CMO shall assist in necessary analytical Technology transfers to accomplish such testing by LMI.

(b) Upon receipt of a Rejection Notice, CMO shall have **** (****) days to notify LMI as to whether it agrees that the subject Product deviates from the Specifications. If CMO disagrees with the contents of such Rejection Notice, it shall so advise LMI by notice in writing within **** (****) days after receipt of such Rejection Notice. If LMI and CMO fail to agree within **** (****) days after CMO's notice to LMI as to whether any Product identified in the Rejection Notice deviates from the applicable Specifications, the parties shall mutually determine an independent laboratory to evaluate whether such Product deviates from the Specifications. All retesting shall be performed in accordance with LMI retesting procedures and cGMP. The evaluation shall be binding on the parties, and if such evaluation certifies that any Product deviates from the applicable Specifications, LMI may reject that Product. Notwithstanding anything to the contrary, in the event LMI rejects any Product as provided hereunder, CMO shall ****, if LMI so requests.

(c) Subject to the provisions of Section 5.6(a), LMI has the right to reject and return, at the expense of CMO and for ****, any portion of any shipment which deviates from the applicable Specifications, without invalidating the remainder of the purchase order, to the extent that such deviation arises from CMO's failure to manufacture the applicable Product in accordance with the applicable Specifications. All reasonable expenses incurred pursuant to this Section 5.6, including those of an independent laboratory, shall be paid by the Party against whom the dispute is decided.

5.7 *Quality Agreements*. The Parties agree that, within **** (****) days of the date hereof,they will enter into one or more separate quality agreements that will cover arrangements for quality control, testing documentation, quality assurance and other related matters (the " Quality Agreements"). The Parties acknowledge that stability testing for any Product manufactured during the Term will continue after termination or expiration of the Agreement for the Product(s)' remaining shelf life, unless LMI decides in its sole discretion to undertake such stability testing or to assign such responsibilities to a third party.

5.8 *Health, Safety and Environmental Compliance*.

(a) Manufacturing operations are to be performed by CMO using appropriate safety measures and containment techniques as dictated by applicable law, regulations and industry standards. CMO shall be solely responsible for implementing and maintaining health and safety procedures for the manufacture of Product and performance of services under this agreement and for the handling of any materials or hazardous waste used in or generated by such activities. CMO, in consultation with LMI, shall develop safety and handling procedures for Product; provided, however, that LMI shall have no responsibility for CMO's health and safety program. The generation, collection, storage, handling, transportation, movement and release of hazardous materials and waste generated in connection with the manufacture of any Product and other services under this Agreement shall be the responsibility of CMO, at CMO's cost and expense, unless otherwise agreed to in writing by the Parties for special situations and conditions. Without limiting other legally applicable requirements, CMO shall prepare, execute and maintain, as the generator of waste, all licenses, registrations, approvals and authorizations, notices, shipping documents and waste manifests required under applicable law and regulations.

(b) LMI has established a program for systematic assessment of its supplier's EHS programs (" TPM EHS Assessment Program ") and CMO agrees to participate and reasonably cooperate with LMI in effectively implementing this TPM EHS Assessment Program.

(c) CMO will review LMI's TPM EHS Assessment Program and cooperate with LMI in developing a reasonable plan for CMO's compliance with respect to the Product(s). Specifically and subject to the foregoing, CMO agrees to:

(i) promptly respond to reasonable requests from LMI for non-confidential information made as part of LMI's TPM EHS Assessment Program; LMI will provide a questionnaire to CMO and CMO is expected to provide the complete response within **** (****) days;

(ii) reasonably cooperate with LMI to clarify and supplement any information related to its facilities and operations; and

(iii) provide to LMI, upon request, copies of CMO's environmental, health and safety permits required by any governmental authority which are associated with the Product(s) and all facility operation related thereto.

(d) CMO agrees that LMI or its appointed agent(s) (subject to entering into suitable confidentiality agreements reasonably acceptable to CMO, provided such agents(s) are reasonably acceptable to CMO) shall be entitled to conduct inspections and audits no more than once per year upon **** notice and mutually convenient times of any areas or facilities used to produce the Product(s) or required for production of the Product(s) in order (i) to assist in completion of LMI's TPM EHS Assessment Program and (ii) to allow for a loss prevention inspection of the facility by LMI's insurance

underwriting company as necessary for LMI to obtain contingent business interruption insurance; provided that, if LMI discovers any issues during such audit or inspection requiring remediation, then LMI shall be entitled to reaudit or reinspect such areas or facilities under this Section 5.9(d) within the later of **** (****) days or CMO's written notice to LMI that such remediation has been completed.

(e) CMO shall take reasonable and appropriate precautions to ensure that its personnel (including its employees, contractors and agents) are protected from the Product and/or the Product's manufacturing process exposures through either engineering infrastructure, personnel protective equipment or a combination of both. Upon request, within **** (****) days, CMO shall provide workplace monitoring data which demonstrates the effectiveness of controls.

5.9 *Facility*. CMO shall perform all services under this Agreement at the agreed upon facility located at ****. CMO shall not change the location of such facility or use any additional facility for the performance of services under this Agreement without the prior written consent of LMI, such consent not to be unreasonably withheld, delayed or conditioned. CMO will be responsible for all applicable costs and expenses in connection with any such change of location of the facility or use of any additional facility for the performance of services under this Agreement (including, but not limited to, costs for qualification and validation batches).

6. INTELLECTUAL PROPERTY; NONDISCLOSURE; CONFIDENTIALITY

6.1 *Intellectual Property*.

(a) As between the Parties, subject to the licenses granted under Section 6.1(b) and (c) below, each Party retains all right, title and interest in and to the Intellectual Property and Technology that each Party currently owns, licenses and/or uses to the extent related to the purposes of this Agreement ("Pre-Existing Intellectual Property and Technology"). Under no circumstances will the licenses granted in Section 6.1(b) or (c) below be construed as a sale of any of the Pre-Existing Intellectual Property and Technology by either Party. As between the Parties, each Party shall, subject to the licenses granted in Section 6.1(b) and (c) below, own all right, title and interest in and to any modifications, derivative works, enhancements or improvements of or to any of the Pre-Existing Intellectual Property and Technology related to this Agreement that such Party creates, develops, discovers, conceives and/or reduces to practice in the course of performing under this Agreement (" Improvements"); provided, however, CMO agrees that LMI shall own, and shall and hereby does assign to LMI, all right, title and interest in and to all **** to the extent ****. Subject to the foregoing, the Parties shall jointly own and have the right to use and license (without accounting to the other) all inventions and developments, whether modifications, derivative works, enhancements or improvements to any Intellectual Property and/or Technology related to this Agreement, which are jointly created or developed during the Term.

