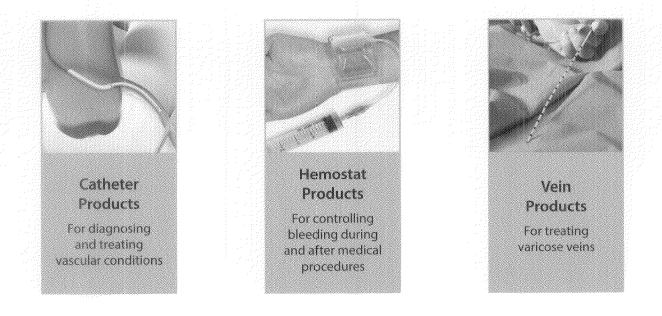


Company Profile

Vascular Solutions is a leading medical device company that delivers proprietary clinical solutions for diagnosing and treating vascular conditions. Our rapidly growing product line consists of innovative devices across established and emerging areas of coronary and peripheral vascular medicine.

We quickly generate ideas, create new devices and then deliver the finished products to physicians through our U.S. direct sales force and international distribution network. Our strategy of focusing on underserved clinical needs combined with rapid product development has resulted in an expanding product portfolio. Since 2003, we have developed and launched over 70 new products worldwide.

Vascular Solutions' mission is to deliver excellence in vascular devices.



2012 Financial Highlights*

13% growth in product revenue to \$98.0 million

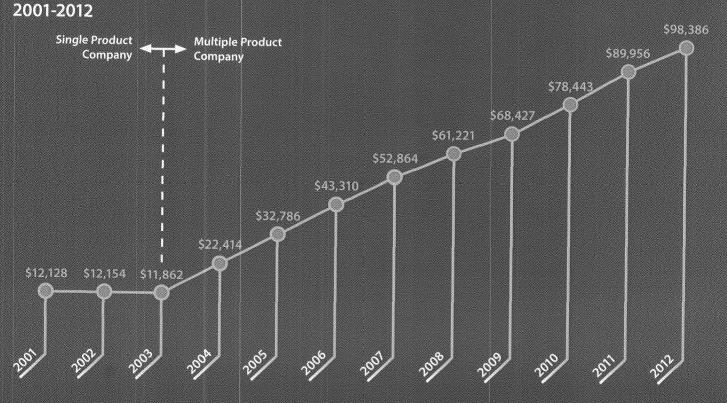
27% increase in operating income to \$15.9 million

32% increase in cash generated from operations to \$19.2 million

9th consecutive year of >10% growth in product revenue

*Product revenue excludes license revenue, 2011 operating income excludes \$2.5 million of accelerated license revenue and \$0.6 million of reduction in earn-out accrual for comparison purposes.

Revenue Growth





Dear Fellow Shareholders,

Dear Fellow Shareholders,

If you looked only at Vascular Solutions' performance in 2012, you might not believe that medical device companies are facing a tough operating environment. But the truth is, the challenges for the medical device industry in 2012 have persisted, and in many ways have intensified. A quick look at the recent financial results of most medical device companies tells the industry's status in very stark terms: declines in sales and earnings growth, leading to layoffs and other cost-cutting measures that are likely to undermine the potential for future innovation and growth in medical devices.

In the face of these industry-wide troubles, Vascular Solutions' results are even more remarkable, both in size and longevity. During 2012 we remained focused on our unique goal of launching multiple clinical niche products to sustain double-digit product revenue growth while leveraging our extensive U.S. direct sales force and worldwide international distribution network into even higher levels of earnings growth. That basic business model has been in place since 2003, and it continues to serve us very well in generating superior financial results – even in today's difficult operating environment for medical device companies.

In 2012, we increased our product revenue by 13%, which represented our 9th consecutive year of greater than 10% top-line growth. In the fourth quarter, with record quarterly revenues of \$25.3 million, we achieved our oft-stated milestone objective of surpassing \$100 million in annualized revenue. On a directly comparative basis, our operating income grew by 27% to \$15.9 million in 2012, representing an operating margin of 16.2%, a continuing substantial jump from a directly comparative operating margin of 14.3% in 2011. And our earnings grew by 33% to \$0.60 per share in 2012 from the directly comparative number in 2011. This earnings growth resulted in us generating \$19.2 million in cash from operations in 2012, up from \$14.6 million in the prior year. We ended 2012 with \$11.6 million in cash, and once again no debt, after spending \$7.5 million for product acquisitions and licenses, \$5.4 million for stock repurchases, \$3.1 million for capital equipment, and \$8.0 million for the purchase of a building to satisfy our continued expansion needs which also will lower our facility costs starting in 2013.

Our continuing goal has been to launch 10 new products each year, and in 2012 we launched 11 significant new products. One thing to notice about these new products is that they represent a very balanced approach in our growth strategy. Of the 11, six were developed internally and five were added as the result of tuck-in acquisitions and licensing agreements. Our strong balance sheet and operating cash flow generation enable us to target growth opportunities from the outside that can leverage our existing call points.

The most important new revenue source for us in 2012 was one that came to us from the outside. In January 2012, we launched a reprocessing service for our competitor's ClosureFAST® vein ablation catheter in association with Northeast Scientific, Inc., which generated \$4.4 million in 2012 revenue. This new reprocessing service allowed us to restore growth to our vein products category and made it the fastest growing of our three product categories during the year, with a 34% increase over the 2011 revenue.

Revenue in our largest product category, catheter products, grew 16% during 2012. Once again, the big contributor in this product category was our GuideLiner[®] guide extension catheter, which in its third year on the market grew by an impressive 51% to \$14.7 million. GuideLiner, which has been described by physicians as an "indispensable tool" in performing challenging catheterization procedures, is the perfect example of an internally-

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

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2012

OR

[] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the transition period from to

Commission file number: 0-27605

VASCULAR SOLUTIONS, INC.

(Exact name of registrant as specified in its charter)

Minnesota

(State or other jurisdiction of incorporation or organization)

41-1859679

(IRS Employer Identification No.)

6464 Sycamore Court North Minneapolis, Minnesota 55369 (Address of principal executive offices, including zip code)

(763) 656-4300

(Registrant's telephone number, including area code)

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

Title of each class:

Common Stock, par value \$.01 per share

Name of each exchange on which registered:

The NASDAQ Global Market

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

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

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§229.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes [X] No []

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (section 229.406 of this chapter) 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, or a smaller reporting company. See the definitions of "large accelerated filer," accelerated filer," and smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer [] Accelerated filer [X] Non-accelerated filer [] Smaller reporting company []

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

The aggregate market value of voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold on June 30, 2012 was \$193,491,786.

As of February 1, 2013, the number of shares outstanding of the registrant's common stock was 16,502,929.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Proxy Statement for its 2012 Annual Meeting of Shareholders to be held on May 3, 2013 are incorporated by reference in Part III of this Annual Report on Form 10-K.

PART I

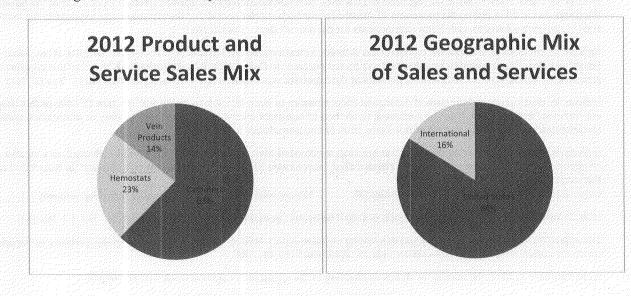
ITEM 1. BUSINESS

Overview

Vascular Solutions, Inc. (we, us or Vascular) is focused on bringing clinically advanced solutions to interventional cardiologists and interventional radiologists worldwide. As a vertically-integrated medical device company, we generate ideas, create new minimally invasive medical devices, and then deliver these products and related services to physicians through our direct domestic sales force and our international distribution network. The innovative products and services we offer are divided into three categories:

- Catheter products, principally consisting of catheters used in minimally invasive medical procedures for the diagnosis or treatment of vascular conditions, such as the Pronto[®] extraction catheters used in treating acute myocardial infarction and the GuideLiner[®] catheter used to access discrete regions of the coronary anatomy, and also including products used in connection with gaining percutaneous access to the vasculature to perform minimally invasive procedures, such as micro-introducer kits;
- Hemostat products, principally consisting of blood clotting products, such as the D-Stat[®] Dry hemostat, a topical thrombin-based pad with a bandage used to control surface bleeding, and the D-Stat Flowable, a thick yet flowable thrombin-based mixture for preventing bleeding in subcutaneous pockets; and
- Vein products and services, principally consisting of the Vari-Lase[®] endovenous laser, a laser console and procedure kit used for the treatment of varicose veins, and a reprocessing service for radiofrequency vein ablation catheters.

During 2012, 63% of our product and service sales were derived from catheter products, 23% from hemostat products, and 14% from vein products and services. Approximately 84% of our 2012 product and service sales were generated in the United States through our direct sales force and approximately 16% of our sales were through our network of independent distributors outside the United States.



History

We were incorporated in the state of Minnesota in December 1996, and began operations in February 1997. In 2000 we received FDA clearance for our first product, the Duett[™] sealing device, which is used to

seal the puncture site following catheterization procedures. We completed our initial public offering in 2000 by raising net proceeds of approximately \$44.0 million at an offering price of \$12.00 per share. In 2001, we made the strategic decision to develop additional products and to de-emphasize our Duett product. We have grown from net revenue of \$6.2 million in 2000 solely from sales of our Duett product to net revenue of \$98.4 million in 2012 from sales of over 70 products we have developed and launched since 2002. This increase in revenue represents a compound annual growth rate of 26% and is driven by our commitment to the development and launch of multiple new devices to diagnose and treat vascular conditions.

Interventional Cardiology and Interventional Radiology Industry Background

An estimated 80 million Americans have one or more types of cardiovascular disease-diseases of the heart and blood vessels. Cardiovascular disease is the number one cause of death in the United States and is replacing infectious disease as the world's pre-eminent health risk. Advances in medicine have enabled physicians to perform an increasing number of diagnostic and therapeutic treatments of cardiovascular disease using minimally invasive methods, such as catheters placed inside the arteries, instead of highly invasive open surgery. Cardiologists and radiologists use diagnostic procedures, such as angiography, to confirm, and interventional procedures, such as angioplasty and stenting, to treat diseases of the coronary and peripheral arteries. Based on industry statistics, we estimate that cardiologists and radiologists performed over nine million diagnostic and interventional catheterization procedures worldwide in 2012. During the past few years, the number of catheterization procedures performed worldwide has been declining gradually due to a number of factors - among them, the effects of weak economies on overall health care utilization rates, efforts by third-party payers to lower costs associated with medical procedures, investigations by government agencies into potential over-utilization of procedures, the implementation by hospitals of policies designed to reduce the incidence of unnecessary procedures in the wake of these outside investigations, and new diagnostic imaging and functional assessment modalities that more effectively screen patients to determine the need for treatment. Although worldwide demographic factors, including the growing incidence of cardiovascular disease, seem to favor long-term growth in the number of interventional procedures, we believe that these recent pressures on utilization rates are likely to result in relatively flat catheterization volumes for the foreseeable future. The worldwide market for interventional medical devices used in cardiovascular procedures in 2012 exceeded \$12 billion.

Each angiographic procedure using a catheter requires a puncture in an artery, usually the femoral artery in the groin area and sometimes the radial artery in the wrist of the patient to gain access for the catheter. The catheter then is deployed through an introducer sheath and into the vessel to be diagnosed or treated. Upon completion of the procedure and removal of the catheter, the physician must seal this puncture in the artery and the tissue tract that leads from the skin surface to the artery to stop bleeding.

The interventional medical device industry is characterized by intense competition, rapidly-evolving technology, and a high degree of government regulation. To grow our business, we have focused on continually developing and commercializing new products and services. Looking ahead, we expect our business may be impacted by the following trends and opportunities:

- The future regulatory approval of newly-developed products. Any new product that we develop must be approved by the Food and Drug Administration (FDA) in the United States and by similar regulatory bodies in other countries before they can be sold. The requirements for obtaining product approval have undergone change, and the FDA has proposed additional changes to the product approval process in 2012. We monitor the changing regulatory landscape and modify our regulatory submissions as necessary to obtain product approvals.
- Successfully integrating acquired products and services into our existing operations. The acquisition of products and services complementary to our existing product portfolio and customer call point provides an additional business opportunity, but is dependent on the successful integration of the acquired products into our existing business structure.

- In December 2012 we acquired the Teirstein EdgeTM device organizer and the AngioAssistTM docking station assets from Shepherd Scientific, Inc. (Shepherd Scientific) and have integrated these products into our operations.
- In August 2012, we acquired the Venture[®] Wire Control Catheter (Venture) assets from St. Jude Medical, Cardiology Division, Inc. ("St. Jude Medical") and are in the process of integrating this product into our operations.
- In June 2012, we acquired the Accumed[™] wrist positioning splint assets from Accumed Systems, Inc. (Accumed) and have integrated this product into our operations.
- In January 2012, we acquired the rights, patents and intellectual property relating to our Pronto catheter from Dr. Pedro Silva and his affiliates.
- In December 2011, we acquired exclusive 5-year rights to sell reprocessing services for the ClosureFast[®] catheter in the United States from Northeast Scientific, Inc. (NES).
- In January 2011, we acquired the Guardian[®] hemostasis valve assets from Zerusa Limited (Zerusa) and have established a subsidiary in the Republic of Ireland to continue the manufacturing of these products.

For additional information on these acquisitions, see Note 15 to our Consolidated Financial Statements in Item 8 of Part II of this Annual Report on Form 10-K for the year ended December 31, 2012.

• *Managing intellectual property*. The interventional medical device industry is characterized by numerous patent filings and litigation claims made to protect new and evolving product ideas. To maximize the profitability of new product ideas, we seek patent protection for those product design and method concepts which we believe have the potential to provide substantial product revenue. While we are not currently involved in any intellectual property litigation, we have been so in the recent past. Managing intellectual property assets and claims is a significant challenge for our business.

Products and Services

Our product and service offerings are divided into three categories: catheter products, hemostat products and vein products and services. The competitive advantages of our products and services are enhanced by the experience of our direct U.S. sales employees and international independent distributors, the experience of our management team, and our dedication to bringing clinically unique solutions in the markets we serve worldwide.

For information about our revenue, profits or losses and total assets, see our Consolidated Financial Statements included in Item 8 of Part II of this Annual Report on Form 10-K for the year ended December 31, 2012.

Catheter Products

Catheter products represent the largest of our three product categories. In 2012, worldwide sales of our catheter products totaled \$61.3 million, an increase of 16% from the 2011 level. Catheter products represented approximately 63% of our total product and service sales during 2012. Our catheter products consist of a variety of devices used to gain access, diagnose and treat vascular conditions during minimally invasive catheterization procedures.

Our top-selling catheter products during 2012 are described in the chart below.

Product	Market Introduction	2012 Sales (\$MM)	Estimated Market Potential (\$MM)	Description
Pronto	2003	\$20.1	\$100	Manual aspiration catheter for the removal of fresh, soft thrombus and emboli
GuideLiner	2009	\$14.7	>\$30	Guide extension catheter used for deep-seating, back-out support, and optimal stenting in challenging interventions
Micro- Introducers	2003	\$7.8	\$75	Access kit products used to gain percutaneous access to the vasculture for performing arterial and venous catheterization procedures
Langston [®]	2004	\$4.9	>\$10	Dual lumen catheter used to measure intravascular pressure gradients, primarily for the diagnosis of aortic valve stenosis
SmartNeedle	2010	\$3.5	>\$5	Doppler-guided needle device designed to provide auditory ultrasound-guided access to arteries and veins during catheterization procedures
Guardian®	2007	<\$3	\$200	Guardian is a hemostat valve used in catheterization procedures to allow placement of multiple devices simultaneously in the artery while minimizing blood loss
Snares	2008	<\$3	\$35	Interventional snares used to retrieve or manipulate objects in the cardiovascular system
SuperCross TM	2011	<\$3	>\$10	Microcatheters for support and delivery of guidewires during challenging coronary and peripheral catheterization procedures
Minnie®	2009	<\$3	\$30	Support catheter used to facilitate placement and exchange of guidewires and other interventional devices.

Our highest selling catheter products are our Pronto catheters, which consist of a catheter with a proprietary distal tip and large extraction lumen that can be delivered into arteries to mechanically remove blood clots using simple vacuum suction. The original Pronto extraction catheter was developed by Dr. Pedro Silva of Milan, Italy, who exclusively licensed the design to us in 2002. We received CE mark approval and commenced international sales of the Pronto in August 2003, and received FDA clearance in December 2003 and commenced sales in the United States in early 2004. In the fourth quarter of 2005 we launched the third generation design of the Pronto, named the Pronto V3. The V3 version of the Pronto resulted in a substantial increase in Pronto sales in 2006. In January 2011 we commenced the launch of the Pronto V4, which utilizes an embedded longitudinal wire for maximum extraction with enhanced deliverability and kink resistance. On January 6, 2012, we purchased the rights, patents and intellectual property relating to the Pronto extraction catheter from Dr. Silva and his affiliates in exchange for \$3.25 million, and so have not made any royalty

payments on sales of Pronto catheters occurring after December 31, 2011. We believe that the market size for the removal of soft thrombus is approximately \$100 million per year worldwide.

In addition to the Pronto V3 and V4, we have developed and launched five additional versions of extraction catheters - the Pronto-Short, Pronto 035, Pronto LP, QXT^{\circledast} and XL^{TM} . The Pronto-Short is a shorter and larger version, designed for use in clotted dialysis grafts that was launched in August 2005. The Pronto 035 is a much larger version, designed for use in large vessels that was launched in August 2007. The Pronto LP is a low profile version, designed for use in smaller vessels that was launched in January 2008. The QXT is a low-cost version, designed to be sold in certain international markets that was launched in March 2008. The XL extraction catheter is a larger version with either a straight or pigtail tip, designed for use in larger vessels that was launched in March 2008.

In November 2009 we launched the GuideLiner catheter. The GuideLiner catheter is a unique coaxial "mother and child" guide extension with rapid exchange convenience that enables deep seating, guide backup support and selective intubation in challenging coronary interventions. In December 2011 we launched the second generation of our GuideLiner catheter with increased flexibility, a smaller size version and a longer extension. We believe the market opportunity of the GuideLiner is in excess of \$30 million per year.

In July 2003 we launched a variety of access kit products used to gain percutaneous access to the vasculature for performing arterial and venous catheterization procedures. These products include a full line of micro-introducer kits and a variety of specialty guidewires.

At the end of the third quarter of 2004 we received regulatory clearance in the United States for the Langston[®] dual lumen pigtail catheter. The Langston catheter is used for the measurement of intravascular pressure gradients, primarily measured to diagnose aortic valve stenosis. In March 2011 we launched the second version of our Langston catheter with improved pressure measurement and reduced kinking. We believe our Langston catheter is the only dual lumen pigtail catheter on the U.S. market that is designed specifically for this clinical purpose. We believe the U.S. market opportunity for the Langston catheter product line is greater than \$10 million per year.