(b) CMO hereby grants to LMI a **** license, with right to sublicense, in and to all CMO-owned Pre-Existing Intellectual Property and Technology and Improvements relating to such Pre-Existing Intellectual Property and Technology for use in connection

with the Product(s). This license shall **** of the Agreement and shall be included within **** in Sections 2.5 and 3.3.

(c) LMI hereby grants to CMO a **** license, with right to sublicense to LMI-approved subcontractors, in and to all LMI-owned Pre-Existing Intellectual Property and Technology and Improvements relating to such Pre-Existing Intellectual Property and Technology solely for use in connection with development and manufacturing of the Product(s) hereunder for LMI. This license shall **** of the Agreement.

6.2 *Nondisclosure and **** Obligations*.

(a) Except as otherwise specifically contemplated by Section 2.5 or as provided in this Section 6, during the Term of this Agreement and for a period of **** thereafter, both Parties shall maintain in confidence (i.e., not disclose to any third party) and use only for purposes specifically authorized under this Agreement Information received from or on behalf of the other Party, whether such Information is contained in a written or electronic document, whether it is oral or whether it is disclosed by means of inspection. " Information" shall mean any and all non-public, confidential, trade secret, proprietary information or data, in any form, whether oral, written, electronic, graphic or tangible, and all copies thereof, relating to the Product(s) or either Party's business, including, but not restricted to, marketing plans and strategies, software codes, software, products, materials, sales figures, methods, know-how, manufacturing, packaging, distribution, inventions, research or development plans and the like that will be disclosed by or on behalf of one Party to the other.

(b) For purposes of clarity, CMO acknowledges and agrees that LMI's "Information" includes, without limitation, **** developed by CMO for LMI in connection with the services described herein, and any ****. To the extent it is reasonably necessary or appropriate to fulfill its obligations or exercise its rights under this Agreement, a Party may disclose Information it is otherwise obligated under this Section not to disclose, to its Affiliates, employees, officers, directors, lenders, sublicensees, consultants, outside contractors and clinical investigators (collectively, "Representatives") on a need-to-know basis and on condition that such entities or persons are directed to only use such Information for purposes specifically authorized under this Agreement and to keep the Information confidential for the same time periods and to the same extent as such Party is required to keep the Information confidential; notwithstanding the foregoing the Party so disclosing Information will be liable to the other Party hereunder for any misuse or improper disclosure of any such Information by any such firms or individuals. A Party or its Representatives may disclose such Information to government or other regulatory authorities to the extent that such disclosure is reasonably necessary to obtain patents or authorizations to conduct clinical trials of, and to commercially market, the Product(s). The obligation not to disclose Information shall not apply to any part of such Information that (i) is or becomes part of the public domain other than by disclosure by the receiving Party or its Representatives in breach of this Agreement, (ii) can be shown by written documents to have been disclosed to the receiving Party or its Representatives by a third party, provided such Information

was not obtained by such third party directly or indirectly from the other Party or its Representatives subject to confidentiality obligations or duties, (iii) prior to disclosure under this Agreement can be shown by written documents to have been already in the possession of the receiving Party or its Representatives, provided such Information was not obtained directly or indirectly from the other Party under this Agreement pursuant to a confidentiality agreement, or (iv) can be shown by written documents to have been independently developed outside of this Agreement by the receiving Party or its Affiliates without reference to the Information or breach of any of the provisions of this Agreement. The Party asserting the applicability of one of the exclusions set forth in the immediately preceding sentence shall have the burden of proving the applicability of any such exclusion in any particular circumstance. If a receiving Party is required to disclose Information of the other Party pursuant to interrogatories, requests for information or documents, subpoena, civil investigative demand of a court or governmental agency, it shall use commercially reasonable efforts to do so on a confidential basis (and provided that the disclosing Party furnishes only that portion of the Information which is legally required), and, in any event, it shall provide (if legally permissible) the other Party prompt notice after receipt of any such official requests to enable the other Party to seek a protective order or similar relief.

(c) CMO understands and acknowledges that Information, Intellectual Property, and Technology relating to LMI's products has been developed or obtained by the investment of significant time, effort and expense by LMI, and that such Information, Intellectual Property, and Technology is a valuable, special and unique asset of LMI which provides LMI with a significant commercial advantage, and needs to be protected from improper use and disclosure (including, but not limited to, any improper use by CMO and its Representatives). CMO further recognizes that **** and, as a result, CMO agrees not to undertake, in any manner, directly or indirectly for itself, its Affiliates, or any third party, **** **** during ****. For purposes of this Agreement, "****" includes ****. CMO agrees that there may be no adequate remedy at law for any such breach and, upon any such breach or any threat thereof, LMI shall be entitled to appropriate equitable relief, including injunctive relief, in addition to whatever other remedies it might be entitled. Such additional remedies will include, without limitation, LMI's reasonable attorney's fees, court costs and related expenses in connection with the investigation of such activities and the enforcement of this provision. In addition, in order to protect against the disclosure of LMI's Information, upon termination or expiration of this Agreement, or as otherwise requested by LMI, CMO will promptly deliver to LMI or, at the request of LMI, destroy all copies of the Information in its possession; provided, in each case, that CMO may retain, in a secure location, a copy of such documents and records for purposes of defending any legal proceedings or as is required to be maintained in order to satisfy any law, rule, or regulation to which CMO is subject.

6.3 *Terms of this Agreement.*

(a) LMI and CMO each agree not to disclose, whether by press release or in any other manner, the existence of this Agreement or any terms or conditions of this Agreement, to any third party without the prior written consent of the other Party (which

shall not be unreasonably withheld), except as required by applicable law; it being understood that LMI will be able to file this Agreement with the U.S. Securities and Exchange Commission and other government agencies to the extent it reasonably determines such filing is required under applicable rules and regulations, provided that LMI shall be required to use reasonable efforts to seek confidential treatment of pricing and other commercially sensitive information. In addition, each Party may disclose the terms and conditions of this Agreement to a lender or third party to which it is considering transferring all or substantially all of its interests in the assets to which this Agreement relates; provided, however, that such third party executes a confidentiality agreement by which such third party is bound to hold the disclosed information in confidence.

(b) The Parties shall agree in good faith upon the substance of Information that can be used as a routine reference in the usual course of business to describe the terms of this transaction and each of them may disclose such Information, as modified by mutual agreement from time to time, without the other Party's consent.

6.4 *Injunctive Relief*. The Parties hereto understand and agree that remedies at law may be inadequate to protect against any breach of any of the provisions of this Section 6 by a Party or its employees, agents, officers or directors or any other person acting in concert with it or on its behalf. Accordingly, each Party shall be entitled to seek injunctive relief or any other equitable relief appropriate under the circumstances by a court of competent jurisdiction against or with respect to any action that constitutes any such breach of this Section 6.

7. INDEMNIFICATION; INSURANCE.

7.1 *By CMO*. Except to the comparative extent LMI is responsible to indemnify CMO and/or others under Section 7.2, CMO will indemnify and hold LMI, its Affiliates, and its and their directors, officers, agents and employees harmless against any and all liability, damages, losses, costs or expenses, including without limitation, reasonable fees and disbursement of attorneys (collectively, " Liability") resulting from any third party claims made or suits brought against them to the extent such Liability arises from (i) CMO's services in developing the Product(s), (ii) CMO's manufacturing, supplying, processing or otherwise manufacturing the Product(s), (iii) CMO's negligent acts or omissions or willful misconduct in the manufacture, storage, packaging, labeling, handling or shipping of the Product(s); (iv) CMO's breach of any representation, warranty or covenant, or failure to perform any of its obligations, hereunder; or (v) personal injuries and/or deaths that are proximately caused (as defined under Massachusetts law) by a Manufacturing Defect. For purposes of this Section 7.1, "Manufacturing Defect" means the negligence, recklessness (having a baseline not less than negligence), wrongful intentional acts or negligent omissions, willful misconduct, or strict liability, of or by CMO, its Affiliates, and its and their directors, officers, agents and employees resulting from, or arising out of, or in connection with, the development and manufacture of any Product by CMO or its permitted subcontractors hereunder.

7.2 *By LMI*. Except to the comparative extent CMO is responsible to indemnify LMI and/or others under Section 7.1, LMI will indemnify and hold CMO and its directors, officers, agents and employees harmless against any and all Liability resulting from any third party claims

made or suits brought against them to the extent such Liability arises from (i) any packaging or labeling of any Product(s) to the extent that such packaging or labeling has been supplied by or at the direction of LMI and applied in accordance with instructions from LMI, (ii) LMI's negligence or willful misconduct in the storage, handling, shipping, use, marketing, distribution or sale of the Product(s), or any other product packaged or included with the Product(s); (iii) a breach of a representation, warranty or covenant made by LMI; or (iv) personal injuries and/or death resulting from, arising out of, or in connection with, any distribution or sale of any Product by LMI, its Affiliates or its distributors, including claims based on negligence, warranty, strict liability or any other theory of liability or violation of applicable law.

7.3 *Conditions of Indemnification*. A Party or any of its Affiliates or their respective directors, officers, employees or agents (the "Indemnitee") that intends to claim indemnification under this Section 7 shall promptly notify the other Party (the " Indemnitor") of any Liability in respect of which the Indemnitee intends to claim such indemnification reasonably promptly after the Indemnitee is aware thereof, and the Indemnitor shall have the right to assume the defense of any related third party action, suit or proceeding with counsel mutually satisfactory to the Parties; provided, however, that an Indemnitee shall have the right to retain its own counsel and participate in the defense thereof at its own cost and expense. The indemnity agreement in this Section 7 shall not apply to amounts paid in settlement of any claim, loss, damage or expense if such settlement is effected without the consent of the Indemnitor, which consent shall not be withheld or delayed unreasonably. The failure of an Indemnitee to deliver notice to the Indemnitor within a reasonable time after becoming aware of any such matter, if prejudicial to the Indemnitor's ability to defend such action, shall relieve the Indemnitor of any liability to the Indemnitee under this Section 7 to the extent of such prejudice. The Indemnitee under this Section 7 and its directors, officers, employees and agents shall cooperate fully with the Indemnitor and its legal representatives in the investigation and defense of any matter covered by this indemnification.

7.4 *Insurance*. LMI and CMO will each, at its own cost and expense, obtain and maintain in full force and effect, during the term of this Agreement and for a period of one year following the expiration or other termination of this Agreement, commercial general liability insurance with an insurance carrier reasonably acceptable to the other Party, with limits of liability, including excess coverage, of an amount at least equal to the greater of (i) **** and (ii) **** (****) times the amounts paid to CMO hereunder for the previous calendar year (up to **** in coverage), combined single limit bodily injury and property damage covering its duties and obligations under the Agreement.

8. ALTERNATIVE DISPUTE RESOLUTION.

(a) The Parties will attempt in good faith to resolve any controversy, claim or dispute (" Dispute") arising out of or relating to this Agreement promptly by negotiations. Any such Dispute which is not settled by the Parties within thirty (30) days after notice of such Dispute is given by one Party to the other in writing shall be referred to a senior executive of LMI and a senior executive of CMO who are authorized to settle such Disputes on behalf of their respective companies (" Senior Executives"). If the Dispute has not been resolved within thirty (30) days after the end of the thirty (30) day negotiation period referred to above (which period may be extended by mutual

agreement), subject to any rights to injunctive relief and unless otherwise specifically provided for herein, any Dispute shall be settled by binding arbitration as described in subsection (b) below, if the Parties so choose.

(b) Any Dispute which is not resolved by the Parties within the time period described in subsection (a) shall be settled by final and binding arbitration to be conducted by a single arbitrator in Boston, Massachusetts, pursuant to the then-existing Commercial Rules of the American Arbitration Association. The decision or award of the arbitrator shall be final, and judgment upon such decision or award may be entered in any competent court or application may be made to any competent court for judicial acceptance of such decision or award and an order of enforcement. The arbitrator shall allocate the costs of the arbitration to one or both of the Parties as it sees fit.

(c) Nothing contained in this Section or any other provision of this Agreement shall be construed to limit or preclude a Party from bringing an action in any court of competent jurisdiction for injunctive or other provisional relief to compel the other Party to comply with its obligations hereunder before or during the pendency of mediation or arbitration proceedings.