In April 2010 we acquired the SmartNeedle and pdACCESS Doppler guided needle products from Escalon. The SmartNeedle and pdACCESS products consist of a hand-held monitor and one-time use needles designed to provide auditory ultrasound guided access to arteries and veins during catheterization procedures.

During 2007 we entered into an agreement with Zerusa Limited (Zerusa) to act as the exclusive U.S. distributor of Zerusa's Guardian hemostatic valve. The Guardian hemostatic valve is a valve used in catheterization procedures to allow the placement of multiple devices simultaneously in the artery with a unique push-button operation that is designed to minimize blood loss. In November 2009 we began distribution of a second generation version called the Guardian II hemostatic valve. In January 2011 we acquired substantially all of the assets of Zerusa, including the Guardian hemostasis valves.

In January 2009 we launched the Minnie support catheter. The Minnie support catheter is designed to provide guidewire support and exchange during complex interventions. We believe the current market size for support catheters is approximately \$30 million per year.

During 2008 we entered into an agreement with Radius Medical, Ltd. to distribute their Micro Elite[™] and Expro Elite[™] Snares within the United States. The Elite snares feature a highly torqueable shaft design for control and maneuverability when accessing distal targets. In October 2010 we acquired the entire snare and retrieval product line from Radius. We believe the market opportunity for snares within interventional cardiology and radiology is approximately \$35 million per year.

During 2006 we launched the Twin-Pass[®] dual access catheter. The Twin-Pass is a two lumen catheter designed to be used in conjunction with steerable guidewires to access discrete regions of the coronary and

peripheral arterial vasculature and for use during procedures utilizing two guidewires. We believe the Twin-Pass addresses a market opportunity of \$5 million per year.

In January 2011, we launched the SuperCross microcatheter. The SuperCross offers guidewire support and delivery during coronary and peripheral catheterization procedures.

Hemostat Products

Our second product category, hemostat products, generated 2012 sales of \$22.7 million, a decline of 2% from the 2011 level. Hemostat products represented 23% of our total product and service sales during 2012.

Our hemostat products primarily utilize thrombin, a powerful bovine-derived blood clotting protein, to deliver a rapid seal of bleeding with a variety of shelf-stable product configurations. Through internal development we developed a proprietary manufacturing process to terminally sterilize our thrombin-based hemostats, which has resulted in our ability to create unique advantages in storage, shipping, preparation and application of our hemostat products.

Our three largest selling hemostat products during 2012 are listed in the chart below.

Product	Market Introduction	2012 Sales (\$MM)	Estimated Market Potential (\$MM)	Description
D-Stat Dry, Thrombix	2003	\$14.4	\$50	Thrombin-based hemostat bandages used in conjunction with manual compression to control bleeding at the site of femoral artery punctures created for interventional access
D-Stat Flowable	2002	\$5.7	\$10	Flowable mixture of collagen, thrombin, and diluent used to control bleeding in the pectoral pockets created in pacemaker and implantable cardioverter defibrillator (ICD) implants
D-Stat Radial	2004	<\$3	\$25	Wrist band that combines a thrombin pad with a compression collar to control bleeding at the radial artery access site created for interventional access

Our most popular hemostat product is the D-Stat Dry hemostat bandage. In September 2003 we received regulatory clearance and commenced sales of our D-Stat Dry hemostat bandage in the United States and international markets. The D-Stat Dry hemostat bandage is a version of our proprietary blood clotting substance that is lyophilized (freeze-dried) into a gauze pad and combined with an adhesive bandage for application. The D-Stat Dry is used as an adjunct to manual compression for managing bleeding after catheterization procedures.

The traditional method for sealing the puncture site after catheterization procedures has been a manual process whereby a healthcare professional applies direct pressure to the puncture site, sometimes using a sand bag or a large C-clamp, for 20 minutes to an hour in order to form a blood clot. The healthcare professional then monitors the patient, who must remain immobile in order to prevent dislodging of the clot, for an additional two to 24 hours. Patients subjected to manual compression generally experience significant pain and discomfort during compression of the puncture site and during the period in which they are required to be immobile. Many patients report that this pain is the most uncomfortable aspect of the catheterization

procedure. In addition, patients can develop a substantial coagulated mass of blood, or hematoma, around the puncture site. Finally, the need for healthcare personnel to provide compression and the use of hospital beds during the recovery period results in substantial costs to the institution, which, under virtually all current healthcare payment systems, are not separately reimbursed.

Until 1996, manual compression was used following virtually all catheterization procedures. In late 1995, the first vascular sealing device which did not rely on compression was introduced in the United States. In addition to invasive (below the skin surface) sealing devices, starting in 2000, non-invasive "patches" began to be used as an assist to manual compression following catheterizations. Non-invasive patches are used by physicians who (principally due to cost, complexity or risk of complications) do not wish to use invasive sealing devices, and for those patients who are contra-indicated for an invasive sealing device. Based on the number of catheterization procedures performed annually by cardiologists and radiologists, industry sources report that the total market opportunity for vascular sealing devices (invasive and noninvasive) is more than \$1 billion annually.

We completed a 376-patient, five center randomized clinical study that demonstrated a 50% reduction in the median time-to-hemostasis when using the D-Stat Dry bandage compared to simple manual compression. In the third quarter of 2006 we received FDA clearance of our claim that the D-Stat Dry reduces the time-tohemostasis in diagnostic catheterizations. In the first quarter of 2008 we received FDA clearance and began selling two new versions of the original D-Stat Dry bandage. The first new version, the D-Stat Dry Clear hemostatic bandage, is packaged with a clear bandage which allows for better visibility of the site while the bandage is in place. The second new version, Thrombix[®], uses a lower cost manufacturing process which offers price flexibility within the product line. In the first quarter of 2009 we received FDA clearance and began selling a new version of the original D-Stat Dry bandage. This new product, the D-Stat Dry Wrap hemostatic bandage, contains a pre-cut specifically designed for the control of bleeding around indwelling lines. In May 2011 we received FDA clearance and began selling a new version of our D-Stat Dry bandages with silver impregnated into the gauze pad to help prevent the colonization of microorganisms on the pad. We believe that the market for hemostat pads following catheterization procedures has grown substantially since the first competitive patch was introduced in 2000, with a market size of approximately \$50 million.

The market for hemostat patches used to stop bleeding of femoral artery punctures is mature, with multiple competitors and ongoing pricing pressures. In addition, two trends are negatively affecting the demand for our D-Stat and Thrombix patches: the recent slow-down in growth of catheterization procedures in general and the movement toward greater reliance on using the radial artery in the arm, rather than the femoral artery in the leg, as the access site for diagnostic and interventional procedures. Radial artery access, or transradial access, is now undergoing rapid adoption in the U.S. A detailed analysis by the Society for Cardiovascular Angiography and Interventions (SCAI) indicated that radial access accounted for fewer than 3% of all catheterization procedures in the U.S. in 2009. But more recent survey data suggest that radial access has grown to approximately 15% presently. The level of penetration is still far behind most other parts of the world - such as Canada at 50% and the average for European countries at around 30% of catheterization procedures, according to the SCAI data - but many U.S. practitioners believe that the percentage of catheterization procedures using radial access in the U.S. is likely to double over the next few years. With approximately 2.6 million diagnostic and 925,000 interventional catheterizations performed in the U.S. in 2012 (numbers that are essentially flat from the 2011 levels), we believe that approximately 500,000 of these procedures were performed with the radial access approach. Based on feedback from cardiac catheterization personnel, we believe the number of radial artery access procedures performed in the U.S. will grow to approximately one million by the end of 2016.

There are several reasons for the growing acceptance of radial access in the U.S. In recent years, a variety of clinical studies have indicated that radial access has a better patient safety profile than femoral access with fewer access site complication, including significantly less bleeding. Earlier ambulation and discharge are possible with radial access, and thus cost-effectiveness studies have consistently favored radial versus femoral access. For centers that focus on patient comfort, the radial approach can be the better choice. The recent availability of specialized radial access devices and catheters has also facilitated adoption of the

technique. Radial access has been integrated into professional society practice guidelines and into the fellowship programs for physicians undergoing training to be certified in interventional specialties.

While the movement to radial access has presented obstacles to expansion of our femoral hemostat patch business, the trend has created opportunities for growth through entirely new products. For example, our D-Stat Radial hemostat band is a version of the D-Stat Dry that includes a compression band to allow it to be applied over the radial artery in the wrist. The D-Stat Radial is the first device for radial artery hemostasis that contains an active blood clotting agent together with a compression collar for this purpose. We received regulatory clearance for the D-Stat Radial hemostat band in September 2003, and made manufacturing improvements to the product before launching it in the United States in early 2004. In December 2009, we made further manufacturing improvements and launched a new version called the D-Stat Rad-BandTM in the United States. In 2012, while sales of our femoral hemostat patches declined 6% on both a U.S. and worldwide basis, sales of our D-Stat Radial device grew 19% worldwide, including 24% growth in the U.S.

During 2012, we adopted a strategic focus on launching products that cater to the significant growth opportunity in the radial access market. In June 2012, we acquired the Accumed wrist positioning splint device from Accumed. The Accumed wrist positioning split consists of a molded plastic brace that simplifies access to the radial artery by holding the wrist and forearm in an appropriate, comfortable position. The device is also designed to facilitate placement of a hemostatic band to control bleeding after the procedure. In October of 2012, we launched the R-Band[™] radial compression device under a licensing agreement with Lepu Medical Technology (Beijing) Co., Ltd. Under the agreement, we serve as the exclusive distributor of the R-Band in the United States. R-Band is placed around the patient's wrist after a radial catheterization procedure and uses an inflatable compression band to assist hemostasis.

Our D-Stat Flowable hemostat, which we began selling worldwide in February 2002, is a thick yet flowable mixture of collagen, thrombin and diluent that can be delivered topically and into voids and open spaces to control active bleeding. The D-Stat Flowable hemostat can be used in a wide variety of procedures as an adjunct to hemostasis. In December 2006 we received FDA approval of our premarket approval (PMA) supplement for the use of D-Stat Flowable in the prepectoral pockets created in pacemaker and implantable cardioverter defibrillator (ICD) implants. Our PMA supplement was supported by the results of our 269-patient "Pocket Protector" clinical study that demonstrated a 48% reduction in the incidence of clinically relevant hematomas through the use of D-Stat Flowable compared to the standard of care. We estimate that the U.S. market opportunity for this prepectoral pocket indication is greater than 100,000 procedures or \$10 million annually.

Vein Products and Services

Our third business category, vein products and services, generated \$14.1 million in revenues during 2012, an increase of 34% from the 2011 level. This business segment was responsible for 14% of our total product and service sales during 2012.

Product/Service	Market Introduction	2012 Sales (\$MM)	Estimated Market Potential (\$MM)	Description
Vari-Lase procedure kits and procedure packs	2003	\$7.9	>\$100	Procedure kits combine our laser fibers with a variety of other components used in endovenous laser ablation procedures (e.g., access needles, sheaths, and guidewires) in individually pouched and sterilized bundles. Procedure packs are sterile bundles of access components used in venous procedures, such as syringes, needles, and scalpels; gowns, drapes and dressings; and other accessories such as topical agents
ClosureFAST reprocessing service	2012	\$4.4	>\$15	Service offered in collaboration with Northeast Scientific, Inc., for the reprocessing of Covidien's ClosureFAST radiofrequency ablation catheters
Vari-Lase consoles	2003	<\$3		810 nm wavelength, 15 watt laser console with non- proprietary connector for use with any laser fiber to perform endovenous laser ablation procedures

Our three major product and service offerings for vein practices are summarized in the table below.

Our Vari-Lase endovenous laser products consist of a laser console, procedure kits and accessories used in the treatment of reflux of the great saphenous vein, commonly referred to as varicose veins. More than one million people in the United States seek treatment each year for varicose veins. Left untreated, varicose veins can result in serious clinical consequences, including limited mobility and venous stasis ulcers. Historically, an invasive surgical procedure known as vein stripping was the only treatment for severe varicose veins. While vein stripping is still performed, since 2002 a non-surgical procedure using endovenous laser energy to treat and close the diseased vein has become a preferred alternative. Clinical data on endovenous laser therapy has demonstrated excellent clinical results and outstanding patient satisfaction. During the fourth quarter of 2004 the Center for Medicare and Medicaid Services (CMS) published the Medicare Physicians Fee Schedule which established favorable reimbursement rates for the endovenous laser procedure starting January 1, 2005. Private insurance companies also have issued reimbursement coverage decisions resulting in more physicians adding endovenous laser therapy to their practice. We believe the current market size for treating varicose veins using endovenous therapy is greater than \$200 million per year.

The first product we launched in our vein product line was our Vari-Lase procedure kit in July 2003 in the United States. Our Vari-Lase procedure kit is custom-designed for the endovenous procedure, with features supporting ease-of-use and safety, and is compatible with many of the competitive laser consoles used in this procedure. In December 2003, we received FDA clearance for our Vari-Lase laser console, which is manufactured to our specifications by MedArt, a leading Denmark-based medical laser manufacturer. Since 2004 we have continued our expansion by adding several accessory items to our vein product line. In April 2007 we launched the Vari-Lase Bright TipTM fiber which utilizes a ceramic sleeve to the distal tip of the laser fiber to provide improved ultrasound visibility and prevent contact between the

energy-transmitting fiber tip and the vein wall during the application of laser energy. In January 2010 we launched a new 15 Watt version of our Vari-Lase laser console.

On December 22, 2011, we entered into an exclusive 5-year license agreement with NES, under which we sell a reprocessing service to customers utilizing the ClosureFast radiofrequency catheter in the treatment of varicose veins in the U.S. The ClosureFast catheter is owned and marketed by VNUS Medical Technologies, Inc., a subsidiary of Covidien. Under the reprocessing service provided by NES, the customer sends its used ClosureFast catheters to NES, where they are inspected, cleaned, tested, repackaged, resterilized and shipped back to the customer. We believe the U.S. market opportunity for reprocessing the ClosureFast catheter is greater than \$15 million per year.

On July 17, 2012, we announced that we had entered into an agreement that expires on December 31, 2015, with VueTek Scientific LLC to serve as distributor in the U.S. and 20 other countries, including Canada, Mexico, and the European countries that accept the CE Mark, for the Veinsite® vascular imaging system. Veinsite is a portable, battery-powered headset that uses near-infrared (NIR) light to identify veins below the skin surface. It is a helpful tool to vein therapy physicians while performing sclerotherapy and phlebectomy procedures.

The amount of total revenue contributed by each of our product lines and by geographic areas for the last three fiscal years is set forth in Notes 2 and 11 to our Consolidated Financial Statements in Item 8 of Part II of this Annual Report on Form 10-K for the year ended December 31, 2012.

Agreements with King Pharmaceuticals, Inc.

In January 2007, we entered into three agreements with King Pharmaceuticals, Inc. (King), consisting of a License Agreement, a Device Supply Agreement and a Thrombin-JMI[®] Supply Agreement.

The effect of these three agreements was to forge a new relationship between us and King having essentially three components. First, King is selling through its direct sales force, and we are manufacturing and supplying to King, our Thrombi-Pad trauma bandage and Thrombi-Gel hemostat products. Second, we are working with King to develop additional hemostat products to be sold by King outside of our direct sales force's call point of cardiac, peripheral and electrophysiology catheterization laboratories. Third, King is selling Thrombin-JMI[®] to us for use in the manufacture of our hemostatic products under a 10-year, fixed price arrangement.

Under the terms of the License Agreement, we granted to King an exclusive, royalty-free, fully-paid up, perpetual, worldwide right and license to all of our patents and know-how relating to the development, manufacture, use, sale, importation or other exploitation of our Thrombi-Pad trauma bandage, Thrombi-Gel hemostats, Thrombi-Paste hemostat (collectively, the "Products") and all future medical devices having application in the Field (as defined below) and intended to produce hemostasis by accelerating the clotting process of blood (a "hemostat device"). The "Field" is defined as all applications of hemostat devices in all areas other than catheterization laboratories (cardiac and peripheral), electrophysiology laboratories and holding and recovery rooms for such laboratories. Upon execution of the License Agreement, King paid us a one-time payment of \$6.0 million. No other payments are due from King to us under the License Agreement. The term of the License Agreement commenced on January 9, 2007 and continues until the later of the expiration of each licensed patent or King's relinquishment of its license rights under the licensed know-how.

Under the terms of the Device Supply Agreement, we agreed to manufacture and supply the Products to King and King agreed to purchase the Products from us for King's exclusive commercialization, distribution, sale and use of the Products in the Field. King does not have any minimum purchase obligations under the Device Supply Agreement. The Device Supply Agreement does not limit our ability to manufacture the Products for our own commercialization, distribution, sale and use outside of the Field. The transfer prices are fixed for each Product under the Device Supply Agreement and are adjusted for cost and inflation increases according to a market index. Upon the first commercial sale by King of a Thrombi-Gel hemostat

(which occurred in May 2007), King made a one-time, non-refundable milestone payment to us of \$1.0 million. Upon the first commercial sale by King of a Thrombi-Paste hemostat product (which has not occurred and is expected to never occur), King agreed to make another one-time, non-refundable milestone payment to us of \$1.0 million. If, after undertaking and completing the development and regulatory plans with respect to the Thrombi-Gel and Thrombi-Paste products, such development and regulatory efforts did not result in regulatory approval for use of the product in surgery, we agreed to make a one-time, noncreditable, non-refundable payment in the amount of \$2.5 million to King for each of the two products.. On July 6, 2011, King notified us that they were terminating the development of the Thrombi-Paste products and terminating efforts to obtain the surgical indication for the Thrombi-Gel products. As a result of King making the decision to not proceed, we are not required to make either of the \$2,500,000 payments to King, and instead we recognized revenue of \$2,762,000 in the third quarter of 2011 as the remaining deferred license revenue originally allocated to the Thrombi-Paste products and the surgical indication of the Thrombi-Gel products as part of this agreement. Under the Device Supply Agreement, King also has certain rights of first refusal with respect to any hemostatic devices for use in the Field that we may develop on our own or at the request of King. The Device Supply Agreement has an initial term of 10 years, followed by successive automatic one-year extensions, subject to termination by the parties under certain circumstances, including termination by King without cause any time after the third anniversary of its execution upon two years prior written notice to us.

Under the terms of the Thrombin-JMI[®] Supply Agreement, King agreed to manufacture and supply thrombin to us on a non-exclusive basis. King agreed to supply us with such quantity of thrombin as we may order for use in devices not intended for sale by King in the Field at a fixed price throughout the term of the Thrombin-JMI[®] Supply Agreement as adjusted for inflation, variations in potency and other factors. King also agreed to provide thrombin to us under the Thrombin-JMI[®] Supply Agreement at no cost for incorporation into Products and hemostat devices intended for sale in the Field by King. The Thrombin-JMI[®] Supply Agreement has an initial term of 10 years, followed by successive automatic one-year extensions, subject to termination by the parties under certain circumstances, including (1) termination by King without cause any time after the fifth anniversary of its execution upon five years prior written notice to us and (2) termination by us without cause any time after the fifth anniversary of its execution upon five years prior written notice to King provided that the Device Supply Agreement has expired on its terms or the parties have agreed to terminate it.