9. MISCELLANEOUS.

9.1 *Relationship of the Parties*. In making and performing this Agreement, the Parties are acting, and intend to be treated, as independent entities and nothing contained in this Agreement shall be construed or implied to create an agency, partnership, joint venture or employer and employee relationship between LMI and CMO. Each Party shall retain the exclusive right of control with respect to its employees and agents, and shall be responsible for all taxes, withholdings, and other statutory or contractual obligations of any sort in respect of its employees and agents providing Product(s) and services hereunder including, but not limited to, workers' compensation insurance. Except as otherwise provided herein, neither Party may make any representation, warranty or commitment, whether express or implied, on behalf of or incur any charges or expenses for or in the name of the other Party. No Party shall be liable for the act of any other Party unless such act is expressly authorized in writing by both Parties hereto.

9.2 *Expenses.* Except as specifically provided herein, each Party shall each pay its own expenses (including the fees and expenses of their respective agents, representatives, counsel and accountants) incidental to the preparation, negotiation and consummation of this Agreement and the transactions contemplated hereby.

9.3 *Survival.* The following provisions shall survive the termination or expiration of this Agreement (along with any payment obligations accruing during the Term under any other provision) for any reason in accordance with their respective terms:

Section 1 (Definitions)
Section 2.5 (Transfer Notice)
Section 3.3(c) (Terminal Supply)
Section 3.4 (Effect of Expiration or Termination; Accrued Rights; Surviving Obligations)

Section 4 (Regulatory Issues)
Section 5 (Warranties and Quality Assurance)
Section 6 (Intellectual Property; Nondisclosure; Confidentiality)
Section 7 (Indemnification)
Section 8 (Alternative Dispute Resolution)
Section 9 (Miscellaneous)

9.4 *Notices.* All notices, demands and other communications to be given or delivered under or by reason of the provisions of this Agreement shall be deemed to be given upon receipt (or refusal) and shall be in writing and (a) personally delivered or sent by confirmed telecopy (with hard copy to follow); (b) sent by reputable overnight express courier (charges prepaid); or (c) mailed by certified or registered mail, postage prepaid and return receipt requested. Unless another address is specified in writing, notices, demands and communications to LMI and CMO shall be sent to the addresses indicated below:

Notices to LMI:

Lantheus Medical Imaging, Inc.
331 Treble Cove Road
North Billerica, Massachusetts 01862
Attn: Vice President, Manufacturing and Operations

with a copy to:

Lantheus Medical Imaging, Inc.
331 Treble Cove Road
North Billerica, Massachusetts 01862
Attn: General Counsel

Notices to CMO:

Pharmalucence, Inc.
29 Dunham Road
Billerica, MA 01821
Attention: Chief Operating Officer
E-mail: ****

9.5 *Force Majeure.* If the performance of any obligation under this Agreement by either Party is prevented, restricted, interfered with or delayed by reason of natural disaster, casualty, acts of God, riots, acts of terrorism or such other event of similar nature, all of which are outside the reasonable control of the affected Party ("Force Majeure Event"), the Party so affected shall, upon giving prompt written notice to the other Party (including a full description of particulars), be excused from such performance to the extent of such prevention, restriction, interference or delay; provided that the affected Party shall use its reasonable commercial efforts to avoid or remove such causes of non-performance and shall continue performance whenever such causes are removed.

9.6 *LIMITATIONS ON LIABILITY.* IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER PARTY OR TO ANY THIRD PARTY FOR ANY INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE, EXEMPLARY, OR CONSEQUENTIAL DAMAGES ARISING FROM THIS AGREEMENT, WHETHER THE BASIS OF THE LIABILITY IS BREACH OF CONTRACT, TORT, STATUTES, OR ANY OTHER LEGAL THEORY, EXCEPT TO THE EXTENT NECESSARY TO SATISFY A THIRD PARTY CLAIM UNDER SECTION 7 OF THIS AGREEMENT OR TO THE EXTENT SUCH LIABILITY ARISES FROM CMO'S WILLFUL MISCONDUCT, FRAUD OR GROSSLY NEGLIGENT ACTS OR OMISSIONS OR A PARTY'S BREACH OF THE CONFIDENTIALITY AND NON-USE OBLIGATIONS SET FORTH HEREIN, AND WHETHER SUCH FIRST PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR NOT.

9.7 *Successors and Assigns; Assignment*. This Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns. This Agreement or any part thereof, may not be assigned, in whole or in part, without the prior written consent of the other Party, which consent may be withheld in the sole discretion of the other Party; provided, however, that either Party may assign this Agreement without the consent of the other Party, in whole or in part, (i) to any Affiliate of such Party, it being agreed that no such assignment to a Party's Affiliate shall release the assigning Party from its obligations hereunder, or (ii) for the benefit of any lenders under any financing arrangement, or (iii) in connection with the direct or indirect (x) transfer and sale of all or substantially all of the assets or business of such Party or any of its Affiliates or (y) the transfer and sale of all or substantially all of the assets or business of the specific business line, division or unit of such Party or any of its Affiliates to which this Agreement relates, in the case of clause (iii), so long as the transferee or assignee agrees in writing to assume the obligations of the transferor or assignor as if an original party hereto.

9.8 *Entire Agreement; Modification*. This Agreement (together with all Proposals) supersedes all prior agreements and understandings between the Parties or any of their respective Affiliates (written or oral) relating to the subject matter hereof, including any term sheets, and this Agreement (together with all Proposals) is the entire and complete statement of the terms of the agreement between the Parties with respect to the subject matter hereof. This Agreement and any Proposal may be amended, modified, or supplemented only in a writing signed by LMI and CMO.

9.9 *Waivers.* The failure of a Party at any time or times to require performance of any provision hereof shall in no manner affect its right at a later time to enforce the same. No waiver by a Party of any condition or of any breach of any term, covenant, representation or warranty contained in this Agreement shall be effective unless in writing, and no waiver in any one or more instances shall be deemed to be a further or continuing waiver of any such condition or breach in other instances or a waiver of any other condition or breach of any other term, covenant, representation or warranty.

9.10 *Section and Other Headings*. The section and other headings contained in this Agreement are for reference purposes only and shall not in any way affect the meaning or interpretation of this Agreement.

9.11 *Governing Law*. This Agreement (and all claims, controversies and causes of actions relating hereto or otherwise arising hereunder or in connection herewith) shall be exclusively interpreted in accordance with and governed by the laws of the Commonwealth of Massachusetts, without regard to the conflicts of law rules thereof.

9.12 *Severability.* To the extent that a court of competent jurisdiction determines that any term or provision of this Agreement is invalid or unenforceable, the Parties agree that (a) such term or provision shall be reformed (whether by reducing its scope, duration or area or replacing any such term or provision with a term or provision that is valid and enforceable and that comes closest to expressing the intention of the invalid or unenforceable term or provision), and this Agreement shall be enforceable as so reformed, and (b) any such invalidity or unenforceability shall not invalidate or render unenforceable any other term or provision of this Agreement.

9.13 *No Third Party Beneficiaries*. Neither this Agreement nor any provision hereof is intended to confer upon any person (other than the Parties hereto and, in the case of Section 7, the Indemnittees, which shall be third party beneficiaries thereunder) any rights or remedies hereunder.

9.14 *Construction*. The Parties have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the Parties and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any of the provisions of this Agreement.

9.15 *Counterparts*. This Agreement may be executed in two or more counterparts, each of which shall be deemed to be an original, and such counterparts shall together constitute one and the same instrument. A facsimile transmission of an executed counterpart signature page shall be deemed an original.

[*The remainder of this page is left blank intentionally*.]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives as of the date first above written.

LANTHEUS MEDICAL IMAGING, INC.

By: /s/ Jeff Bailey
Name: Jeff Bailey
Title: Chief Executive Officer

PHARMALUCENCE, INC.

By: /s/ Edward J. Connolly
Name: Edward J. Connolly
Title: COO

Proposal #1:
DEFINITY® Vial for (Perflutren Lipid Microsphere) Injectable Suspension

November 12, 2013

The following proposal ("Proposal #1"), upon execution and delivery, will constitute a Proposal pursuant to, and as defined in, the Manufacturing and Supply Agreement (the "Agreement"), dated as of November 12, 2013, by and between Lantheus Medical Imaging, Inc., and Pharmalucence, Inc.

All capitalized terms used but not defined herein shall have the meanings ascribed to those terms in the Agreement.

Proposal #1 shall be attached to the Agreement and shall be automatically deemed incorporated into the Agreement by reference.

In the event of any conflict between this Proposal #1 and the Agreement, the terms of the Agreement shall control.

The pricing indicated below is based upon the testing and manufacturing requirements set forth in the RFP Proposal, dated September 13, 2013. Any changes to the manufacturing or test parameters shall be subject to mutual agreement and attached as an addendum hereto. For the avoidance of doubt, this Proposal #1 reflects the sole pricing terms set forth in the Agreement, and none of the pricing or other economic terms set forth in the RFP Proposal, dated September 13, 2013, attached hereto are effective.

****

CONFIDENTIAL

IN WITNESS WHEREOF, the Parties have caused this Proposal #1 to be executed by their respective duly authorized representatives as of the date first above written.

LANTHEUS MEDICAL IMAGING, INC.

By: /s/ Jeff Bailey
Name: Jeff Bailey
Title: Chief Executive Officer

PHARMALUCENCE, INC.

By: /s/ Edward J. Connolly
Name: Edward J. Connolly
Title: COO

Exhibit 10.50

CONFIDENTIAL TREATMENT REQUESTED

INFORMATION FOR WHICH CONFIDENTIAL TREATMENT HAS BEEN REQUESTED IS OMITTED AND NOTED WITH "**". AN UNREDACTED VERSION OF THIS DOCUMENT HAS ALSO BEEN PROVIDED TO THE SECURITIES AND EXCHANGE COMMISSION.**

SETTLEMENT AND RELEASE AGREEMENT

THIS SETTLEMENT AND RELEASE AGREEMENT ("Settlement Agreement") is entered into as of November 12, 2013 (the "Effective Date") by and between BEN VENUE LABORATORIES, INC. ("BVL"), and LANTHEUS MEDICAL IMAGING, INC. ("LMI"). BVL and LMI are collectively referred to as the "Parties" or in the singular as a "Party."

RECITALS

WHEREAS, BVL is a Delaware corporation that provides services to the pharmaceutical industry as a contract manufacturer which supplies its customers with sterile finished dosage forms, with its principal place of business located in Ohio; and

WHEREAS, LMI is a Delaware corporation engaged in the business of developing, manufacturing and distributing diagnostic medical imaging products, with its principal place of business located in Massachusetts; and

WHEREAS, BVL and LMI during their business relationship have been parties to a number of contractual arrangements, including but not limited to that certain Manufacturing & Service Contract for Commercial Products effective as of March 20, 2012 ("Agreement"); and

WHEREAS, BVL has experienced a variety of issues that have challenged its ability to consistently provide development services and manufacture product to LMI pursuant to the Agreement between the Parties; and

WHEREAS, the Parties have cooperated in good faith to satisfactorily resolve all issues of concern and material disputes arising from their business relationship and the Agreement; and

WHEREAS, BVL has provided the notice of termination required by Section 12.7 of the Agreement, such that the Agreement shall terminate on November 15, 2013; and

WHEREAS, the Parties desire to resolve fully and finally any and all disputes and/or claims whatsoever between them relating to, arising from, or in connection with the Agreement or otherwise as a result of any other business dealing between them; and

WHEREAS, the Parties have mutually resolved, to each other's satisfaction, a complete and final compromise and resolution of all outstanding issues and disputes.

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, and for other good and valuable consideration, receipt and sufficiency of which is hereby acknowledged, and with full consultation or the opportunity for consultation with counsel and such other advisors as they deem appropriate, the Parties to this Settlement Agreement hereby agree as follows:

TERMS & CONDITIONS

1. The foregoing Recitals are incorporated herein and constitute express terms of the Settlement Agreement.

2. In full and final satisfaction of LMI's release of any and all LMI Claims (as defined in ¶7 of this Settlement Agreement), BVL shall provide the Liquidated Damages and Consideration recited herein under the terms and conditions described herein. The Parties mutually agree that BVL's payment of the Liquidated Damages and Consideration described herein is intended to fully and completely resolve any and all LMI Claims that LMI has or may have against the BVL Released Parties, including but not limited to LMI Claims relating to, arising out of, or based upon the Agreement.

3. The Parties acknowledge and agree that, in accordance with Section 12.7 of the Agreement and pursuant to BVL's letter to LMI dated October 16, 2013, the Agreement shall terminate on November 15, 2013, at which time the Agreement shall have no further force or effect. The Parties acknowledge that, upon the effective date of termination, neither Party shall have any further obligations under the Agreement except for: (i) those obligations that expressly survive termination under Section 12.11 of the Agreement; (ii) BVL's obligation under Section 12.8.3 of the Agreement (as modified by this paragraph 3); and (iii) BVL's obligation under paragraph 6 of this Settlement Agreement.