Business Strategy

Our primary objective is to establish ourselves as a leading supplier of clinically superior medical devices and services for substantial, unique opportunities within interventional medicine. The key steps in achieving our primary objective are the following:

- Maintain and Improve our Clinically-Oriented Direct Sales Force in the United States. During 2000 we commenced sales of our products in the United States through a direct sales force of clinically trained account managers who sell and train interventional cardiologists, radiologists and catheterization laboratory personnel on the use of our products. As our product lines have increased, we have increased the size of our sales force to 96 at the end of 2012, which provides substantially complete geographic coverage of the United States.
- Expand our Existing Products to Our Existing Market. Since the beginning of 2003 we have launched multiple new products and services in the United States through our direct sales force to our existing markets. Pursuing this multiple product and services strategy has generated material sales growth, and we believe that each of our current product lines has the potential to generate continued sales growth during 2013 and beyond.
- Develop New Devices and Services to be Sold Through our Direct Sales Force to our Existing Customers. We intend to continue to leverage our direct sales force by bringing additional products and services to the interventional physician.

- Acquire Additional Products or Services to be Sold Through our Direct Sales Force to our Existing Customers. We intend to continue to leverage our direct sales force by bringing additional products and services to the interventional physician through acquisitions. Over the past two years we have acquired products and services from Zerusa, NES, Accumed, St. Jude Medical and Shepherd Scientific (see Note 15 to our Consolidated Financial Statements in Item 8 of Part II of this Annual Report on Form 10-K for the year ended December 31, 2012). We expect to continue to acquire complementary products and services and to enter into distribution agreements for the distribution of other companies' products through our direct U.S. sales force.
- Explore Corporate Relationships to Augment our Direct Sales Force. In markets for our products beyond the interventional physician (such as occurred with our Thrombi-Gel, Thrombi-Paste and Thrombi-Pad products) and in other situations where synergistic sales can result, we intend to enter into corporate relationships to broaden our products' reach and increase our revenues without distracting our direct sales force.

Sales, Marketing and Distribution

In 2000 we commenced sales of our Duett sealing device in the United States through our direct sales organization. As of December 31, 2012, our worldwide sales force consisted of 96 employees, all of whom sell our entire line of products and services. We believe that the majority of interventional catheterization procedures in the United States are performed in high volume catheterization laboratories, and that these institutions can be served by our focused direct sales force.

In January 2011, we created a wholly-owned subsidiary in Ireland to facilitate the acquisition of the Guardian hemostasis valve products from Zerusa. Upon closing of the acquisition, this subsidiary commenced sales of the Guardian hemostasis valves in international markets through independent distributors.

As part of our sales strategy, our sales force is clinically trained and is able to train physicians and other healthcare personnel on the use of our products and services. We believe that effective training is a key factor in encouraging physicians to use interventional medical devices and services. We have created, and will continue to work to improve, an in-the-field training program for the use of all of our products and services. We also develop and maintain close working relationships with our customers to continue to receive input concerning our product and service development plans.

We are focused on building market awareness and acceptance of our products and services. Our marketing department provides a wide range of programs, materials and events that support our sales force. These include product and service training, conference and trade show appearances and sales literature and promotional materials.

Our international sales and marketing strategy has been to sell to interventional cardiologists and interventional radiologists through established independent distributors in major international markets, subject to required regulatory approvals. We currently have independent distributors that cover 50 countries outside the U.S. In Germany, we created a wholly-owned subsidiary to sell directly to customers in the German market beginning in the fourth quarter of 2000. In the first quarter of 2008 we transitioned our sales in Germany to an independent distributor and closed our German subsidiary. We have entered into multi-year written distributors upon receipt of purchase orders. Each of our independent distributors has the exclusive right to sell our products within a defined territory. These distributors also market other medical products, although they have agreed not to sell directly competitive products. Our independent distributors purchase our products from us at a discount from list price and resell the device to hospitals and clinics. Sales to international distributors are denominated in United States dollars, with the exception of sales from our

subsidiary in Ireland and sales to our German distributor, which are denominated in Euros. The end-user price is determined by the distributor and varies from country to country.

New Product and Service Development

Our growth depends in large part on the continuous introduction of new and innovative products and services, together with ongoing enhancements to our existing products and services, through internal product development, technology licensing and strategic alliances. We recognize the importance of, and intend to continue to make investments in, research and development. We incurred expenses of \$11,870,000 in 2012, \$10,240,000 in 2011, and \$9,524,000 in 2010 for research and development activities, which constituted 12%, 11%, and 12%, respectively, of net sales. R&D activities include research, product development and intellectual property. We expect that our R&D expenditures will be approximately 10 to 12% of net sales in 2013.

Our research and product development group works closely with our sales force to incorporate customer feedback into our development and design process. We believe that we have a reputation within interventional cardiology and interventional radiology as a good partner for product and service development because of our tradition of close physician collaboration, dedicated market focus, responsiveness and execution capabilities for product and service development and commercialization.

To further leverage our efficiencies, our research and development group continues to develop in-house capabilities to manufacture some of the components currently produced by outside vendors.

We expect our research and development activities to continue to expand to include evaluation of new concepts, products and services for the interventional cardiology and interventional radiology field. We believe that there are many potential new interventional products and services that would fit within the development, clinical, manufacturing and distribution network we have created for our existing products and services.

Manufacturing

We manufacture our products in our facilities located in the suburbs of Minneapolis, Minnesota and in the country of Ireland. The catheter manufacturing and packaging processes occur under a controlled clean room environment. Our quality system, manufacturing facilities and processes have been certified to be compliant with the European Medical Device Directive 93/42/EEC, ISO 13485:2012, the Canadian Medical Device Regulations SOR/98-282, and FDA Quality System Regulations.

We purchase components from various suppliers and rely on single sources for several parts of our products. We purchase our requirements for thrombin (a component in all of the D-Stat products) for use in manufacturing products sold in the U.S. under the Thrombin-JMI[®] Supply Agreement with King. To date, we have not experienced any significant adverse effects resulting from shortages of components.

The manufacture and sale of our products entails significant risk of product liability claims. Although we have product liability insurance coverage in an amount which we consider reasonable, it may not be adequate to cover potential claims. Any product liability claims asserted against us could result in costly litigation, reduced sales and significant liabilities and divert the attention of our technical and management personnel away from the development and marketing of our products for significant periods of time.

Competition

We encounter significant competition across our product lines and in each market in which our products are sold. These markets are characterized by rapid change resulting from technological advances and

scientific discoveries. We face competitors ranging from large manufacturers with multiple business lines to small manufacturers that offer a limited selection of products.

Our primary competitors include: Medtronic, Abbott Laboratories, Johnson & Johnson, Boston Scientific, Covidien, Merit Medical, Marine Polymer Technologies, Cook Medical, Spectranetics, AngioDynamics, biolitec, Dornier MedTech, St. Jude Medical and Terumo.

Many of our competitors have substantially greater financial, technological, research and development, regulatory, marketing, sales and personnel resources than we do. Competitors may also have greater experience in developing products, obtaining regulatory approvals, and manufacturing and marketing such products. Additionally, competitors may obtain patent protection or regulatory approval or clearance, or achieve product commercialization before us, any of which could materially adversely affect us. We compete on the basis of our clinically differentiated products and services and focused opportunities within this interventional medical device and service market.

In each of our product and service areas, we believe that several other companies are developing new devices and services. The medical device industry is characterized by rapid and significant technological changes as well as the frequent emergence of new technologies. There are likely to be research and development projects related to these market areas of which we are currently unaware. A new technology, product or service may emerge that results in a reduced need for our products and services or results in a product or service that renders our product or service noncompetitive.

Regulatory Requirements

United States

Our products and services are regulated in the United States as medical devices by the FDA under the Federal Food, Drug and Cosmetic Act. The FDA classifies medical devices and services into one of three classes based upon controls the FDA considers necessary to reasonably ensure their safety and effectiveness. Class I devices are subject to general controls such as labeling, adherence to good manufacturing practices and maintenance of product complaint records, but are usually exempt from premarket notification requirements. Class II devices are subject to the same general controls and also are subject to special controls such as performance standards, and FDA guidelines, and may also require clinical testing prior to approval. Class III devices are subject to the highest level of controls because they are used in life-sustaining or life-supporting implantable devices. Class III devices require rigorous clinical testing prior to their approval and generally require a premarket approval (PMA) or supplement application prior to their sale.

If a medical device manufacturer can establish that a device is "substantially equivalent" to a legally marketed Class I or Class II device, or to an unclassified device, or to a Class III device for which the FDA has not called for PMAs, the manufacturer may seek clearance from the FDA to market the device by filing a 510(k) premarket notification. The 510(k) notification must be supported by appropriate data establishing the claim of substantial equivalence to the satisfaction of the FDA. Following submission of the 510(k) notification, the manufacturer may not place the device into commercial distribution in the United States until an order is issued by the FDA.

Manufacturers must file an investigational device exemption (IDE) application if human clinical studies of a device are required and if the FDA considers experimental use of the device to represent significant risk to the patient. The IDE application must be supported by data, typically including the results of animal and mechanical testing of the device. If the IDE application is approved by the FDA, human clinical studies may begin at a specific number of investigational sites with a maximum number of patients, as approved by the FDA. The clinical studies must be conducted under the review of an independent institutional review board to ensure the protection of patient rights. Generally, upon completion of human clinical studies, a manufacturer seeks approval of a Class III medical device from the FDA by submitting a PMA application. A PMA application must be supported by extensive data, including the results of the clinical studies, as well as literature to establish the safety and effectiveness of the device.

Our D-Stat Flowable is dually classified as both a Class III and Class II device based on the three distinct indications for use that have been assigned to this product.

Our remaining products generally are classified as Class II products and therefore require clearance of a 510(k) notification by the FDA prior to being sold in the United States. Each of the devices within these product lines was subject to a 510(k) notification which was determined to be "substantially equivalent" to a legally marketed predicate device by the FDA, thereby allowing commercial marketing in the United States. In some instances we are able to launch a next generation product without a formal 510(k) notification filing.

We also are subject to FDA regulations concerning manufacturing processes and reporting obligations. These regulations require that manufacturing operations be performed according to FDA standards and in accordance with documentation, control and testing standards. We are subject to inspection by the FDA on an on-going basis. We are required to provide information to the FDA on adverse events and maintain a documentation and record keeping system in accordance with FDA guidelines. The advertising of our products is subject to both FDA and Federal Trade Commission jurisdiction. If the FDA believes that we are not in compliance with any aspect of the law, it can institute proceedings to detain or seize products, issue a recall, stop future violations and assess civil and criminal penalties against us, our officers and our employees.

International

The European Union has adopted rules which require that medical products receive the right to affix the CE mark, an international symbol of adherence to quality assurance standards and compliance with applicable European medical device directives. As part of the CE mark compliance, manufacturers are required to comply with the European quality systems standards. We received CE mark certification for our first product and certification of our quality system in July 1998, and we have subsequently received the CE mark certification for other products we distribute in the European Union.

Our hemostatic products contain bovine-derived thrombin and are subject to additional regulatory review within the European Union to minimize the risk of exposure to viral and Bovine Spongiform Encephalopathy (BSE) pathogens. The regulations in this area continue to evolve and our products may be subject to additional regulatory scrutiny in the future.

International sales of our products are subject to the regulatory requirements of each country in which we sell. These requirements vary from country to country but generally are less stringent than those in the United States. Regulatory approvals are obtained where required to sell our products in those countries.

Third Party Reimbursement

In the United States, healthcare providers that purchase medical devices generally rely on third-party payors, principally the Centers for Medicare and Medicaid Services or CMS (formerly the Health Care Financing Administration, or HCFA) and private health insurance plans, to reimburse all or part of the cost of catherization procedures. We believe that in the current United States reimbursement system, the cost of vascular sealing devices is incorporated into the overall cost of the catheter procedure. Our other products are subject to reimbursement rules depending on the specific medical procedure in which they are utilized.

CMS and the AMA Current Procedure Terminology (CPT) panel finalized the implementation of reimbursement codes for the endovenous laser ablation procedure beginning in January 2005. This action cleared the way for a consistent means of billing the Medicare program for medically necessary vein treatments using laser technologies and resulted in a favorable reimbursement rate. Reimbursement for these

procedures is now well-established but adjusted annually in accordance with the normal adjustment procedures of CMS.

Market acceptance of our products in international markets is dependent in part upon the availability of reimbursement from healthcare payment systems. Reimbursement and healthcare payment systems in international markets vary significantly by country. The main types of healthcare payment systems in international markets are government-sponsored healthcare and private insurance. Countries with government-sponsored healthcare, such as the United Kingdom, have a centralized, nationalized healthcare system. New devices are brought into the system through negotiations between departments at individual hospitals at the time of budgeting. In most foreign countries, there are also private insurance systems that may offer payments for alternative therapies.

Patents and Intellectual Property

We file patent applications to protect technology, inventions and improvements that are significant to the development of our business, and use trade secrets and trademarks to protect other areas of our business. We currently have 19 U.S. patents issued and 6 additional patents pending concerning our Pronto catheter, Gopher catheter, Guardian hemostasis valve, Vari-Lase products, GuideLiner catheter and other products. We also have pursued international patent applications. Our 19 U.S. patents have expiration dates ranging from August 2016 to February 2030.

The interventional medical device market in general, and the endovenous laser therapy field in particular, are characterized by frequent and substantial intellectual property litigation. Currently, we are not involved in any patent litigation; however, we have been involved in multiple pieces of litigation, the last of which was completed in 2010. The interpretation of patents involves complex and evolving legal and factual questions. Intellectual property litigation in recent years has proven to be complex and expensive, and the outcome of such litigation is difficult to predict.

We may become the subject of additional intellectual property claims in the future related to our products or services. Our defense of any intellectual property claims, regardless of the merits of the complaint, could divert the attention of our technical and management personnel away from the development and marketing of our products and services for significant periods of time. The costs incurred to defend these claims could be substantial and adversely affect us, even if we are ultimately successful.

We also rely on trade secret protection for certain aspects of our technology. We typically require our employees, consultants and vendors for major components to execute confidentiality agreements upon their commencing services with us or before we disclose confidential information to them. These agreements generally provide that all confidential information developed or made known to the other party during the course of that party's relationship with us is to be kept confidential and not disclosed to third parties, except in special circumstances. The agreements with our employees also provide that all inventions conceived or developed in the course of providing services to us shall be our exclusive property.

We also register the trademarks through which we conduct our business. To date, we have registered and use the trademarks "Acolysis[®]," "Acolysis System[®]," "Auto-Fill[®]," "D-Stat[®]," "Drainer[®]," "Draine Edge[®]," "Gandras[®]," "Gator[®]," "Gopher[®]," "GrebSet[®]," "Guardian[®]," "GuideLiner[®]," "Hunter[®]," "Jiffy Wire[®]," "Langston[®]," "Minnie[®]," "Muskie[®]," "Piggyback[®]," "Pronto[®]," "QXT Extraction Catheter[®]," "Rad-Band[®]," "Sealix[®]," "Skyway[®]," "SmartNeedle[®]," "Thrombix[®]," "Thrombi-Gel[®]," "Trespass[®]," "Twin-Pass[®]," "Vari-Lase[®]," "Venture[®]," and "WireFiber[®]," and we use the following trademarks "AccumedTM," "AngioAssistTM," "Amplatz SSTTM," "AxisTM," "BennelliTM," "Bright TipTM," "Centesis TrayTM," "CohenTM," "Diagnostic DuettTM," "Duo CobraTM," "EliteTM," "Expro EliteTM," "FRTM dilator," "Gel-BeadTM," "Gel-BlockTM," "Gel-RopeTM," "InnerChangeTM," "LatchTM," "M2TM," "Mg SealTM," "Max-SupportTM," "MaximusTM," "MICRO EliteTM," "NavigationTM," "OracleTM," "Quattro TM," "R350TM," "R-BandTM," "SuperCrossTM," "Switch-ItTM," "SymproTM," "Teirstein EdgeTM," "VSI SelectTM," "VSI StraitSetTM," "VSI Tru-TorqueTM," "XLTM," and "DuettTM." We acquired the registered trademark "Acolysis" in connection with our acquisition of the Acolysis therapeutic ultrasound business in 2002. We acquired the registered trademark "SmartNeedle" in connection with our acquisition of the SmartNeedle and pdAccess products in April 2010. We acquired the unregistered trademarks "Expro Elite" and "MICRO Elite" in connection with our acquisition of the snare and retrieval products in October 2010. We acquired the registered trademark "Guardian" in connection with our acquisition of the Guardian hemostasis valve products in January 2011. We acquired the unregistered trademark Accumed in connection with our acquisition of the Accumed wrist positioning splint product in June 2012. We acquired the registered trademark Venture in connection with our acquisition of the Venture Wire Control Catheter business in August 2012. We acquired the unregistered trademarks AngioAssist and Teirstein Edge in connection with our acquisition of the AngioAssist docking station and Teirstein Edge device organizer products in December 2012. U.S. trademark registrations are generally for a term of 10 years, renewable every 10 years as long as the trademark is used in the regular course of trade.

The trademark "ClosureFast[®]" is owned by Tyco Healthcare Group, LP. The trademark "Veinsite[®]" is owned by VueTek Scientific LLC.

Employees

As of December 31, 2012, we had 377 full-time employees. Of these employees, 136 were in manufacturing activities, 127 were in sales and marketing activities, 51 were in regulatory, quality assurance and clinical research activities, 40 were in research and development activities, and 23 were in general and administrative functions. We have never had a work stoppage and none of our employees are covered by collective bargaining agreements. We believe our employee relations are good. We are an Equal Opportunity Employer.

Executive Officers of the Registrant

Our executive officers as of January 31, 2013 are as follows:

<u>Name</u>	Age	<u>Position</u>
Howard Root	52	Chief Executive Officer and Director
James Hennen	40	Chief Financial Officer, Senior Vice President of Finance and Corporate Secretary
Charmaine Sutton	53	Senior Vice President of Operations
William Rutstein	60	Senior Vice President of Worldwide Sales
Jonathan Hammond	45	Vice President of Manufacturing Engineering
Brett Demchuk	49	Vice President of Product Quality
Susan Christian	44	Vice President of Sales Operations
Carrie Powers	38	Vice President of Marketing
Phillip Nalbone	51	Vice President of Corporate Development

Howard Root has served as Chief Executive Officer and a member of our Board of Directors since he co-founded Vascular Solutions in February 1997. From 1990 to 1995, Mr. Root was employed by ATS Medical, Inc., a mechanical heart valve company, most recently as Vice President and General Counsel. Prior to joining ATS Medical, Mr. Root practiced corporate law, specializing in representing emerging growth companies, at the law firm of Dorsey & Whitney LLP for over five years. Mr. Root is a member of the Board of Directors of the Medical Device Manufacturers Association (MDMA).