With respect to BVL's obligation under Section 12.8.3, the Parties have agreed that BVL will, at no cost to LMI, provide the reasonable technical transfer assistance as specifically set forth in Attachment I. The Parties have reviewed Attachment I and agree as to its scope. The Parties have agreed that BVL will provide this technical transfer assistance up until December 31, 2013, at which time BVL will have no further obligations under Section 12.8.3.

LIQUIDATED DAMAGES

4. Pursuant to Sections 12.7 and 34 of the Agreement, BVL will pay, as liquidated damages, the sum of **THREE MILLION EIGHT HUNDRED AND SEVENTY-SIX THOUSAND AND THIRTY-SEVEN DOLLARS ($3,876,037)** to LMI within five (5) business days of the Effective Date of this Settlement Agreement. Such payment will be by wire transfer per instructions to be provided by LMI no later than the Effective Date.

CONSIDERATION

5. As consideration for the release set forth in Paragraph 7, which takes effect upon LMI's receipt of both payments described in paragraph 4 and this paragraph 5, BVL will also pay LMI the sum of **FIVE MILLION DOLLARS ($5,000,000)** within five (5) business days of

the Effective Date of this Settlement Agreement. Such payment will be by wire transfer per instructions to be provided by LMI no later than the Effective Date.

6. The Parties acknowledge that BVL will use commercially reasonable efforts to finalize, and is still in the process of finalizing, the Batches set forth in Attachment II to batch disposition and certification. The Parties further acknowledge that there is a risk that these Batches may not be releasable. Notwithstanding these risks and notwithstanding BVL's commercially reasonable efforts, the Parties agree that, other than those amounts set forth in Paragraphs 4 and 5 above, no additional compensation will be provided to LMI for any reason whatsoever.

RELEASE & COVENANT NOT TO SUE

7. Effective immediately upon receipt by LMI of both of the payments by BVL to LMI described in Paragraphs 4 and 5 of this Settlement Agreement, LMI, for itself and its predecessors, successors, affiliates, heirs, assigns, administrators, agents, shareholders, directors, principals, officers, partners, employees, agents, contractors, attorneys, and representatives, hereby releases and forever discharges BVL, its parent, subsidiaries, divisions, affiliates, predecessors, successors, assigns, shareholders, directors, principals, officers, employees, agents, contractors, insurers and attorneys (the "BVL Released Parties"), from *any and all claims, potential claims, rights, demands, actions, causes of action, suits and damages of every kind and nature whatsoever through the Effective Date, whether such claims have accrued or not accrued as of the Effective Date, including, without limitation, any claims at law or in equity, requests or demands for actual, compensatory, consequential, liquidated, exemplary and punitive damages, attorney's fees, injunctive or other equitable relief, and any and all claims, potential claims, rights, demands, actions, causes of action, suits and damages whether or not LMI is aware of such* (the italicized language herein defined as "LMI Claims"). This release and discharge is

intended to be broad and expansive, to release and waive any and all LMI Claims that LMI has or may have against the BVL Released Parties as of the Effective Date, including, but not limited to LMI Claims arising out of, or based upon the negotiation, execution, representations, warranties, duties, obligations, performance, non-performance, termination or breach of the Agreement, provided however, that this release shall be deemed null and void *ab initio*, in the event that BVL and/or any party asserting rights on behalf of BVL, recovers or rescinds any of the payments made by BVL under this Settlement Agreement, whether as a result of bankruptcy proceedings or otherwise, including but not limited to "voidable preference" or "fraudulent conveyance" actions.

8. Effective immediately upon receipt by LMI of both of the payments by BVL to LMI described in Paragraphs 4 and 5 of this Settlement Agreement, BVL, for itself and its predecessors, successors, affiliates, heirs, assigns, administrators, agents, shareholders, directors, principals, officers, partners, employees, agents, contractors, attorneys, and representatives, hereby releases and forever discharges LMI, its parent, subsidiaries, divisions, affiliates, predecessors, successors, assigns, shareholders, directors, principals, officers, employees, agents, contractors, insurers and attorneys (the "LMI Released Parties"), from *any and all claims, potential claims, rights, demands, actions, causes of action, suits and damages of every kind and nature whatsoever through the Effective Date, whether such claims have accrued or not accrued as of the Effective Date, including, without limitation, any claims at law or in equity, requests or demands for actual, compensatory, consequential, liquidated, exemplary and punitive damages, attorney's fees, injunctive or other equitable relief, and any and all claims, potential claims, rights, demands, actions, causes of action, suits and damages whether or not BVL is aware of such* (the italicized language herein defined as "BVL Claims"). This release and discharge is

intended to be broad and expansive, to release and waive any and all BVL Claims that BVL has or may have against the LMI Released Parties as of the Effective Date, including, but not limited to BVL Claims arising out of, or based upon the negotiation, execution, representations, warranties, duties, obligations, performance, non-performance, termination or breach of the Agreement.

9. Except as to enforcement of this Settlement Agreement, as otherwise provided for in Paragraph 7 of this Agreement, or with respect to the surviving provisions of the Agreement, LMI covenants and agrees that it will forever refrain from instituting, prosecuting, maintaining or pressing any LMI Claim, action, suit, or proceeding against the BVL Released Parties relating to, or arising out of, any right or LMI Claim released in Paragraph 7 of the Settlement Agreement.

10. Except as to enforcement of this Settlement Agreement or with respect to the surviving provisions of the Agreement, BVL covenants and agrees that it will forever refrain from instituting, prosecuting, maintaining or pressing any BVL Claim, action, suit, or proceeding against the LMI Released Parties relating to, or arising out of, any right or BVL Claim released in Paragraph 8 of the Settlement Agreement.

11.

OTHER PROVISIONS

12. This Settlement Agreement shall in no event be construed as or be deemed to be evidence of an admission or concession on the part of any Party of any claim or any fault or liability or damages whatsoever.

13. LMI represents and warrants that no person or entity other than LMI has any interest in, and that LMI has not made any assignment or transfer of, any right, LMI Claim or other matter covered by the release in Paragraph 7 of this Settlement Agreement.

14. BVL represents and warrants that no person or entity other than BVL has any interest in, and that BVL has not made any assignment or transfer of, any right, BVL Claim or other matter covered by the release in Paragraph 8 of this Settlement Agreement.

15. The Parties and their counsel agree not to disclose to any person or entity, directly or indirectly, or by or through any agent, employee, or other representative, the terms or conditions of this Settlement Agreement other than as necessary to effectuate the provisions of this Settlement Agreement or as may be required by any applicable law, including the United States securities laws, or the rules of any stock exchange or NASDAQ. Notwithstanding the foregoing, the Parties may disclose the fact of settlement and that their disputes have been resolved.

16. This Settlement Agreement may not be introduced into evidence in any proceeding by any person or entity, nor may it be used in support of or for the prosecution of any cause of action against any Party except for enforcing the terms and conditions of this Settlement Agreement.

17. Each Party, on its own, has made such investigation of the facts pertaining to the LMI Claims or BVL Claims released herein as it has deemed necessary. Each Party agrees and acknowledges that there may be facts of which it is presently unaware, but it nonetheless assumes the risk of entering into this Settlement Agreement. Each Party further agrees and acknowledges that there may be LMI Claims or BVL Claims that are as yet unknown to the Party and that may not be known until some future time. Notwithstanding this fact, each Party has explicitly negotiated and bargained for the release herein. Thus, in furtherance of their intentions, the Settlement Agreement shall remain in full force and effect notwithstanding the discovery of any additional facts or law, or changes in facts or law, and the Settlement

Agreement shall not be subject to rescission or modification by reason of any change or difference in facts or law.

18. By signing this Settlement Agreement, the Parties acknowledge that they have been advised with respect thereto by their respective attorneys, that they have been afforded ample opportunity to review this Settlement Agreement, that they have read and do understand this Settlement Agreement, and that they have executed this Settlement Agreement freely and voluntarily. The Parties specifically acknowledge that they have reviewed or have had the opportunity to review this Settlement Agreement with their legal or other advisors, and are fully aware of all of their rights and alternatives.

19. LMI represents that it has carefully considered the terms of the Settlement Agreement and that its Board of Directors using their best business judgment have determined that it is in the best interest of the company and its shareholders to enter into this Settlement Agreement.

20. BVL represents that it has carefully considered the terms of the Settlement Agreement and that its Board of Directors using their best business judgment have determined that it is in the best interest of the company and its shareholders to enter into this Settlement Agreement.

21. This Settlement Agreement (a) contains the entire understanding of the Parties hereto, (b) supersedes any and all prior agreements regardless of their nature, and (c) shall not be amended or modified except by a written instrument hereafter signed by all Parties hereto.

22. EACH PARTY FURTHER ACKNOWLEDGES AND AGREES THAT, IN ENTERING INTO THIS SETTLEMENT AGREEMENT, IT HAS NOT IN ANY WAY RELIED UPON ANY ORAL OR WRITTEN AGREEMENTS, STATEMENTS, PROMISES,

INFORMATION, ARRANGEMENTS, UNDERSTANDINGS, REPRESENTATIONS, OR WARRANTIES, EXPRESS OR IMPLIED, NOT SPECIFICALLY SET FORTH IN THIS SETTLEMENT AGREEMENT.

23. Should any provision of this Settlement Agreement be held illegal, invalid or nonbinding on any of the Parties, such holding shall not invalidate the whole of this Settlement Agreement. Instead, the Parties shall negotiate in good faith to reform this Settlement Agreement in order to give effect to the original intention of the Parties in all material respects. All other provisions hereof shall remain in full force and effect and shall be liberally construed in order to carry out the intentions of the Parties as nearly as may be possible.

24. No waiver of the breach of any of the provisions of this Settlement Agreement shall be a waiver of any preceding or succeeding breach of that provision, or of any other provision(s) of this agreement. No waiver of any provision of this Settlement Agreement shall be effective unless evidenced by a written instrument signed by the waiving Party.

25. The Parties each acknowledge that the terms and conditions of this Settlement Agreement have been the subject of active, arms-length negotiations, and that such terms and conditions should not be construed in favor of or against any Party by reason of the extent to which any Party or its professional advisors participated in the preparation of this Settlement Agreement. Neither of the Parties shall be considered the drafter of this Settlement Agreement or any provision of the agreement for the purpose of any statute, case law or rule of construction that would or might cause any provision to be construed against the drafter.

26. The Parties agree to execute any and all supplementary documents and to take all additional steps reasonably necessary to give full force and effect to the terms and intent of this Settlement Agreement.

27. All covenants and agreements herein shall bind and inure to the benefit of the respective successors of the Parties hereto.

28. This Settlement Agreement shall be construed and interpreted to effectuate the Parties' intent, which is to resolve completely any and all LMI Claims or BVL Claims, as the case may be, that either Party has against the other, including, but not limited to, LMI Claims or BVL Claims relating to, arising out of, or based upon the Agreement.

29. This Settlement Agreement and the rights and obligations of the Parties hereunder shall be governed by Delaware law and, to the extent the laws of the State of Delaware are preempted or otherwise made inapplicable by federal law, the laws of the United States of America.

30. Each of the Parties irrevocably and unconditionally agrees that any suit, action or legal proceeding arising out of or relating to this Settlement Agreement any obligation existing as a result of §12.11 of the Agreement shall be instituted in the United States District Court for Delaware, or if such court does not possess subject matter jurisdiction, of any type, or will not accept jurisdiction, in any court of general jurisdiction in Wilmington, Delaware; consents and submits to the exclusive jurisdiction of such foregoing courts in any such suit, action or proceeding; consents to personal jurisdiction in such courts; waives any objection which it may have to laying of venue of any such suit, action or proceeding in said courts; and waives any claim or defense of inconvenient forum.

31. In the event of (a) an alleged breach of the Settlement Agreement, (b) a dispute between or among the Parties in connection with the performance of the Settlement Agreement or (c) any obligation existing as a result of §12.11 the Agreement, the Parties shall be required to first provide notice and a reasonable opportunity to cure. Unless otherwise stated in writing

subsequent to the Effective Date of this Settlement Agreement, all notifications and communications made pursuant to this Agreement shall be submitted to the persons and entities listed below by Federal Express, UPS, or any other overnight carrier in which case the notice shall be deemed given two (2) business days from the date of delivery to such carrier or by confirmed facsimile (followed by delivery of an original via overnight carrier), in which case the notice shall be deemed given on confirmation of transmission:

Lantheus Medical Imaging, Inc.
331 Treble Cove Road
North Billerica, MA 08162
Attn: General Counsel
Telephone (###) ###-####
Facsimile: (###) ###-####

Ben Venue Laboratories, Inc.
300 Northfield Road
Bedford, OH 44146
Attn: Vice President, Contract Manufacturing Services
Telephone: (###) ###-####
Facsimile: (###) ###-####

With a copy (that shall not constitute legal notice) to:

Division Counsel
Ben Venue Laboratories, Inc.
300 Northfield Road
Bedford, Ohio 44146
Telephone: (###) ###-####
Facsimile: (###) ###-####

32. The undersigned individual signatories each represent that they are authorized to execute this agreement on behalf of the Party identified with respect to each.