James Hennen has served as our Chief Financial Officer since January 2004. Mr. Hennen served as our Controller & Director of Finance from February 2002 through December 2003. Prior to joining us, Mr. Hennen served in various accounting positions, most recently as International Controller with WAM!NET, Inc., a globally networked information technology company for media transfer, where he worked from December 1997 through February 2002. From October 1995 through December 1997, Mr. Hennen was an auditor for Ernst & Young, LLP. Mr. Hennen is a Certified Public Accountant (inactive).

Charmaine Sutton has served as our Senior Vice President of Operations since March 2010. Ms. Sutton previously served on our Board of Directors from July 2007 to March 2010. Ms. Sutton is an expert in regulatory strategies for gaining market authorization of Class II and III devices and diagnostics, and in the development, implementation, troubleshooting and improvement of ISO 13485 and FDA QSR quality systems. Starting in 1991, Ms. Sutton was principal consultant and co-founder of The Tamarack Group, an association of consultants assisting developers and manufacturers of medical devices, diagnostics, pharmaceuticals, biologics and combination products with regulatory and quality system activities. Prior to co-founding The Tamarack Group, Ms. Sutton held Director and VP level Engineering, Regulatory, Quality and Clinical positions in start-up companies, and was a research scientist in the laser fusion program at Lawrence Livermore National Laboratory. From 2006-2011 Ms. Sutton was an adjunct instructor for the Regulatory Affairs and Services graduate program at St. Cloud State University.

Bill Rutstein has served as our Senior Vice President of Worldwide Sales since July 2010. Mr. Rutstein previously served as our Vice President of International Sales starting in October 2008, Senior Director of International Sales starting in January 2008, and Director of International Sales upon joining Vascular Solutions in August 1999. Prior to joining us, Mr. Rutstein was the Business Unit Director for the cardiosurgery division of Minntech Corporation, a medical device company, from April 1997 to July 1999. From November 1988 to March 1997, Mr. Rutstein worked for Daig Corporation (a St. Jude Medical Company), a medical device company specializing in cardiology and electrophysiology catheters, where he served as Regional Sales Manager, National Sales Manager, OEM Sales Manager and International Sales Manager.

Jonathan Hammond has served as our Vice President of Manufacturing Engineering since January 2010. Mr. Hammond previously served as our Director of Process Development from January 2008 to December 2009, our Process Development Manager from January 2007 to December 2007, and our Senior Process Development Engineer from the time he joined us in July of 2005 until December 2006. Prior to joining us, Mr. Hammond served as Senior Manufacturing Engineer with Enpath Medical, a leading supplier of venous vessel introducers, where he worked from November 2002 through June of 2005. From March 1993 through October 2002, Mr. Hammond served in various engineering and technical product management roles for MICROVENA Corporation (ev3).

Brett Demchuk has served as our Vice President of Product Quality since July 2007. Prior to joining us, Mr. Demchuk worked at ATS Medical, Inc. where he was Senior Director of Operations from 1998 to July 2007 and Quality Manager from 1992 to 1998. Prior to ATS Medical, Mr. Demchuk held quality assurance engineering positions at Orthomet and GV Medical.

Susan Christian has served as our Vice President of Sales Operations since October 2008. Ms. Christian previously served as our Senior Director of Sales Operations and Director of Sales Administration upon joining the company in September 2006. Prior to joining us, Ms. Christian served as the Senior Vice President of Finance & Operations of Tad Ware & Company, Inc., a marketing communications agency, where she worked from April 1992 to September 2006. From August 1990 through March 1992, Ms. Christian was a Tax Accountant for Arthur Andersen & Co. Ms. Christian is a Certified Public Accountant (inactive).

Carrie Powers has served as our Vice President of Marketing since July 2009. Ms. Powers previously served as our Senior Director of Product Management and Training from July 2008 to June 2009, Director of Training from March 2007 to July 2008, Product Manager for the Hemostasis Product Line from July 2006 to March 2007 and began her employment with us as an Associate Product Manager for the Hemostasis Product Line from January 2006 to July 2006. Prior to joining us, Ms. Powers was employed by St. Mary's Hospital in Madison, Wisconsin from 2002 to 2006, most recently as a Registered Nurse in the Interventional Cardiac Catheterization Lab.

Phillip Nalbone has served as our Vice President of Corporate Development since September 2011. Prior to joining us, Mr. Nalbone spent nearly 20 years as a medical devices analyst at various investment firms, including Hambrecht & Quist, Volpe Brown Whelan & Co., Solomon Smith Barney, RBC Capital Markets, and Wedbush Securities.

There are no family relationships among any of our executive officers.

Available Information

We make available free of charge on or through our internet website at <u>www.vasc.com</u> our Annual Reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, required Interactive Data files and amendments to these reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (the Exchange Act) as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

ITEM 1A. RISK FACTORS

The risks and uncertainties described below are not the only ones facing our company. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations. If any of the following risks occur, our business, financial condition or results of operations could be seriously harmed.

We will not be successful if the interventional medical device community does not adopt our new products or services.

We have launched over 70 new products or services since 2003. Our success will depend on the continued launch of new products and services and the medical community's acceptance of our new products and services. We cannot predict how quickly, if at all, the medical community will accept our new products and services, or, if accepted, the continuation or extent of their use. Our potential customers must:

- believe that our products or services offer benefits compared to the methodologies and/or devices that they are currently using;
- use our products or services and obtain acceptable clinical outcomes;
- believe that our products or services are worth the price that they will be asked to pay; and
- be willing to commit the time and resources required to change their current methodology.

Because we are often selling a new technology, we have limited ability to predict the level of growth or timing in sales of these products or services. If we encounter difficulties in growing our sales of our new medical devices or services in the United States, our business will be seriously harmed.

We may face litigation claims which could prevent us from manufacturing and selling our products or services or result in our incurring substantial costs and liabilities.

The interventional medical device industry is characterized by numerous patent filings and subject to extensive regulation. As a result, participants in the industry frequently experience substantial intellectual property litigation and governmental inquiries, investigations and litigation.

Some companies in the interventional medical device industry have employed intellectual property litigation in an attempt to gain a competitive advantage. Intellectual property litigation has proven to be very complex, and the outcome of such litigation is difficult to predict. While we are not currently involved in any intellectual property litigation and we do not believe that any of our products or services infringes any existing patent or other intellectual property right, it is highly likely that we will continue to become subject to intellectual property claims with respect to our new or existing products or services.

An adverse determination in any intellectual property litigation or interference proceedings could prohibit us from selling a product or service, subject us to significant immediate payments to third parties and require us to seek licenses from third parties. The costs associated with these license arrangements may be substantial and could include substantial up-front payments and ongoing royalties. Furthermore, the necessary licenses may not be available to us on satisfactory terms, if at all. Adverse determinations in a judicial or administrative proceeding or failure to obtain necessary licenses could prevent us from manufacturing and selling a product or service.

The products and business activities of medical device companies are subject to rigorous regulation by the FDA and other federal, state and international governmental authorities. These authorities and members of Congress have been increasing their scrutiny over the medical device industry. In recent years, the U.S. Congress, the Department of Justice, the Office of Inspector General of the Department of Health and Human Services, and the Department of Defense have issued subpoenas and other requests for information to, conducted investigations of and commenced civil and criminal litigation against medical device manufacturers, primarily related to financial arrangements with health care providers, regulatory compliance and product promotional practices. See "Legal Proceedings" in Item 3 of Part I of this Annual Report on Form 10-K for the year ended December 31, 2012, for a description of a pending action against us by the U.S. Attorney's Office for the Western District of Texas involving allegations of off-label promotion. We anticipate that these governmental authorities will continue to scrutinize our industry closely, and that additional regulation by government authorities may increase compliance costs, exposure to the risks of civil and criminal litigation, and other potentially adverse effects on our operations.

Our defense of these intellectual property claims and governmental actions, whether ongoing or filed in the future and regardless of the merits of the action or complaint, could divert the attention of our technical and management personnel away from the development and marketing of our products and services for significant periods of time. The costs incurred to defend these actions and claims could have a material adverse effect on our results of operations or financial condition, even if our defense is ultimately successful.

Our future operating results are difficult to predict and may vary significantly from quarter to quarter, which may adversely affect the price of our common stock.

The ongoing introduction of new products and services that affect our overall product mix make the prediction of future operating results difficult. You should not rely on our past revenue growth as any indication of future growth rates or operating results. The price of our common stock will likely fall in the event that our operating results do not meet the expectations of analysts and investors. Comparisons of our quarterly operating results are an unreliable indication of our future performance because they are likely to vary significantly based on many factors, including:

- the level of sales of our products and services in the United States market;
- our ability to introduce new products or services and enhancements in a timely manner;
- the demand for and acceptance of our products and services;
- the success of our competition and the introduction of alternative products or services;
- our ability to command favorable pricing for our products and services;
- the growth of the market for our devices and services;
- the expansion and rate of success of our direct sales force in the United States and our independent distributors internationally;
- actions relating to ongoing FDA compliance;

- the effect of intellectual property disputes;
- the size and timing of orders from independent distributors or customers;
- the attraction and retention of key personnel, particularly in sales and marketing, regulatory, manufacturing and research and development;
- unanticipated delays or an inability to control costs;
- general economic conditions as well as those specific to our customers and markets; and
- seasonal fluctuations in revenue due to the elective nature of some procedures.

We may face product liability claims that could result in costly litigation and significant liabilities.

The manufacture and sale of medical products entails significant risk of product liability claims. Any product liability claims, with or without merit, could result in costly litigation, reduced sales, cause us to incur significant liabilities and divert our management's time, attention and resources. We cannot be sure that our product liability insurance coverage is adequate or that it will continue to be available to us on acceptable terms, if at all.

The market for interventional medical devices and services is highly competitive and will likely become more competitive, and our competitors may be able to respond more quickly to new or emerging technologies and changes in customer requirements that may render our products or services obsolete.

The existing market for interventional medical devices and services is intensely competitive. We expect competition to increase further as companies develop new products and services or modify their existing products and services to compete directly with ours. Each of our products and services encounters competition from several medical device companies, including Medtronic Inc., Boston Scientific Corporation, Covidien plc, C.R. Bard, Inc. and St. Jude Medical Inc. Each of these companies has:

- better name recognition;
- broader product lines;
- greater sales, marketing and distribution capabilities;
- significantly greater financial resources;
- larger research and development staffs and facilities; and
- existing relationships with some of our potential customers.

We may not be able to effectively compete with these companies. In addition, broad product lines may allow our competitors to negotiate exclusive, long-term supply contracts and offer comprehensive pricing for their products or services. Broader product lines may also provide our competitors with a significant advantage in marketing competing products or services to group purchasing organizations and other managed care organizations that are increasingly seeking to reduce costs through centralized purchasing. Greater financial resources and product development capabilities may allow our competitors to respond more quickly to new or emerging technologies and changes in customer requirements that may render our products or services obsolete.

Our international sales are subject to a number of risks that could seriously harm our ability to successfully commercialize our products and services in any international market.

Our international sales are subject to several risks, including:

- the ability of our independent distributors to sell our products and services;
- the impact of recessions in economies outside the United States;
- greater difficulty in collecting accounts receivable and longer collection periods;
- unexpected changes in regulatory requirements, tariffs or other trade barriers;
- weaker intellectual property rights protection in some countries;
- potentially adverse tax consequences; and
- political and economic instability.

The occurrence of any of these events could seriously harm our future international sales and our ability to successfully commercialize our products and services in any international market.

Our business and results of operations may be seriously harmed by changes in third-party reimbursement policies.

We could be seriously harmed by changes in reimbursement policies of governmental or private healthcare payors, particularly to the extent any changes affect reimbursement for catheterization procedures in which our products or services are used. Failure by physicians, hospitals and other users of our products or services to obtain sufficient reimbursement from healthcare payors for procedures in which our products or services are used or adverse changes in governmental and private third-party payors' policies toward reimbursement for such procedures would seriously harm our business.

In the United States, healthcare providers, including hospitals and clinics that purchase medical devices or services such as our products and services, generally rely on third-party payors, principally federal Medicare, state Medicaid and private health insurance plans, to reimburse all or part of the cost of catheterization procedures. Any changes in this reimbursement system could seriously harm our business.

In international markets, acceptance of our products and services is dependent in part upon the availability of reimbursement within prevailing healthcare payment systems. Reimbursement and healthcare payment systems in international markets vary significantly by country. Our failure to receive international reimbursement approvals could have a negative impact on market acceptance of our products and services in the markets in which these approvals are sought.

Our products and our manufacturing activities are subject to extensive governmental regulation that could prevent us from selling our products or services in the United States or introducing new and improved products or services.

Our products and services and our manufacturing activities are subject to extensive regulation by a number of governmental agencies, including the FDA and comparable international agencies. We are required to:

- obtain the clearance of the FDA and international agencies before we can market and sell our products and services;
- satisfy these agencies' content requirements for all of our labeling, sales and promotional materials; and
- undergo rigorous inspections by these agencies.

Compliance with the regulations of these agencies may delay or prevent us from introducing any new model of our existing products or other new products or services. Furthermore, we may be subject to sanctions, including temporary or permanent suspension of operations, product recalls and marketing restrictions if we fail to comply with the laws and regulations pertaining to our business.

We are also required to demonstrate compliance with the FDA's quality system regulations. The FDA enforces its quality system regulations through pre-approval and periodic post-approval inspections. These regulations relate to product testing, vendor qualification, design control and quality assurance, as well as the maintenance of records and documentation. If we are unable to conform to these regulations, the FDA may take actions which could seriously harm our business. In addition, government regulation may be established that could prevent, delay, modify or rescind regulatory clearance or approval of our products or services.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our offices in the United States are located in three buildings totaling approximately 178,000 square feet of space in two suburbs of Minneapolis, Minnesota (Maple Grove and Plymouth). We lease two of the buildings totaling approximately 106,000 square feet of space. These leased facilities include approximately 29,000 square feet used for manufacturing activities and approximately 5,000 square feet used for research and laboratory activities, with the remainder used for warehouse and general office space. On October 15, 2010, we amended and replaced both lease agreements with a consolidated lease agreement to add an additional 12,000 square feet, with additional renewal options.

In November 2012, we purchased a three-story office building located adjacent to our primary leased manufacturing facility in Maple Grove, Minnesota. We intend to occupy approximately 24,000 square feet of the building as general office space beginning January 2013 and continue the existing leases of the remaining 48,000 square feet of the building to the current tenants.

Our offices in Ireland are located in one building totaling 1,150 square feet of leased space in Galway. This facility includes approximately 450 square feet used for research and laboratory activities, with the remainder used for warehouse and general office space. This lease is set to auto renew in May 2013.

ITEM 3. LEGAL PROCEEDINGS

On June 28, 2011, we received a subpoena from the U.S. Attorney's Office for the Western District of Texas under the Health Insurance Portability & Accountability Act of 1996 (HIPAA) requesting the production of documents related to our Vari-Lase products, and in particular the use of the Vari-Lase[®] Short Kit for the treatment of perforator veins. The Vari-Lase Short Kit has been sold under a 510(k) clearance for the treatment of incompetence and reflux of superficial veins in the lower extremity since 2007 with total U.S. sales through December 31, 2012 of approximately \$432,000 (0.1% of the Company's total U.S. sales) and has not been the subject of any reported serious adverse clinical event. On August 14, 2012, the U.S. District Court for the Western District of Texas unsealed a qui tam complaint that had been filed on November 19, 2010 by Desalle Bui, a former sales employee, which is the basis for the U.S. Attorney's investigation, to which the federal government, after three extensions of time, has elected to intervene. The complaint contains allegations of off-label promotion of Vari-Lase products for the treatment of perforator veins, re-use of singleuse Vari-Lase products and kickbacks paid to physicians, resulting in alleged damages to the government of approximately \$20 million. An amended complaint limited to allegations of off-label promotion of the Vari-Lase Short Kit resulting in an unspecified amount of damages and penalties was filed by the U.S. Attorney's Office in December 2012. On January 31, 2013 we filed a motion to dismiss the amended claim. We believe the allegations are factually inaccurate and without merit, and therefore we intend to both fully comply with the U.S. Attorney's investigation and defend the litigation.

From time to time we are involved in legal proceedings arising in the normal course of our business. As of the date of this report we are not a party to any legal proceedings not described in this section in which an adverse outcome would reasonably be expected to have a material adverse effect on our results of operations or financial condition.

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

Our common stock is traded on the NASDAQ Global Market under the symbol "VASC". The following table sets forth, for the periods indicated, the high and low sales prices for our common stock as reported by the NASDAQ Global Market.

	<u>High</u>	Low
2012		
First Quarter	\$11.49	\$10.20
Second Quarter	12.73	10.09
Third Quarter	14.84	12.49
Fourth Quarter	15.83	13.00
2011		
2011	\$12.12	*10 * 0
First Quarter		\$10.28
Second Quarter	13.20	10.65
Third Quarter	13.75	10.79
Fourth Quarter	12.58	9.90

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

On February 1, 2012, our Board of Directors approved a Common Stock Repurchase Plan (the "Repurchase Plan"), which provided the option to repurchase up to a maximum of 1,000,000 shares of our common stock on the open market at market prices. The Repurchase Plan expired on December 31, 2012 after the repurchase of a total of 425,135 shares for a total of \$4,762,000.

Holders

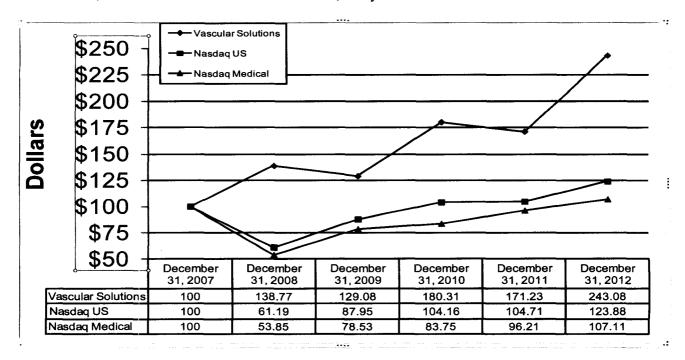
As of December 31, 2012, we had 210 shareholders of record. Such number of record holders does not reflect shareholders who beneficially own common stock held in nominee or street name.

Dividends

We have paid no cash dividends on our common stock, and do not intend to pay cash dividends on our common stock in the future.

Performance Graph

The following graph shows a comparison of cumulative total returns for our common stock, the NASDAQ Stock Market Index (U.S.) and the NASDAQ Medical Industry Index (Medical Devices, Instruments and Supplies), assuming the investment of \$100 in our common stock and each index on December 31, 2007 and the reinvestment of dividends, if any.



ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data as of December 31, 2012 and 2011 and for the three years ended December 31, 2012, 2011 and 2010 are derived from, and should be read together with, our consolidated financial statements included elsewhere in this Form 10-K. The following selected financial data as of December 31, 2010, 2009 and 2008 and for the fiscal years ended December 31, 2009 and 2008 are derived from consolidated financial statements not included herein. The information set forth below should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations," the Consolidated Financial Statements and Notes thereto and other financial information included elsewhere in this Form 10-K.

	Year Ended December 31,									
		2012		2011		2010		2009		2008
				(in thousan	ds, e	xcept per s	hare	e amounts)	•	
Statements of Operations Data:						• •				
Net revenue:										
Product revenue	\$	98,036	\$	86,589	\$	77,419	\$	66,726	\$	59,757
License and collaboration revenue		350		3,367		1,024		1,701		1,464
Total net revenue		98,386		89,956		78,443		68,427		61,221
Product costs and operating expenses:										
Cost of goods sold		32,561		29,844		26,465		22,917		20,690
Cost of sales related to thrombin										
inventory		-		-		-		-		670
Collaboration expenses		-		-		175		850		632
Research and development		11,870		10,240		9,524		7,847		6,333
Clinical and regulatory		4,358		4,332		3,551		2,886		3,220
Sales and marketing		25,777		24,126		23,188		21,206		20,482
General and administrative		6,522		4,997		5,183		4,555		4,695
Litigation		-		-		(3,529)		-		1,484
Amortization of purchased technology										
and intangibles		1,393		831	_	304		-		-
Total product costs and operating	-		-							
expenses		82,481		74,370		64,861		60,261	· _	58,206
Operating earnings		15,905		15,586		13,582		8,166		3,015
Other earnings (expenses):										
Interest earnings				16		38		48		203
		(13)		(13)		(20)		(38)		
Interest expense Foreign exchange gain (loss)		(13)		110		• •		• •		(62)
Foreign exchange gain (loss)			-	110	. <u> </u>	(42)	·	(10)		(28)
Earnings before income taxes		15,892		15,699		13,558		8,166		3,128
Income tax benefit (expense)		(5,983)		(5,960)		7,819*		(2,788)		13,045
Net earnings	\$	9,909	\$	9,739	\$	21,377	\$	5,378	\$	16,173
Net carmings	ъ.	3,303	φ	9,739	<u>.</u>	21,377	φ	5,578	φ	10,175
Net earnings per common share – Basic	\$	0.62	\$	0.59	\$	1.30	\$	0.34	\$	1.04
Net earnings per common share –										
Diluted	\$	0.60	\$	0.57	\$	1.26	\$	0.33	\$	1.01
Weighted average number of basic	:							· · · · · · · · · · · · · · · · · · ·		
common shares outstanding		16,004		16,638		16,478		16,047		15,588
Weighted average number of diluted	•									
common shares	-	16,456		17,184		17,008		16,475		15,955

* A complete discussion of the facts and circumstances surrounding this amount can be found on page 32 of this Annual Report on Form 10-K for the year ended December 31, 2012.

.

		As of December 31,							
	_	2012		2011		2010	2009		2008
	_				í (in	thousands)			
Balance Sheet Data:									
Cash, cash equivalents and available-									
for-sale securities	\$	11,554	\$	13,726	\$	17,360 \$	17,794	\$	7,209
Working capital		38,016		38,650		38,927	35,145		22,677
Total assets		88,002		76,483		78,457	51,755		44,180
Total shareholders' equity		76,867		66,706		64,103	40,399		31,826

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

The following discussion of our financial condition and results of operations should be read in conjunction with our Consolidated Financial Statements and Notes thereto, and the other financial information included elsewhere in this Form 10-K. This Management's Discussion and Analysis of Financial Condition and Results of Operations contains descriptions of our expectations regarding future trends affecting our business. These forward-looking statements and other forward-looking statements made elsewhere in this document that are not strictly historical fact are made in reliance upon safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are based on management's current expectations as of the date of this report but involve risks, uncertainties and other factors which may cause actual results to differ materially from those contemplated by such forward looking statements. Item 1A of Part I of this Annual Report on Form 10-K for the year ended December 31, 2012, sets forth certain factors we believe could cause actual results to differ materially from those contemplated by the forward-looking statements. We do not intend to update any of these forward-looking statements after the date of this Form 10-K to conform them to actual results.

Overview

We are a medical device company focused on bringing solutions to interventional cardiologists and interventional radiologists. As a vertically-integrated medical device company, we generate ideas and create new interventional medical devices, and then deliver those products and related services directly to the physician through our direct domestic sales force and international distribution network. We continue to develop new products and services and new applications for our existing products.

Recently, the number of catheterization procedures performed worldwide has been declining gradually due to a number of factors - among them, the effects of weak economies on overall health care utilization rates, efforts by third-party payers to lower costs associated with medical procedures, investigations by government agencies into potential over-utilization of procedures, the implementation by hospitals of policies designed to reduce the incidence of unnecessary procedures in the wake of these outside investigations, and new diagnostic imaging and functional assessment modalities that more effectively screen patients to determine the need for treatment. Although worldwide demographic factors, including the growing incidence of obesity, diabetes, and cardiovascular disease, seem to favor long-term growth in the number of interventional procedures, we believe these recent pressures on utilization rates are likely to result in relatively flat catheterization volumes for the foreseeable future. We intend to remain competitive in this market through the continued introduction of new products and services. We expect to originate these new products and services primarily through our internal research and development and clinical efforts, but we may supplement them with targeted acquisitions or other external collaborations. Additionally, our growth has been, and will continue to be, impacted by our expansion and penetration into new geographic markets, the expansion and penetration of our direct sales organization in existing geographic markets, and our continuing focus on increasing the efficiency of our existing direct sales organization.

Our product portfolio includes a broad spectrum of over 70 products consisting of over 600 stock keeping units (SKUs), a wide array of blood clotting devices, extraction catheters, access catheters, guide catheters, micro-introducer kits, guidewires, snare and retrieval devices, a reprocessing service for ClosureFast radiofrequency catheters and endovenous laser and procedure kits for the treatment of varicose veins. Our management, including our chief executive officer who is our chief operating decision maker, report and manage our operations in three main categories based on similarities in the products or services sold. We have corporate infrastructure and direct sales capabilities in the United States and have established distribution relationships in most major international markets. In order to drive sales growth, we have invested not only in the expansion of our global distribution system, but also new product development and clinical trials to obtain regulatory approvals. A significant portion of our net sales historically has been, and we expect to continue to be, attributable to new and enhanced products and services. We expect to continue to further validate the clinical and competitive benefits of our technology platforms to drive utilization of our current products and the development of new and enhanced products and services.

Results of Operations

The following table sets forth, for the periods indicated, certain items from our statements of operations expressed as a percentage of net sales:

	Year Ended December 31,			
	2012	2011	2010	
Net revenue:				
Product revenue	100%	96%	99%	
License and collaboration revenue	-	4%	1%	
Total net revenue	100%	100%	100%	
Product costs and operating expenses:				
Cost of goods sold	33%	33%	34%	
Collaboration expenses	· –	-	-	
Research and development	12%	11%	12%	
Clinical and regulatory	5%	5%	4%	
Sales and marketing	26%	27%	30%	
General and administrative	7%	5%	7%	
Litigation	-	-	(4%)	
Amortization of purchased technology and				
intangibles	1%	1%	-	
Total product costs and operating expenses	84%	82%	83%	
Operating earnings	16%	18%	17%	
Interest earnings/expense and foreign exchange				
loss, net	-			
Earnings before income taxes	16%	18%	17%	
Income tax benefit (expense)	(6%)	(7%)	10%	
Net earnings	10%	11%	27%	

Our primary products and related services fall into three categories. The following table sets forth, for the periods indicated, net revenue by product category along with the change from the previous year:

	2012		For Years Ended I 2011	December 31	l, 2010	2010		
	Net Revenue	Percent Change		Percent Change	Net Revenue	Percent Change		
Catheter products	\$61,262,000 22,676,000	16% (2%)	\$53,040,000 23,065,000	27% (6%)	\$41,907,000 24,579,000	37% - %		
Vein products		34%	10,484,000	(4%)	10,933,000	(4%)		
Total product revenue License & collaboration	98,036,000 350,000	13% (90%)	86,589,000 3,367,000	12% 229%	77,419,000 1,024,000	16% (40%)		
Total net revenue	\$98,386,000	9%	\$89,956,000	15%	\$78,443,000	15%		

Year ended December 31, 2012 compared to the years ended December 31, 2011 and December 31, 2010.

Net revenue increased 9% to \$98,386,000 for the year ended December 31, 2012 from \$89,956,000 for the year ended December 31, 2011. This increase in revenue is comprised of the following components:

	% Change
Volume of existing product and service revenue	9%
New product or service introductions, which consist of any product or	
service that had no revenue in the comparable period in 2011	6%
Product and service pricing	(3%)
Decline in licensing revenue	(3%)
	9%

Approximately 84% of our net revenue was earned in the United States and 16% of our net revenue was earned in international markets for the year ended December 31, 2012.

Net revenue increased 15% to \$89,956,000 for the year ended December 31, 2011 from \$78,443,000 for the year ended December 31, 2010. This increase in revenue is comprised of the following components:

	% Change
Volume of existing product and service revenue	13%
New product or service introductions, which consist of any product or	
service that had no revenue in the comparable period in 2010	2%
Product and service pricing	(3%)
Increase in licensing revenue	3%
	15%

Approximately 84% of our net revenue was earned in the United States and 16% of our net revenue was earned in international markets for the year ended December 31, 2011.

We recognized \$350,000 of licensing revenue during the year ended December 31, 2012, compared to \$3,367,000 during the year ended December 31, 2011 and \$849,000 during the year ended December 31, 2010, all of which was derived from our License Agreement and Device Supply Agreement with King and our distribution agreement with Nicolai in Germany. On July 6, 2011, King notified us that it was terminating the development of the Thrombi-Paste products and terminating efforts to obtain the surgical indication for the Thrombi-Gel products. As a result of King making this decision not to proceed, we recognized revenue of \$2,762,000 in the third quarter of 2011, which represented the remaining deferred

license revenue originally allocated to the Thrombi-Paste products and the surgical indication of the Thrombi-Gel products as part of the King agreements.

We recognized no collaboration revenue in 2012 and 2011, and \$175,000 in 2010. This collaboration revenue was derived from clinical and development work done for King the Device Supply Agreement. In 2013 we expect to recognize \$400,000 of collaboration revenue as a result of a development agreement we entered into with Pfizer to develop a new hemostatic device.

Gross margin across all product lines increased to 67% for the year ended December 31, 2012, compared to 66% for the years ended December 31, 2011 and December 31, 2010. The increase in gross margin primarily resulted from our acquisition of the intellectual property related to our Pronto extraction catheters in January 2012, which eliminated the royalties paid on sales of the product after December 31, 2011 (see Note 15 to our Consolidated Financial Statements in Item 8 of Part II of this Annual Report on Form 10-K for the year ended December 31, 2012). We expect product gross margins to be in the range of 66.5% to 67.5% in 2013, subject to variations in our selling mix between U.S. and international markets and between our lower margin products such as the Vari-Lase products and our higher margin products such as the D-Stat Dry.

Collaboration expense was \$-0- for the year ended December 31, 2012, compared to \$-0- for the year ended December 31, 2011 and \$175,000 for the year ended December 31, 2010. Collaboration expense was primarily the result of our collaboration revenue related to the clinical and development work being performed for King. We expect collaboration expenses to be approximately \$300,000 in 2013.

Research and development expense for the year ended December 31, 2012 totaled \$11,870,000, or 12% of revenue, compared to \$10,240,000, or 11% of revenue for the year ended December 31, 2011 and \$9,524,000, or 12% of revenue for the year ended December 31, 2010. Research and development expenses have increased on a dollar basis as we have hired additional employees to improve the through-put of our new product development projects. We expect our continuing research and development expense to be approximately 11% to 12% of revenue in 2013 as we continue to pursue additional new products and move our longer term development projects forward.

Clinical and regulatory expense for the year ended December 31, 2012 totaled \$4,358,000, or 5% of revenue, compared to \$4,332,000, or 5% of revenue for the year ended December 31, 2011 and \$3,551,000, or 4% of revenue for the year ended December 31, 2010. Clinical and regulatory expenses have remained relatively constant on a dollar basis and as a percentage of revenue compared to the year ended December 31, 2011. The increase in clinical and regulatory expenses from the year ended December 31, 2010 was the result of hiring additional employees to strengthen our expertise in the regulatory and quality areas in response to the changes in the FDA requirements. We expect clinical and regulatory expense to be approximately 4% of revenue in 2013.

Sales and marketing expense for the year ended December 31, 2012 totaled \$25,777,000, or 26% of revenue, compared to \$24,126,000, or 27% of revenue for the year ended December 31, 2011 and \$23,188,000, or 30% of revenue for the year ended December 31, 2010. The decline in sales and marketing expense as a percentage of revenue primarily resulted from maintaining our U.S. direct sales force at between 88 and 92 full-time employees while continuing to grow revenue. We expect to maintain the same relative size of our direct sales force during 2013. As a result, we expect our sales and marketing expense will continue to decline as a percentage of revenue to between 24% and 25% of revenue by the end of 2013.

General and administrative expense for the year ended December 31, 2012 totaled \$6,522,000, or 7% of revenue, compared to \$4,997,000, or 5% of revenue for the year ended December 31, 2011 and \$5,183,000, or 7% of revenue for the year ended December 31, 2010. General and administrative expense has increased on a dollar and percentage basis compared to the year ended December 31, 2011 due to increases in our staffing and business operations. In accordance with accounting rules (Accounting Standards Codification "ASC" 805, *Business Combinations*) on September 30, 2011 we reduced the amount of the earn-out liability related to our acquisition of the snare and retrieval products from Radius Medical in October 2010 by the amount of

\$586,000, which reduced general and administrative expenses by a corresponding amount. During 2012 we further reduced the Radius earn-out liability by a total of \$232,000, resulting in \$79,000 in remaining earn-out liability at December 31, 2012. We will continue to assess the Radius earn-out liability balance and make any necessary adjustments in future periods, if warranted. During the year ended December 31, 2012 we incurred an additional \$204,000 of legal expenses compared to 2011 responding to the subpoena issued by the U.S. Attorney's office (see Note 14 to our Consolidated Financial Statements in Item 8 of Part II of this Annual Report on Form 10-K for the year ended December 31, 2012). We expect general and administrative expense to be approximately 6.5% to 7.5% of revenue during 2013.

Litigation expense was \$-0- for both years ended December 31, 2012 and December 31, 2011, compared to litigation income of \$3,529,000 for the year ended December 31, 2010. The litigation income resulted from an award of damages the Company received in the first quarter of 2010 in defamation litigation against a competitor.

Commencing January 1, 2013 a new 2.3% excise tax has been imposed on the sale of medical devices in the U.S. The tax was enacted in conjunction with the Patient Protection and Affordable care Act of 2010 and applies only to the sale of medical device products in the U.S., which excludes international sales, service revenues and freight charges. We expect this new excise tax will result in an additional expense of 1.2% to 1.4% of our revenues in 2013 that will be reported as a separate line item within our operating expenses on our consolidated statements of operations.

Amortization of purchased technology and other intangibles was \$1,393,000 for the year ended December 31, 2012, compared to \$831,000 for the year ended December 31, 2011, and \$304,000 for the year ended December 31, 2010. The amortization resulted from our purchase of the SmartNeedle and pdACCESS products in April 2010, the Radius snare products in October 2010, the Guardian hemostasis valve products in January 2011, the reprocessing license agreement with NES in December 2011, our acquisition of the intellectual property related to our Pronto extraction catheters in January 2012, our purchase of the Accumed wrist splint products in June 2012, our purchase of the Venture Wire Control Catheter business in August 2012, and our purchase of the Teirstein Edge and AngioAssist products in December 2012. As part of these asset purchases and licensing agreements, we allocated \$14,900,000 to purchased technology and other intangibles that are being amortized over a period of 9 to 11 years (see Notes 3 and 15 to the Consolidated Financial Statements included in Item 8 of Part II of this Annual Report on 10-K for the year ended December 31, 2012).

We recorded income tax expense of \$5,983,000 for the year ended December 31, 2012, compared to an income tax expense of \$5,960,000 for the year ended December 31, 2011 and income tax benefit of \$7,819,000 for the year ended December 31, 2010. This represents an income tax rate of 38% for the years ended December 31, 2012 and December 31, 2011.

We assess the likelihood that our deferred tax assets will be recovered from future taxable earnings during the fourth quarter of each year. We consider projected future taxable earnings and ongoing tax planning strategies in assessing the amount of the valuation allowance necessary to offset our deferred tax assets that will not be recoverable. In the fourth quarter of 2010, based upon management's assessment of all available evidence, including our cumulative pretax net earnings for fiscal years 2010, 2009 and 2008, estimates of future profitability and the overall prospects of our business, we determined that it was more likely than not that we would utilize substantially all of our deferred tax assets in the future, and as a result we recorded a \$12.5 million income tax benefit at December 31, 2010. We will continue to assess the potential realization of our deferred tax assets on an annual basis or on an interim basis if circumstances warrant. If our actual results and updated projections vary significantly from our prior estimates, we expect to increase or decrease our valuation allowance against our gross deferred tax assets. Any adjustment to our earnings for the deferred tax would occur in the period we make the determination. Prior to 2008, we did not generate any significant pre-tax earnings in any year and therefore have not paid any federal income taxes, other than alternative minimum taxes, since our inception in December 1996.

As of December 31, 2012, we had a total of \$8.8 million of deferred tax assets on our balance sheet, consisting of \$6.8 million of current deferred tax assets and \$2.0 million of long term deferred tax assets. In addition, at December 31, 2012 we had the following tax benefits not recorded on our balance sheet:

- \$0.9 million of federal and state research and development tax credit carryforwards which begin to expire in the year 2013. We have recorded an allowance of approximately \$0.1 million against this amount, reflecting the amount of these research and development tax credit carryforwards expected to expire prior to being utilized.
- \$1.3 million, tax affected, of federal and state tax deductions related to the exercise of stock options available to offset future taxes payable which begin to expire in the year 2021. When utilized, these tax deductions will not result in a reduction in income tax expense, but rather will be recorded as additional paid-in-capital.
- Approximately \$47,000 of foreign tax loss carryforwards which do not expire.

We project our income tax expense to be between \$6.5 million and \$7.5 million in 2013. Of this total, we expect to be able to utilize \$4.5 million of deferred tax assets to offset our tax payments, resulting in our use of between \$2.0 million and \$3.0 million in cash to pay state and federal taxes in 2013. Under the United States Tax Reform Act of 1986, the amounts of and benefits from net operating loss carryforwards may be impaired or limited in certain circumstances, including significant changes in ownership interests. Future use of our existing net operating loss carryforwards may be restricted due to changes in ownership or from future tax legislation.

Liquidity and Capital Resources

Our cash and cash equivalents totaled \$11,554,000 at December 31, 2012 compared to \$13,726,000 in cash and cash equivalents at December 31, 2011, a decrease of \$2,172,000. Our cash equivalents are invested in a money market fund invested in all types of high quality, short-term money market instruments denominated in U.S. dollars such as debt instruments guaranteed by the governments of the United States, Western Europe, Australia, Japan and Canada, high quality corporate issuers and bank obligations. The money market fund's assets are rated in the highest short-term category by nationally recognized rating agencies, such as Moody's or Standard & Poor's.