33. This Settlement Agreement may be executed in counterparts and it is the intent of the Parties that the copy signed by any Party will be fully enforceable against said Party.

34. The Effective Date of this Settlement Agreement is the date of signature of the last signatory to the Settlement Agreement.

IN WITNESS WHEREOF, the Parties have executed this Settlement Agreement through their duly authorized representatives.

BEN VENUE LABORATORIES, INC.		**LANTHEUS MEDICAL IMAGING, INC.**	
By:	/s/ William A. Owen	By:	/s/ Jeffrey A. Bailey
Print:	William A. Owen	Print:	Jeffrey A. Bailey
Title:	VP Finance	Title:	President/CEO
Date Signed:	11/12/13	Dated Signed:	11/12/13
By:	/s/ Sheila A. Denton		
Print:	Sheila A. Denton		
Title:	ED Legal		
Date Signed:	11/12/13		

ATTACHMENT I
TECH TRANSFER ASSISTANCE

BVL will provide the following technical support to LMI per Section 3 of the Agreement dated November 13 2013.

- Reasonable participation in conference calls to address any product-specific questions related to the manufacturing or testing of the product;
- Reasonable reproduction of product-specific document, including Master Production Records, Specifications, and Test Methods.

ATTACHMENT II
BATCHES PENDING DISPOSITION

****

Exhibit 10.51

CONFIDENTIAL TREATMENT REQUESTED

INFORMATION FOR WHICH CONFIDENTIAL TREATMENT HAS BEEN REQUESTED IS OMITTED AND NOTED WITH "**". AN UNREDACTED VERSION OF THIS DOCUMENT HAS ALSO BEEN PROVIDED TO THE SECURITIES AND EXCHANGE COMMISSION.**

Lantheus Medical Imaging, Inc.
331 Treble Cove Road
North Billerica, MA 01862

February 6, 2014

Pharmalucence, Inc.
29 Dunham Road
Billerica, MA 01862
Attention: Edward J. Connolly,
Chief Operating Officer

Re: Letter Agreement Imposing **** Obligations
(this "Letter Agreement")

Dear Edward:

In connection with our companies' partnership under the long-term Manufacturing and Supply Agreement by and between Pharmalucence, Inc. (" CMO") and Lantheus Medical Imaging, Inc. ("LMI"), dated as of November 12, 2013 (as may be amended, modified or supplemented from time to time, the "Agreement"), the Parties desire to amend the Agreement to provide for **** obligations, as follows:

1. ***No Hire and Non-Solicitation***. The Agreement is hereby amended by providing for a new Section 6.2(d) that states as follows:

   During the term of this Agreement and for **** thereafter, each Party hereby agrees not to (and agrees to cause its controlled affiliates not to), ****.

2. ***Miscellaneous***. Capitalized terms used but not defined in this Letter Agreement shall have the meanings ascribed to those terms in the Agreement. Article 9 of the Agreement (entitled "Miscellaneous") is hereby expressly incorporated by reference into this Agreement. The Parties acknowledge and agree that, except as expressly amended by this Letter Agreement, the Agreement (as so amended) remains in full force and effect in accordance with its terms.

Please confirm your company's agreement with the terms and conditions of this Letter Agreement by countersigning two copies of this letter and returning one fully executed copy to my attention.

[*The remainder of this page is left blank intentionally*.]

IN WITNESS WHEREOF, the Parties have caused this Letter Agreement to be executed by their respective duly authorized representatives as of the date first above written.

Lantheus:

LANTHEUS MEDICAL IMAGING, INC.

By: /s/ William C. Dawes Jr.
Name: William C. Dawes Jr.
Title: V.P. MFG + OPS

Pharmalucence:

PHARMALUCENCE, INC.

By: /s/ Edward J. Connolly
Name: Edward J. Connolly
Title: COO

Exhibit 12.1

STATEMENTS RE: COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES

(in thousands)	Year-Ended December 31, 2013	2012	2011	2010	2009
Earnings					
Income (loss) from continuing operations	$ (60,664)	$ (42,556)	$ (52,371)	$ 7,435	$ 42,304
Fixed charges	43,607	42,111	37,753	22,767	13,539
Total earnings	$ (17,057)	$ (445)	$ (14,618)	$ 30,202	$ 55,843
Fixed Charges					
Interest Expense	$ 42,915	$ 42,014	$ 37,658	$ 20,395	$ 13,458
Estimated interest portion within rental expense	94	97	95	94	81
Write-off of deferred financing costs	598	—	—	2,278	—
Total fixed charges	$ 43,607	$ 42,111	$ 37,753	$ 22,767	$ 13,539
Ratio of earnings to fixed charges(1)	—	—	—	1.3x	4.1x

(1) Earnings were insufficient to cover fixed charges by $60.7 million, $42.6 million and $52.4 million, for the years ended December 31, 2013, 2012 and 2011, respectively.

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Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO SECURITIES EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a), AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Jeffrey Bailey, certify that:

1. I have reviewed this annual report on Form 10-K of Lantheus Medical Imaging, 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 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 and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

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

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

Dated: March 11, 2014

/s/ JEFFREY BAILEY

Name: Jeffrey Bailey

Title: *President and Chief Executive Officer*

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Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO SECURITIES EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a), AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, John Golubieski, certify that:

1. I have reviewed this annual report on Form 10-K of Lantheus Medical Imaging, 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 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 and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

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

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

Dated: March 11, 2014

/s/ JOHN GOLUBIESKI

Name: John Golubieski
Title: *Interim Chief Financial Officer*

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Exhibit 32.1

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

Each of the undersigned hereby certifies that to his knowledge the Annual Report on Form 10-K for the fiscal year ended December 31, 2013 of Lantheus Medical Imaging, Inc. (the "Company") filed with the Securities and Exchange Commission on the date hereof fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in such report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 11, 2014

/s/ JEFFREY BAILEY

Name: Jeffrey Bailey
Title: *President and Chief Executive Officer*

Dated: March 11, 2014

/s/ JOHN GOLUBIESKI

Name: John Golubieski
Title: *Interim Chief Financial Officer*

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

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