Cash provided by operations. We generated \$19,211,000 of cash from operations during the year ended December 31, 2012 primarily resulting from our earnings before taxes of \$15,892,000 since essentially all of our income taxes were offset by the utilization of net operating loss carryforwards. In the year ended December 31, 2012 our accounts receivable increased by \$2,084,000, which was in line with our revenue growth and expectations, while our inventory decreased by \$1,032,000 through continued emphasis on process improvements. During the year ended December 31, 2012 we incurred \$6,534,000 of non-cash depreciation, amortization and stock compensation charges; \$351,000 of non-cash charges relating to the amortization of deferred license fees and other deferred revenue; and \$232,000 of non-cash charges relating to the adjustment of the earn-out as part of the Radius acquisition.

Cash used for investing activities. We used \$18,621,000 of cash in investing activities during the year ended December 31, 2012. We used \$7,986,000 of cash to purchase an office building adjacent to our primary manufacturing facility, \$3,250,000 of cash to purchase the intellectual property related to our Pronto extraction catheters from Dr. Pedro Silva and his affiliates, \$2,250,000 of cash to purchase the Venture wire control catheter products from St. Jude Medical, \$1,500,000 of cash to purchase the Accumed wrist control splint products from Accumed, and \$500,000 of cash to purchase the Teirstein Edge and AngioAssist products from Shepherd Scientific. We also incurred capital expenditures of \$3,145,000 relating to our purchase of additional manufacturing equipment, expanding our extrusion capabilities and purchasing additional research and development equipment.

Cash used for financing activities. We used \$2,785,000 of cash in financing activities during the year ended December 31, 2012. We used \$4,762,000 of cash to repurchase common shares under our stock repurchase plan, and we used \$651,000 of cash to repurchase shares that vested under outstanding restricted stock awards to satisfy income tax withholding obligations. This was offset by our receipt of \$1,493,000 of cash from the sale of stock under our Employee Stock Purchase Plan and the exercise of outstanding stock options, and \$1,135,000 of stock option net operating loss carryforwards utilized during the year ended December 31, 2012.

We have a \$10 million revolving line of credit with US Bank, which expires on December 31, 2013, bears interest at the rate of LIBOR plus 1.60% and is secured by a first security interest on all of our assets. The credit facility includes one covenant that we cannot have a maximum cash flow leverage ratio greater than 2.5 to 1. The calculation of this covenant is determined by multiplying our annual lease expenses times six and adding any loans, then dividing this amount by the sum of our earnings before interest, taxes, depreciation, amortization and our annual operating lease payments. We were in compliance with this covenant on December 31, 2012. As of December 31, 2012, we had no outstanding balance on the \$10 million revolving line of credit with an availability of \$10 million.

The following table summarizes our contractual cash commitments as of December 31, 2012:

		More than			
Contractual Obligations	Total	1 year	1 - 3 years	3 - 5 years	5 years
Facility operating leases	\$2,494,000	\$ 905,000	\$1,589,000	-	-

Not included in the table above are the expected payments for contingent consideration related to our acquisition of the snare and retrieval products Radius Medical. The contingent consideration payment is based on 25% of the net sales of the snare and retrieval products which exceed \$3.0 million for the calendar years ending December 31, 2013. This amount was not included in the table above due to our inability to predict the amount and timing of the cash portion of the payments. The remaining earn-out liability recorded at December 31, 2012 is \$79,000.

Off-balance sheet arrangements. We do not have any off-balance sheet arrangements, as defined by the rules and regulations of the SEC, that have or are reasonably likely to have a material effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources. As a result, we are not materially exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in these arrangements.

We currently anticipate that we will experience positive cash flow from our normal operating activities for the foreseeable future. We currently believe that our working capital of \$38.0 million at December 31, 2012 will be sufficient to meet all of our operating and capital requirements for the foreseeable future. However, our actual liquidity and capital requirements will depend upon numerous unpredictable factors, including the amount of revenues from sales of our existing and new products; the cost of maintaining, enforcing and defending patents and other intellectual property rights; competing technological and market developments; developments related to regulatory and third party reimbursement matters; and other factors.

Critical Accounting Policies

Management's Discussion and Analysis of Financial Condition and Results of Operations addresses our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of our consolidated financial statements requires that we make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. On an on-going basis, we evaluate

these estimates and judgments. We base our estimates and judgments on historical experience and on various other factors that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Our accounting policies are described in Note 2 to the Consolidated Financial Statements included in Item 8 of Part II of this Annual Report on 10-K for the year ended December 31, 2012. We set forth below those material accounting policies that we believe are the most critical to an investor's understanding of our financial results and condition and that require complex management judgment.

Inventory

We state our inventory at the lower of cost (first-in, first-out method) or market. The estimated value of excess, obsolete and slow-moving inventory as well as inventory with a carrying value in excess of its net realizable value is established by us on a quarterly basis through review of inventory on hand and assessment of future demand, anticipated release of new products into the market, historical experience and product expiration. Our stated value of inventory could be materially different if demand for our products decreased because of competitive conditions or market acceptance, or if products become obsolete because of advancements in the industry. We have approximately \$571,000 of Sigma thrombin in inventory at December 31, 2012, which we expect to use in our hemostat products sold in international markets. We received regulatory approval in February 2008 allowing us to use the Sigma thrombin in our international hemostat products. In the fourth quarter of 2008, we wrote off \$670,000 of our Sigma thrombin which we expect will expire before we are able to use it. We will continue to review our Sigma thrombin needs and we will write off any amounts we anticipate will not be used.

Revenue Recognition

We recognize revenue in accordance with generally accepted accounting principles as outlined in ASC 605-10-S99, *Revenue Recognition*, which requires that four basic criteria be met before revenue can be recognized: (i) persuasive evidence of an arrangement exists; (ii) the price is fixed or determinable; (iii) collectability is reasonably assured; and (iv) product delivery has occurred or services have been rendered. We recognize revenue as products are shipped based on FOB shipping point terms when title passes to customers. We negotiate credit terms on a customer-by-customer basis and products are shipped at an agreed upon price. All product returns must be pre-approved and, if approved, customers are subject to a 20% restocking charge.

We generate revenue from license agreements and research collaborations and recognize these revenues when earned. In accordance with ASC 605, for deliverables which contain multiple deliverables, we separate the deliverables into separate accounting units if they meet the following criteria: (i) the delivered items have a stand-alone value to the customer; (ii) the fair value of any undelivered items can be reliably determined; and (iii) if the arrangement includes a general right of return, delivery of the undelivered items is probable and substantially controlled by the seller. Deliverables that do not meet these criteria are combined with one or more other deliverables into one accounting unit. Revenue from each accounting unit is recognized based on the applicable accounting literature, primarily ASC 605-10-S99.

We also generate revenue from the ClosureFast catheter reprocessing service rights acquired from NES in December 2011. In accordance with ASC 605-45 the reprocessing revenue will be reported as our revenue and the amount paid to NES will be reported as our cost of sales (See Note 2 to our Consolidated Financial Statements in Item 8 of Part II of this Annual Report on Form 10-K for the year ended December 31, 2012).

Effective April 1, 2008 we entered into a five-year distribution agreement with Nicolai, GmbH. As a result of entering into this distribution agreement, we no longer maintain a direct sales force in Germany. In connection with this distribution agreement, we received 500,000 Euros from Nicolai, GmbH in 2008. The payment was deferred and is being recognized ratably over the five-year term of the distribution agreement.

The distribution agreement also includes provisions requiring us to pay Nicolai, GmbH specific amounts if we terminate the distribution agreement prior to the end of the five-year term. We do not intend to terminate the distribution agreement and, as such, have not recorded a liability relating to these potential future payments to Nicolai, GmbH.

On January 9, 2007, we entered into three separate agreements with King, consisting of a License Agreement, a Device Supply Agreement and a Thrombin-JMI® Supply Agreement. We licensed the exclusive rights to our products Thrombi-Pad, Thrombi-Gel and Thrombi-Paste to King for a one-time payment of \$6 million. We continue to manufacture the licensed products for sale to King under the Device Supply Agreement. The Device Supply Agreement requires King to pay us a \$1 million milestone payment upon the first commercial sale of Thrombi-Gel and again upon the first commercial sale of Thrombi-Paste. On May 30, 2007 we received the first \$1 million payment related to King's first commercial sale of Thrombi-Pad. In 2009 King decided to suspend indefinitely the clinical development of the Thrombi-Paste product. In 2010 King suspended all further work on the pursuit of the surgical indication of Thrombi-Gel. We continue to manufacture and sell the Thrombi-Gel and Thrombi-Pad products to King. We are amortizing the \$6 million license fee received on January 9, 2007 and the \$1 million milestone payment received on May 30, 2007 on a straight-line basis over the remaining 10 years. On July 6, 2011, King notified us that it was terminating the development of the Thrombi-Paste products and terminating efforts to obtain the surgical indication for the Thrombi-Gel products. As a result of King making this decision not to proceed, we recognized revenue of \$2,762,000 in the third quarter of 2011 which represented the remaining deferred license revenue originally allocated to the Thrombi-Paste products and the surgical indication of the Thrombi-Gel products as part of the King agreements. We will not receive the second \$1 million milestone payment.

As part of the Device Supply Agreement, we agreed to complete the development and conduct clinical studies for Thrombi-Gel and Thrombi-Paste, with the expected costs related to these activities to be paid by King. We have recognized collaboration revenue on this development agreement as it was earned under the agreements with King.

In addition, we have reviewed the provisions of ASC 808, *Collaborative Arrangements*, and believe the adoption of this ASC will have no impact on the amounts recorded under these agreements.

We analyze the rate of historical returns when evaluating the adequacy of the allowance for sales returns, which is included with the allowance for doubtful accounts on our balance sheet. At December 31, 2012, this reserve was \$55,000 compared to \$30,000 at December 31, 2011. If the historical data we use to calculate these estimates does not properly reflect future returns, revenue could be overstated.

Allowance for Doubtful Accounts

We maintain allowances for doubtful accounts for estimated losses resulting from the inability of our customers to make required payments. This allowance is regularly evaluated by us for adequacy by taking into consideration factors such as past experience, credit quality of the customer base, age of the receivable balances, both individually and in the aggregate, and current economic conditions that may affect a customer's ability to pay. At December 31, 2012, this reserve was \$130,000 compared to \$120,000 at December 31, 2011. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required.

Warranty Costs

We provide a warranty for certain products against defects in material and workmanship for periods of up to 24 months. We record a liability for warranty claims at the time of sale. The amount of the liability is based on the amount we are charged by our original equipment manufacturer to cover the warranty period. The original equipment manufacturer includes a one year warranty with each product sold to us. We record a liability for the uncovered warranty period offered to a customer, provided the warranty period offered exceeds the initial one year warranty period covered by the original equipment manufacturer. At December 31, 2012, this warranty provision was \$29,000 compared to \$23,000 at December 31, 2011. If the assumptions used in calculating the provision were to materially change, resulting in more defects than anticipated, an additional provision may be required.

Income Taxes

The carrying value of our net deferred tax assets assumes that we will be able to generate sufficient taxable earnings in the United States based on estimates and assumptions. We record a valuation allowance to reduce the carrying value of our net deferred tax asset to the amount that is more likely than not to be realized. For the year ended December 31, 2012, we recorded a \$1.4 million valuation allowance and a \$906,000 uncertain tax position reserve related to our net deferred tax assets of \$8.8 million as a result of our adoption of ASC 740, Income Taxes. At December 31, 2012, we have accrued \$-0- for the payment of tax related interest and there was no tax interest or penalties recognized in the statements of operations. In the fourth quarter of 2010, based upon management's assessment of all available evidence, including our cumulative pretax net earnings for fiscal years 2010, 2009 and 2008, estimates of future profitability and the overall prospects of our business, we determined that it is more likely than not that we will be able to realize substantially all of the remaining portion of our deferred tax assets in the future, and as a result recorded a \$12.5 million income tax benefit. To determine the amount of the reduction in the valuation allowance, we used a discounted projection of revenue and earnings for the years ending December 31, 2012 through December 31, 2016. We continue to assess the potential realization of our deferred tax assets on an annual basis, or on an interim basis if circumstances warrant. If our actual results and updated projections vary significantly from our projections, we would need to increase or decrease our valuation allowance against our gross deferred tax assets. We would adjust our earnings for the deferred tax in the period we make the determination.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Financial instruments that potentially subject us to concentrations of credit risk consist primarily of cash and cash equivalents and accounts receivables. We maintain our accounts for cash and cash equivalents principally at one major bank and one investment firm in the United States. We have a formal written investment policy that restricts the placement of investments to issuers evaluated as creditworthy. We have not experienced any losses on our deposits of our cash and cash equivalents.

With respect to accounts receivable, we perform credit evaluations of our customers and do not require collateral. There have been no material losses on accounts receivables.

In the United States we sell our products directly to hospitals and clinics. In international markets, we sell our products to independent distributors who, in turn, sell to medical clinics. We sell our product in these countries through independent distributors denominated in United States dollars, with the exception of sales from our subsidiary in Ireland and sales to our distributor in Germany, where sales are denominated in Euros.

We distribute certain products on behalf of certain U.S. and international manufacturers. We pay for all distributed products in United States dollars.

We do not believe our operations are currently subject to significant market risks for interest rates, foreign currency exchange rates, commodity prices or other relevant market price risks of a material nature. A change of 0.1 in the Euro exchange rate would result in an increase or decrease of approximately \$37,000 in the amount of United States dollars we receive in payment on accounts receivable from our German distributor Nicolai, GmbH and \$13,000 on accounts receivable due our subsidiary in Ireland. Under our current policies, we do not use foreign currency derivative instruments to manage exposure to fluctuations in the Euro exchange rate.

We currently have no indebtedness, but if we were to borrow amounts from our revolving credit line, we would be exposed to changes in interest rates. Advances under our revolving credit line bear interest at an

annual rate indexed to LIBOR. We will thus be exposed to interest rate risk with respect to amounts outstanding under the line of credit to the extent that interest rates rise. As we had no amounts outstanding on the line of credit at December 31, 2012, we have no exposure to interest rate changes on this credit facility. Under our current policies, we do not use interest rate derivative instruments to manage exposure to interest rate changes. Additionally, we will be exposed to declines in the interest rates paid on deposited funds. A 0.1% decline in the current market interest rates paid on deposits would result in interest earnings being reduced by approximately \$12,000 on an annual basis.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The Consolidated Financial Statements and Notes thereto required pursuant to this Item begin on page 47 of this Annual Report on Form 10-K for the year ended December 31, 2012.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act). Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of the end of the period covered by this report, our disclosure controls and procedures were effective.

Changes in Internal Controls.

During the fiscal quarter ended December 31, 2012, there has been no change in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Management's Report on Internal Control Over Financial Reporting.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Our internal control system was designed to provide reasonable assurance to our management and board of directors regarding the preparation and fair presentation of published financial statements. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework in *Internal Control - Integrated Framework*, our management concluded that our internal control over financial reporting was effective as of December 31, 2012.

Attestation Report of Independent Registered Public Accounting Firm.

Baker Tilly Virchow Krause, LLP, an independent registered public accounting firm, has issued an attestation report on our internal control over financial reporting as of December 31, 2012. The attestation

report of Baker Tilly Virchow Krause, LLP, on our internal control over financial reporting as of December 31, 2012 is included on page 46 and incorporated by reference herein.

ITEM 9B. OTHER INFORMATION

None

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPRATE GOVERNANCE

Incorporated herein by reference to the Sections under the headings "Proposal 1: Election of Directors," "Corporate Governance - Committees of the Board of Directors" and "Section 16(a) Beneficial Ownership Reporting Compliance" contained in the Proxy Statement for our Annual Meeting of Shareholders to be filed with the Securities and Exchange Commission within 120 days of the close of the year ended December 31, 2012.

See the section under the heading "Executive Officers of the Registrant" in Item 1 of Part I herein for information regarding our executive officers.

Code of Ethics

We have adopted a code of ethics that applies to all of our directors, officers (including our chief executive officer, chief financial officer, chief accounting officer, and any person performing similar functions) and employees. We have posted our Code of Ethics in the "Corporate Governance" section of our website, http://www.vasc.com.

ITEM 11. EXECUTIVE COMPENSATION

.

Incorporated herein by reference to the Sections under the headings "Director Compensation" and "Executive Compensation" contained in the Proxy Statement for our Annual Meeting of Shareholders to be filed with the Securities and Exchange Commission within 120 days of the close of the year ended December 31, 2012.

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

Incorporated herein by reference to the Section under the heading "Security Ownership of Certain Beneficial Owners and Management" contained in the Proxy Statement for our Annual Meeting of Shareholders to be filed with the Securities and Exchange Commission within 120 days of the close of the year ended December 31, 2012.

Equity Compensation Plans

The following table sets forth the securities authorized to be issued under our current equity compensation plans as of December 31, 2012:

Plan category	Number of securities to be issued upon exercise of outstanding options and rights	Weighted-average exercise price of outstanding options and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding outstanding options and rights)
Equity compensation plans approved by security holders	1,143,000	\$10.38	1,592,000 (1) (2)
Equity compensation plans not approved by security holders	None	None	None
Total	1,143,000	\$10.38	1,592,000

- (1) Includes 703,000 shares reserved and available for issuance under our Stock Option and Stock Award Plan. The shares available for issuance under our Stock Option and Stock Award Plan automatically increases on an annual basis through 2016, by the lesser of:
 - 500,000 shares;
 - 5% of the common-equivalent shares outstanding at the end of our prior fiscal year; or
 - a smaller amount determined by our Board of Directors or the committee administering the plan.
- (2) Includes 889,000 shares reserved and available for issuance under our Employee Stock Purchase Plan. The shares available for issuance under our Employee Stock Purchase Plan automatically increases on an annual basis through 2020, by the lesser of:
 - 200,000 shares;
 - 2% of the common-equivalent shares outstanding at the end of our prior fiscal year; or
 - a smaller amount determined by our Board of Directors or the committee administering the plan.

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

Incorporated herein by reference to the Sections under the headings "Related Person Transaction Policy and Related Person Transactions," "Proposal 1: Election of Directors," and "Corporate Governance – Committes of the Board of Directors" contained in the Proxy Statement for our Annual Meeting of Shareholders to be filed with the Securities and Exchange Commission within 120 days of the close of the year ended December 31, 2012.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Incorporated herein by reference to the Section under the heading "Additional Information about our Independent Registered Public Accounting Firm" contained in the Proxy Statement for our Annual Meeting of Shareholders to be filed with the Securities and Exchange Commission within 120 days of the close of the year ended December 31, 2012.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) Documents filed as part of this Report.

(1) The following financial statements are filed herewith in Item 8 in Part II of this Annual Report on Form 10-K for the year ended December 31, 2012.

- (i) Report of Independent Registered Public Accounting Firm
- (ii) Consolidated Balance Sheets
- (iii) Consolidated Statements of Earnings
- (iv) Consolidated Statements of Comprehensive Earnings
- (v) Consolidated Statements of Changes in Shareholders' Equity
- (vi) Consolidated Statements of Cash Flows
- (vii) Notes to Consolidated Financial Statements
- (2) Financial Statement Schedule

Schedule II – Valuation and Qualifying Accounts. Such schedule should be read in conjunction with the consolidated financial statements. All other supplemental schedules are omitted because of the absence of conditions under which they are required.

(3) Exhibits

Exhibit	
<u>Number</u>	Description
3.1	Amended and Restated Articles of Incorporation of Vascular Solutions, Inc. (incorporated
	by reference to Exhibit 3.1 to Vascular Solutions' Form 10-Q for the quarter ended
	September 30, 2000).
3.2	Amended and Restated Bylaws of Vascular Solutions, Inc. (incorporated by reference to
	Exhibit 3.1 of Vascular Solutions' Form 8-K dated October 19, 2007).
4.1	Specimen of Common Stock certificate (incorporated by reference to Exhibit 4.1 of
	Vascular Solutions' Registration Statement on Form S-1 (File No. 333-84089)).
10.1	Lease Agreement dated August 30, 2002 by and between First Industrial, L.P. as Landlord and
	Vascular Solutions, Inc. as Tenant (incorporated by reference to Exhibit 10.1 of Vascular Solutions'
	Form 10-Q for the quarter ended September 30, 2002).
10.2	Fifth Amendment to Lease Agreement, dated November 12, 2007, by and between IRET -
	Plymouth, LLC as Landlord and Vascular Solutions, Inc. as Tenant (incorporated by
	reference to Exhibit 99.1 of Vascular Solutions' Form 8-K dated November 14, 2007).
10.3	Lease Agreement dated December 28, 2006 by and between IRET - Plymouth, LLC as
	Landlord and Vascular Solutions, Inc. as Tenant (incorporated by reference to Exhibit 10.4
	of Vascular Solutions' Form 10-K for the year ended December 31, 2006).
10.4	First Amendment to Lease Agreement, dated November 12, 2007, by and between IRET –
	Plymouth, LLC as Landlord and Vascular Solutions, Inc. as Tenant (incorporated by
	reference to Exhibit 99.2 of Vascular Solutions' Form 8-K dated November 14, 2007).
10.5	Second Amendment to Lease Agreement, dated October 23, 2010, by and between IRET -

10.6**	Plymouth, LLC as Landlord and Vascular Solutions, Inc. as Tenant (incorporated by reference to Exhibit 10.1 of Vascular Solutions' Form 8-K dated October 23, 2010). Form of Employment Agreement by and between Vascular Solutions, Inc. and each of its
10.0	executive officers (incorporated by reference to Exhibit 10.5 of Vascular Solutions' Form 10-Q for the quarter ended March 31, 2004).
10.7	Form of Distribution Agreement (incorporated by reference to Exhibit 10.12 of Vascular Solutions' Registration Statement on Form S-1 (File No. 333-84089)).
10.8**	Vascular Solutions, Inc. Employee Stock Purchase Plan, as amended (incorporated by reference to Exhibit 10.14 of Vascular Solutions' Form 10-K for the year ended December 31, 2000).
10.9	Credit Agreement, dated December 21, 2009, between U.S. Bank Association and Vascular Solutions, Inc. (incorporated by reference to Exhibit 10.12 of Vascular Solutions' Form 10-K for the year ended December 31, 2009).
10.10	Security Agreement, dated December 21, 2009, between U.S. Bank Association and Vascular Solutions, Inc. (incorporated by reference to Exhibit 10.13 of Vascular Solutions' Form 10-K for the year ended December 31, 2009).
10.11	Promissory Note, dated December 21, 2009, between U. S. Bank Association and Vascular Solutions, Inc. (incorporated by reference to Exhibit 10.14 of Vascular Solutions' Form 10-K for the year ended December 31, 2009).
10.12	First Amendment to Credit Agreement, dated December 21, 2009, between U.S. Bank Association and Vascular Solutions, Inc. (incorporated by reference to Exhibit 10.1 of Vascular Solutions' Form 8-K dated December 21, 2010).
10.13	Second Amendment to Credit Agreement, dated December 21, 2009, between U.S. Bank Association and Vascular Solutions, Inc. (incorporated by reference to Exhibit 10.1 of Vascular Solutions' Form 8-K dated December 20, 2011).
10.14	Third Amendment to Credit Agreement, dated December 21, 2009, between U.S. Bank Association and Vascular Solutions, Inc. (incorporated by reference to Exhibit 10.1 of Vascular Solutions' Form 8-K dated December 6, 2012).
10.15**	Form of Incentive Stock Option Agreement (incorporated by reference to Exhibit 10.1 of Vascular Solutions' Form 8-K dated September 22, 2004).
10.16**	Form of Nonqualified Stock Option Agreement (incorporated by reference to Exhibit 10.2 of Vascular Solutions' Form 8-K dated September 22, 2004).
10.17**	Form of Board of Directors Stock Option Agreement, as amended December 9, 2005 (incorporated by reference to Exhibit 10.2 of Vascular Solutions' Form 8-K dated December 9, 2005).
10.18**	Form of Restricted Stock Award Agreement (incorporated by reference to Exhibit 10.3 of Vascular Solutions' Form 8-K dated December 9, 2005).
10.19**	Amended and restated Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.1 of Vascular Solutions' Form 8-K dated April 22, 2010).
10.20	License agreement dated January 9, 2007 by and between Vascular Solutions and King Pharmaceuticals, Inc. (incorporated by reference to Exhibit 10.22 of Vascular Solutions' Form 10-K for the year ended December, 31, 2006).
10.21***	Device Supply agreement dated January 9, 2007 by and between Vascular Solutions and King Pharmaceuticals, Inc. (incorporated by reference to Exhibit 10.23 of Vascular Solutions' Form 10-K for the year ended December 31, 2006).
10.22***	Thrombin-JMI [®] Supply Agreement dated January 9, 2007 by and between Vascular Solutions and King Pharmaceuticals, Inc. (incorporated by reference to Exhibit 10.24 of Vascular Solutions' Form 10-K for the year ended December 31, 2006).
10.23**	Vascular Solutions, Inc. Stock Option and Stock Award Plan, as amended January 25, 2006, effective April 18, 2006 (incorporated by reference to Exhibit 10.1 of Vascular Solutions' Form 10-Q for the quarter ended March 31, 2006).
10.24	Settlement Agreement dated April 8, 2008 between Vascular Solutions, Inc. and Diomed, Inc. (incorporated by reference to Exhibit 10.1 of Vascular Solutions' Form 8-K dated April 10, 2008).

10.25***	Settlement Agreement dated June 2, 2008 among VNUS Medical Technologies, Inc. (acquired by Covidien), AngioDynamics, Inc. and Vascular Solutions, Inc. (incorporated by reference to Exhibit 10.2 of Vascular Solutions' Form 10-Q for the quarter ended June 20.000)
10.26	30, 2008). Asset Purchase Agreement dated April 30, 2010 by and between Vascular Solutions, Inc. and Escalon Vascular IP Holdings, Inc. (incorporated by reference to Exhibit 10.2 of Vascular Solutions' Form 10-Q for the quarter ended June 30, 2010).
10.27	Asset Purchase Agreement dated April 30, 2010 by and between Vascular Solutions and Escalon Vascular Access, Inc. (incorporated by reference to Exhibit 10.1 of Vascular Solutions' Form 10-Q for the quarter ended June 30, 2010).
10.28	Manufacturing and Supply Agreement dated April 30, 2010 by and between Vascular Solutions, Inc. and Escalon Vascular Access, Inc. (incorporated by reference to Exhibit 10.3 of Vascular Solutions' Form 10-Q for the quarter ended June 30, 2010).
10.29	Guarantee dated April 30, 2010 delivered by Escalon Medical Corp for the benefit of Vascular Access, Inc. (incorporated by reference to Exhibit 10.4 of Vascular Solutions' Form 10-Q for the quarter ended June 30, 2010).
10.30	Asset Purchase Agreement dated October 20, 2010 by and between Vascular Solutions, Inc., Radius Medical Technologies, Inc., and Radius Medical LLC. (incorporated by reference to Exhibit 10.1 of Vascular Solutions' Form 10-Q for the quarter ended September 30, 2010).
10.31	Asset Purchase Agreement dated January 27, 2011 by and between Vascular Solutions, Inc. and Zerusa Limited. (incorporated by reference to Exhibit 10.28 of Vascular Solutions' Form 10-K for the year ended December 31, 2010).
10.32	Asset Purchase Agreement dated August 16, 2012 by and between Vascular Solutions, Inc. and St. Jude Medical, Cardiology Division, Inc. (incorporated by reference to Exhibit 10.1 of Vascular Solutions' Form 10-Q for the quarter ended September 30, 2012).
10.33**	Chairman of the Board Agreement dated as of May 1, 2011 (incorporated by reference to Exhibit 10.1 of Vascular Solutions' Form 8-K dated April 22, 2011).
10.34**	Amendment No. 1 dated April 22, 2011, to the Vascular Solutions, Inc. Stock Option and Stock Award Plan (as amended January 25, 2006) (incorporated by reference to Exhibit 10.2 of Vascular Solutions' Form 8-K dated April 22, 2011).
10.35**	Chairman of the Board Stock Option Agreement dated April 22, 2011 (incorporated by reference to Exhibit 10.3 of Vascular Form 8-K dated April 22, 2011).
10.36**	Vascular Solutions, Inc. Amended and Restated Stock Option and Stock Award Plan, as amended through July 27, 2012 (incorporated by reference to Exhibit 10.2 of Vascular Solutions' Form 10-Q for the quarter ended September 30, 2012).
10.37**	Vascular Solutions, Inc. Restricted Stock Award Program for Non-Employee Directors (incorporated by reference to Exhibit 10.3 of Vascular Solutions' Form 10-Q for the quarter ended September 30, 2012).
10.38**	Form of Restricted Stock Award Agreement for Non-Employee Directors (incorporated by reference to Exhibit 10.4 of Vascular Solutions' Form 10-Q for the quarter ended September 30, 2012).
10.39**	Employment Agreement by and between Vascular Solutions, Inc. and its Chief Executive Officer dated as of January 27, 2012 (incorporated by reference to Exhibit 10.1 of Vascular Solutions' Form 10-Q for the quarter ended March 31, 2012).
10.40**	Chief Executive Officer Stock Option Agreement dated as of January 27, 2012 (incorporated by reference to Exhibit 10.2 of Vascular Solutions' Form 10-Q for the quarter ended March 31, 2012).
10.41*	Real Estate Purchase and Sale Agreement dated October 22, 2012 by and between Vascular Solutions, Inc. and Dayhu Investments U.S. Corporation.
23.1*	Consent of Baker Tilly Virchow Krause, LLP.
24.1	Power of Attorney (included on signature page).
31.1*	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

- 31.2* Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 32.1* Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- 32.2* Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- * Filed herewith.
- ******Management contract or compensatory plan or arrangement required to be filed as an Exhibit to this Form 10-K.

*** Pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended, confidential portions of these exhibits have been deleted and filed separately with the Securities and Exchange Commission pursuant to a request for confidential treatment.

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, on the 5th day of February 2013.

VASCULAR SOLUTIONS, INC.

By: /s/ Howard Root

Howard Root Chief Executive Officer and Director

Titla

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints each of Howard Root and James Hennen (with full power to act alone), as his true and lawful attorneys-in-fact and agents, with full powers of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to the Annual Report on Form 10-K of Vascular Solutions, Inc. for the year ended December 31, 2012, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite or 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 all that said attorneys-in-fact and agents, or their substitute or substitutes, lawfully do or cause to be done by virtue hereof.

Signature	Title
/s/ Howard Root	Chief Executive Officer and Director
Howard Root	(principal executive officer)
	Senior Vice President, Finance and Chief Financial
/s/ James Hennen	Officer
James Hennen	(principal financial officer)
/s/ Timothy Slayton	Controller
Timothy Slayton	(principal accounting officer)
/s/ Richard Nigon	Director
Richard Nigon	
/s/ Michael Kopp	Director
Michael Kopp	
/s/ Paul O'Connell	Director
Paul O'Connell	
/s/ John Erb	Director
John Erb	
/s/ Jorge Saucedo	Director
Jorge Saucedo	
/s/ Martin Emerson	Director
Martin Emerson	

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed on the 5th day of February 2013, by the following persons in the capacities indicated.

C: _____

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders, Audit Committee and Board of Directors Vascular Solutions, Inc. Minneapolis, MN

We have audited the accompanying consolidated balance sheets of Vascular Solutions, Inc. as of December 31, 2012 and 2011, and the related consolidated statements of earnings, comprehensive earnings, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 2012. Our audits also included the financial statement schedule listed in the Index at Item 15. We also have audited Vascular Solutions, Inc.'s internal control over financial reporting as of December 31, 2012, based on criteria established in *Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO)*. Vascular Solutions, Inc.'s management is responsible for these consolidated financial statements, the financial statement schedule, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on these consolidated financial statements, the financial statement schedule and the company's internal control over financial reporting based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements and the financial statement schedule are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the consolidated financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Vascular Solutions, Inc. as of December 31, 2012 and 2011, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2012 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule, in all material respects, presents fairly the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, Vascular Solutions, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on criteria established in *Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO)*.

/s/ Baker Tilly Virchow Krause, LLP

Minneapolis, Minnesota February 5, 2013

Consolidated Balance Sheets

	Decem 2012	ber 31, 2011
Assets		2011
Current assets:		
Cash and cash equivalents Accounts receivable, net of reserves of \$185,000 and \$150,000	\$11,554,000	\$13,726,000
at December 31, 2012 and 2011, respectively	, 13,780,000	11,728,000
Inventories	13,737,000	14,788,000
Prepaid expenses and other	2,670,000	1,624,000
Current portion of deferred tax assets	6,800,000	5,500,000
Total current assets	48,541,000	47,366,000
Total current assets	40,541,000	47,500,000
Property, plant and equipment, net	14,756,000	5,607,000
Goodwill	10,387,000	8,117,000
Intangible assets, net	12,325,000	7,948,000
Deferred tax assets, net of current portion and liabilities	1,993,000	7,445,000
Total assets	\$88,002,000	\$76,483,000
Liabilities and shareholders' equity Current liabilities: Accounts payable Accrued compensation Accrued expenses Accrued royalties Current portion of deferred revenue and contingent consideration Total current liabilities	\$ 3,842,000 4,123,000 1,927,000 288,000 345,000 10,525,000	\$ 2,843,000 3,430,000 1,406,000 560,000 477,000 8,716,000
Long-term deferred revenue and contingent consideration, net of current portion	610,000	1,061,000
Commitments and contingencies		
Shareholders' equity: Common stock, \$0.01 par value: Authorized shares – 40,000,000 Issued and outstanding shares –16,378,923– 2012; 16,378,205 – 2011	164,000	164,000
Additional paid-in capital	84,160,000	83,962,000
Other	(150,000)	(204,000)
	(# AAE AAA)	(17,216,000)
Accumulated deficit	(7,307,000)	
	(7,307,000) 76,867,000 \$88,002,000	<u>66,706,000</u> \$76,483,000

See accompanying notes.

,

Consolidated Statements of Earnings

	Year Ended December 31,			
	2012 2011 2010			
N. (
Net revenue: Product revenue	\$98,036,000	\$ 86,589,000	\$ 77,419,000	
License and collaboration revenue	350,000	3,367,000	1,024,000	
Total revenue	98,386,000	89,956,000	78,443,000	
Product costs and operating expenses:				
Cost of goods sold	32,561,000	29,844,000	26,465,000	
Collaboration expenses			175,000	
Research and development	11,870,000	10,240,000	9,524,000	
Clinical and regulatory	4,358,000	4,332,000	3,551,000	
Sales and marketing	25,777,000	24,126,000	23,188,000	
General and administrative	6,522,000	4,997,000	5,183,000	
Litigation		_	(3,529,000)	
Amortization of purchased technology and				
intangibles	1,393,000	831,000	304,000	
Total product costs and operating expenses	82,481,000	74,370,000	64,861,000	
Operating earnings	15,905,000	15,586,000	13,582,000	
Other earnings (expenses):				
Interest earnings	-	16,000	38,000	
Interest expense	(13,000)	(13,000)	(20,000)	
Foreign exchange gain (loss)		110,000	(42,000)	
Earnings before income taxes	15,892,000	15,699,000	13,558,000	
Income tax benefit (expense)	(5,983,000)	(5,960,000)	7,819,000	
Net earnings	\$ 9,909,000	\$ 9,739,000	\$ 21,377,000	
		* 0.50	<u> </u>	
Basic net earnings per common share	\$0.62	\$0.59	\$1.30	
Diluted net earnings per common share	\$0.60	\$0.57	\$1.26	
Shares used in computing basic net earnings per common share	16,003,932	16,638,078	16,478,206	
Shares used in computing diluted net earnings per common share	16,455,729	17,183,579	17,008,218	
1			an an the second se	

See accompanying notes.

Consolidated Statements of Comprehensive Earnings

	Year Ended December 31,					
_		2012		2011	2010	
Net earnings	\$	9,909,000	\$	9,739,000	\$ 21,377,000	
Other comprehensive earnings (loss), net of tax of \$0:						
Foreign currency translation adjustments		54,000		(288,000)		
Comprehensive earnings	\$	9,963,000	\$	9,451,000	\$ 21,377,000	

See accompanying notes.

,

.

Consolidated Statements of Changes in Shareholders' Equity

	Commor	Stock	Additional Paid-In		Accumulated	
	Shares	Amount	Capital	Other	Deficit	Total
Balance at December 31, 2009	16,557,669	\$166,000	\$88,481,000	\$84,000	(\$48,332,000)	\$40,399,000
Exercise of stock options Issuance of common stock under the	238,640	2,000	1,142,000	-	-	1,144,000
Employee Stock Purchase Plan	132,615	1,000	844,000	_	_	845,000
Stock-based compensation Repurchase and cancellation of common stock upon the vesting of restricted	151,375	2,000	2,072,000	-		2,074,000
shares Repurchase of common stock under stock	(49,630)	(1,000)	(403,000)	-	-	(404,000)
repurchase agreement Comprehensive earnings:	(141,309)	(1,000)	(1,331,000)	-	-	(1,332,000)
Net earnings	_	_	-	-	21,377,000	21,377,000
Translation adjustment Total comprehensive earnings	_	-		-		21,377,000
Balance at December 31, 2010	16,889,360	\$169,000	\$90,805,000	\$84,000	(\$26,955,000)	\$64,103,000
	10,009,200	 ,	\$3,0,000,000	+	(,,,	
Exercise of stock options Issuance of common stock under the	87,190	1,000	348,000	-	-	349,000
Employee Stock Purchase Plan	115,511	1,000	949,000	-	-	950,000
Stock-based compensation Repurchase and cancellation of common stock upon the vesting of restricted	236,252	3,000	2,247,000	_	. –	2,250,000
shares	(47,207)	(1,000)	(513,000)	-	-	(514,000)
Repurchase of common stock under stock repurchase agreement Comprehensive earnings:	(902,901)	(9,000)	(9,874,000)	_	_	(9,883,000)
Net earnings	_	-	_	-	9,739,000	9,739,000
Translation adjustment	-	-	_	(288,000)		(288,000)
Total comprehensive earnings		****		(****	(****	9,451,000
Balance at December 31, 2011	16,378,205	\$164,000	\$83,962,000	(\$204,000)	(\$17,216,000)	\$66,706,000
Exercise of stock options Issuance of common stock under the	157,590	2,000	487,000	-		489,000
Employee Stock Purchase Plan	114,060	1,000	1,003,000	-	<u> </u>	1,004,000
Stock-based compensation Repurchase and cancellation of common stock upon the vesting of restricted	213,309	2,000	2,981,000	-	-	2,983,000
shares Repurchase of common stock under stock	(59,106)	(1,000)	(651,000)	-	-	(652,000)
repurchase agreement Excess tax benefit from stock-based	(425,135)	(4,000)	(4,757,000)	-	-	(4,761,000)
compensation Comprehensive earnings:	-	-	1,135,000	-		1,135,000
Net earnings Translation adjustment	-	-	-	54,000	9,909,000 _	9,909,000 54,000
Total comprehensive earnings				,		9,963,000
Balance at December 31, 2012	16,378,923	\$164,000	\$84,160,000	(\$150,000)	(\$ 7,307,000)	\$76,867,000

See accompanying notes.

Consolidated Statements of Cash Flows

	Year Ended December 31,				
· · · · · · · · · · · · · · · · · · ·	2012	2011	2010		
Operating activities	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	# 0 72 0 000	¢ 01 077 000		
Net earnings	\$ 9,909,000	\$ 9,739,000	\$ 21,377,000		
Adjustments to reconcile net earnings to net cash					
provided by operating activities:		0 115 000	1 701 000		
Depreciation	2,158,000	2,115,000	1,701,000		
Amortization	1,393,000	831,000	304,000		
Stock-based compensation	2,983,000	2,250,000	2,074,000		
Deferred taxes, net	5,287,000	5,445,000	(8,055,000)		
Excess tax benefit from stock-based					
compensation	(1,135,000)	_	_		
Loss on disposal of fixed assets	6,000	36,000	1,000		
Change in fair value of contingent consideration	(232,000)	(586,000)	-		
Change in accounts receivable allowance	35,000	(10,000)	10,000		
Changes in operating assets and liabilities:					
Accounts receivable	(2,084,000)	(670,000)	(1,922,000)		
Inventories	1,032,000	(2,179,000)	(3,144,000)		
Prepaid expenses and other	(977,000)	29,000	(185,000)		
Accounts payable	995,000	194,000	1,322,000		
Accrued compensation and expenses	192,000	739,000	196,000		
Amortization of deferred license fees and	,,	,	,		
other deferred revenue	(351,000)	(3,353,000)	(916,000)		
Net cash provided by operating activities	19,211,000	14,580,000	12,763,000		
The cash provided by operating activities	17,211,000	1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	12,700,000		
Investing activities			÷		
Purchase of property and equipment, net	(3,145,000)	(2,389,000)	(2,906,000)		
Purchase of building and land	(7,986,000)	_	_		
Proceeds from the sale of equipment	10,000	_	-		
Cash paid for acquisitions	(7,500,000)	(6,621,000)	(10,544,000)		
Net cash used in investing activities	(18,621,000)	(9,010,000)	(13,450,000)		
Financing activities					
Net proceeds from the exercise of stock options	489,000	349,000	1,144,000		
Net proceeds from the sale of common stock,	407,000	547,000	1,144,000		
employee stock purchase plan	1,004,000	950,000	845,000		
Excess tax benefit from stock-based compensation	1,135,000	950,000	0-10,000		
Repurchase of common shares	(5,413,000)	(10,397,000)	(1,736,000)		
			<u>, </u>		
Net cash provided by (used in) financing activities	(2,785,000)	(9,098,000)	253,000		
Effect of exchange rate changes on cash and cash equivalents	23,000	(106,000)			
Decrease in cash and cash equivalents	(2,172,000)	(3,634,000)	(434,000)		
Cash and cash equivalents at beginning of year	13,726,000	17,360,000	17,794,000		
Cash and cash equivalents at end of year	\$ 11,554,000	\$ 13,726,000	\$ 17,360,000		
Supplemental disclosure of cash flow		• • • • • • • •	• • • • • • • • •		
Cash paid for interest	<u>\$ 13,000</u>	\$ 13,000	\$ 17,000		
Cash paid for taxes	\$ 902,000	\$ 535,000	\$ 362,000		

See accompanying notes

-

1. Description of Business

Vascular Solutions, Inc. (the Company) is a medical device company focused on bringing clinically advanced solutions to interventional cardiologists and interventional radiologists. The Company has three product categories as follows:

- Catheter products, principally consisting of catheters used in minimally invasive medical procedures for the diagnosis or treatment of vascular conditions, such as the Pronto[®] extraction catheters used in treating acute myocardial infarction and the GuideLiner[®] catheter used to access discrete regions of the coronary, and also including products used in connection with gaining percutaneous access to the vasculature to perform minimally invasive procedures, such as micro-introducer kits;
- Hemostat products, principally consisting of blood clotting products, such as the D-Stat[®] Dry hemostat, a topical thrombin-based pad with a bandage used to control surface bleeding, and the D-Stat Flowable, a thick yet flowable thrombin-based mixture for preventing bleeding in subcutaneous pockets; and
- Vein products and services, principally consisting of the Vari-Lase[®] endovenous laser, a laser console and procedure kit used for the treatment of varicose veins, and a reprocessing service for radiofrequency vein ablation catheters.

As a vertically-integrated medical device company, the Company generates ideas and creates new minimally invasive devices or services and then delivers these products and services to the physicians through a direct domestic sales force and an international distribution network. The Company was incorporated in the state of Minnesota in December 1996 and began operations in February 1997.

2. Summary of Significant Accounting Policies

Basis of Consolidation

The consolidated financial statements include the accounts of Vascular Solutions, Inc. and its wholly owned subsidiaries, Vascular Solutions Zerusa Limited and Vascular Solutions GmbH, after elimination of intercompany accounts and transactions.

Segment Reporting

A business segment is a distinguishable component of an enterprise that is engaged in providing an individual product or service or a group of related products or services and that is subject to risks and returns that are different from those of other business segments. The Company's segments have similar economic characteristics and are similar in the nature of the products sold, type of customers, methods used to distribute the Company's products and regulatory environment. Management believes that the Company meets the criteria for aggregating its operating segments into a single reporting segment.

The Company uses three product categories for reporting revenue. The following table sets forth, for the periods indicated, net revenue by product category along with the percent change from the previous year:

			For Years Ended	December 31	l ,			
	2012		2011		2010	2010		
		Percent		Percent		Percent		
	Net Revenue	Change	Net Revenue	Change	Net Revenue	Change		
Catheter products	\$61,262,000	16%	\$53,040,000	27%	\$41,907,000	37%		
Hemostat products	22,676,000	(2%)	23,065,000	(6%)	24,579,000	- %		
Vein products	14,098,000	34%	10,484,000	(4%)	10,933,000	(4%)		
Total product revenue	98,036,000	13%	86,589,000	12%	77,419,000	16%		
License & Collaboration	350,000	(90%)	3,367,000	229%	1,024,000	(40%)		
Total Net Revenue	\$98,386,000	9%	\$89,956,000	15%	\$78,443,000	15%		

Foreign Currency Translation and Transactions

The functional currency of the company's foreign operations is the applicable local currency. The functional currency is translated into U.S. dollars for balance sheet accounts using current exchange rates in effect as of the balance sheet date and for revenue and expense accounts using a weighted-average exchange rate during the fiscal year. The translation adjustments are deferred as a component of other comprehensive income within the consolidated statements of comprehensive income and the consolidated statements of stockholders' equity. Gains or losses resulting from transactions denominated in foreign currencies are included in other income, net in the consolidated statements of earnings.

Effective April 1, 2008 the Company began to sell products to a new international distributor in Germany at prices denominated in Euros. As a result, the Company is exposed to foreign exchange movements during the time between the shipment of the product and payment. The Company currently has terms of net 60 days with this distributor under the agreement providing for payment in Euros.

Comprehensive Earnings

The components of comprehensive earnings are net earnings and the effects of foreign currency translation adjustments. The accumulated other comprehensive earnings for the foreign currency translation adjustment at December 31, 2012 and 2011 was (\$150,000) and (\$204,000), respectively.

Fair Value of Financial Instruments

The carrying amount for cash and cash equivalents, accounts receivable, accounts payable, and accrued expenses approximates fair value due to the immediate or short-term maturity of these financial instruments.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of deferred tax assets and liabilities, as well as other amounts in the financial statements and accompanying notes. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company classifies all highly liquid investments with initial maturities of three months at the date of purchase or less as cash equivalents. Cash equivalents consist of cash and money market funds and are stated at cost, which approximates market value. The Company deposits its cash in high quality financial institutions. The balances, at times, may exceed federally insured limits.

Credit Risk and Allowance for Doubtful Accounts

The Company maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. This allowance is regularly evaluated by the Company for adequacy by taking into consideration factors such as past experience, credit quality of the customer base, age of the receivable balances, both individually and in the aggregate, and current economic conditions that may affect a customer's ability to pay. Accounts receivable over 60 days past due are considered past due. The Company does not accrue interest on past due accounts receivable. Receivables are written off only after all collection attempts have failed and are based on individual credit evaluation and the specific circumstances of the customer. At December 31, 2012 and 2011, the allowance for doubtful accounts was \$130,000 and \$120,000, respectively.

All product returns must be pre-approved and, if approved, customers are subject to a 20% restocking charge. The Company analyzes the rate of historical returns when evaluating the adequacy of the allowance for sales returns, which is included with the allowance for doubtful accounts on its balance sheet. At December 31, 2012 and 2011, the sales and return allowance was \$55,000 and \$30,000, respectively.

Accounts receivable are shown net of the combined total of the allowance for doubtful accounts and allowance for sales returns of \$185,000 and \$150,000 at December 31, 2012 and 2011, respectively.

Inventories

Inventories are stated at the lower of cost (first-in, first-out method) or market. Appropriate consideration is given to deterioration, obsolescence and other factors in evaluating net realizable value. Inventories are comprised of the following at December 31:

	2012	2011
Raw materials	\$ 6,674,000	\$ 7,107,000
Work-in-process	780,000	1,369,000
Finished goods	6,283,000	6,312,000
-	\$ 13,737,000	\$ 14,788,000

Property, Plant and Equipment

Property, plant and equipment are stated at cost. Depreciation is provided on a straight-line basis over the estimated useful lives of the assets as follows:

Manufacturing equipment	1 to 8 years
Office and computer equipment	1 to 5 years
Furniture and fixtures	3 to 8 years
Leasehold improvements	Shorter of useful life or
-	remaining term of the lease
Research and development equipment	3 to 7 years
Building	30 years

Impairment of Long-Lived Assets

The Company will record impairment losses on long-lived assets when indicators of impairment are present and the undiscounted cash flows estimated to be generated by those assets are less than the assets' carrying amount. The amount of impairment loss recorded will be measured as the amount by which the carrying value of the assets exceeds the fair value of the assets. To date, the Company has determined that no impairment of long-lived assets exists.

Revenue Recognition

In the United States the Company sells its products and services directly to hospitals and clinics. Revenue is recognized in accordance with generally accepted accounting principles as outlined in Accounting Standards Codification ("ASC") 605-10-S99, *Revenue Recognition*, which requires that four basic criteria be met before revenue can be recognized: (i) persuasive evidence of an arrangement exists; (ii) the price is fixed or determinable; (iii) collectability is reasonably assured; and (iv) product delivery has occurred or services have been rendered. The Company recognizes revenue as products are shipped based on FOB shipping point terms when title passes to customers. The Company negotiates credit terms on a customer-by-customer basis and products are shipped at an agreed-upon price.

In all international markets, the Company sells its products to international distributors which subsequently resell the products to hospitals and clinics. The Company has agreements with each of its distributors which provide that title and risk of loss pass to the distributor upon shipment of the products to the distributor. The Company warrants that its products are free from manufacturing defects at the time of shipment to the distributor. Revenue is recognized upon shipment of products to distributors following the receipt and acceptance of a distributor's purchase order. Allowances are provided for estimated returns and costs at the time of shipment. Sales and use taxes are reported on a net basis, excluding them from revenue.

The Company's revenues from license agreements and research collaborations are recognized when earned (see Note 14). In accordance with ASC 605, for deliverables which contain multiple deliverables, the Company separates the deliverables into separate accounting units if they meet the following criteria: (i) the delivered items have a stand-alone value to the customer; (ii) the fair value of any undelivered items can be reliably determined; and (iii) if the arrangement includes a general right of return, delivery of the undelivered items is probable and substantially controlled by the seller. Deliverables that do not meet these criteria are combined with one or more other deliverables into one accounting unit. Revenue from each accounting unit is recognized based on the applicable accounting literature, primarily ASC 605.

The Company currently has a license agreement with King Pharmaceuticals, Inc. (King) under which the Company licensed the exclusive rights of Thrombi-PadTM, Thrombi-Gel[®] and Thrombi-PasteTM products to King in exchange for a license fee. The Company is amortizing the license fees on a straight-line basis over the projected 10 year economic life of the products. The Company determines the economic life of the products under its license agreements by evaluating similar products the Company has launched or other similar products in the medical industry. In addition, the Company has a five-year license agreement with Nicolai, GmbH in which the Company is amortizing the license fee on a straight-line basis over the five-year life of the agreement.

As part of the agreements with King, the Company agreed to complete the development and conduct clinical studies for the Thrombi-Gel and Thrombi-Paste products, with the costs related to the clinical studies paid by King. The Company is recognizing the collaboration revenue on this development agreement as it is earned in accordance with ASC 605. On July 6, 2011, King notified the Company that King was terminating the development of the Thrombi-Paste products and terminating efforts to obtain the surgical indication for the Thrombi-Gel products (Note 14).

Starting in January 2012, the Company began to generate revenue from selling a reprocessing service for ClosureFast[®] radiofrequency catheters. In accordance with ASC 605-45, the Company recognizes this revenue gross, with the amount paid to the supplier of the reprocessing service reflected as cost of sales.

In addition, the Company has reviewed the provisions of ASC 808, *Collabarative Arrangements*, and the adoption of this ASC has had no impact on the amounts recorded under these agreements.

Shipping and Handling Costs

In accordance with the ASC 605-45-45, the Company includes shipping and handling revenues in net sales and shipping and handling costs in cost of goods sold.

Research and Development Costs

All research and development costs are charged to operations as incurred.

Warranty Costs

Certain of the Company's products are covered by warranties against defects in material and workmanship for periods of up to 24 months. The Company records a liability for warranty claims at the time of sale. The amount of the liability is based on the amount the Company is charged from its original equipment manufacturer to cover the warranty period. The original equipment manufacturers include a one year warranty with each product sold to the Company. The Company records a liability for the uncovered warranty period offered to a customer, provided the warranty period offered exceeds the initial one year warranty period covered by the original equipment manufacturer's warranties cover the first year of service and as a result the Company's exposure to uncovered warranty periods was minimal at December 31, 2012.

	2012	2011	2010
Beginning balance	\$ 23,000	\$ 13,000	\$ 73,000
Warranty provisions	57,000	79,000	4,000
Warranty claims	(51,000)	(69,000)	(64,000)
Ending balance	\$ 29,000	\$ 23,000	\$ 13,000

Warranty provisions and claims for the years ended December 31, 2012, 2011 and 2010, were as follows:

Advertising Costs

The Company follows the policy of charging production costs of advertising to expense as incurred. Advertising expense was \$103,000, \$71,000, and \$71,000 for the years ended December 31, 2012, 2011 and 2010, respectively.

Stock-Based Compensation

The Company has various types of stock-based compensation plans. These plans are administered by the compensation committee of the Board of Directors, which selects persons to receive awards and determines the number of shares subject to each award and the terms, conditions, performance measures and other provisions of the award. Refer to Notes 8 and 9 for additional information related to these stock-based compensation plans.

The following amounts have been recognized as stock-based compensation expense in the Consolidated Statements of Operations:

2012		2011		2010
\$ 94,000	\$	86,000	\$	225,000
389,000		250,000		293,000
313,000		239,000		115,000
941,000		825,000		769,000
1,246,000		850,000		672,000
\$ 2,983,000	\$ 2	2,250,000	\$	2,074,000
1	\$	\$ 94,000 \$ 389,000 313,000 941,000 1,246,000	\$ 94,000 \$ 86,000 389,000 250,000 313,000 239,000 941,000 825,000 1,246,000 850,000	\$ 94,000 \$ 86,000 \$ 389,000 250,000 313,000 239,000 941,000 825,000 1,246,000 850,000

The Company uses the Black-Scholes option-pricing model to estimate fair value of stock-based awards with the following weighted average assumptions:

	2012	2011	2010
Stock Options and Awards:			
Expected life (years)	6.50	5.50	5.50
Expected volatility	48%	49%	50%
Dividend yield	0%	0%	0%
Risk-free interest rate	1.21%	2.12%	2.42%
Employee Stock Purchase Plan:			
Expected life (years)	2.0	2.0	2.0
Expected volatility	32%	34%	48%
Dividend yield	0%	0%	0%
Risk-free interest rate	0.28%	0.47%	0.69%

Restricted stock awards fair value is calculated as the market price on the date of grant for the years ended December 31, 2012 and 2011 and the fair value is amortized on a straight line basis over the requisite service period of four years for employee awards and one year for board of director awards. The weighted average fair value of restricted stock awards granted during 2012, 2011 and 2010 was \$11.10, \$10.77 and \$8.45, respectively.

The weighted average fair value of stock options granted with an exercise price equal to the deemed stock price on the date of grant during 2012, 2011 and 2010 was \$5.41, \$4.72 and \$3.99, respectively. The weighted average fair value of stock options granted with an exercise price greater than the deemed stock price on the date of grant during 2012 was \$5.11.

The Company calculates expected volatility for stock options and awards using historical volatility. The starting point for the historical period used is based on a material change in the Company's operations that occurred in the third quarter of 2003. The Company uses a 10% forfeiture rate for key employees and a 15% forfeiture rate for non-key employees for stock options and awards. The Company calculates expected volatility for employee stock purchase plan shares using historical volatility over a two-year period. A two-year period is used to coincide with the maximum two-year offering period under the employee stock purchase plan. The risk-free rates for the expected terms of the stock options and awards and the employee stock purchase plan is based on the U.S. Treasury yield curve in effect at the time of grant.

Income Taxes

Income taxes are accounted for under the liability method. Deferred income taxes are provided for temporary differences between the financial reporting and the tax bases of assets and liabilities. Deferred tax assets are reduced by a valuation allowance to the extent that realization of the related deferred tax asset is not assured. If the Company determines in the future that it is more likely than not that the Company will realize all or a portion of the deferred tax assets, the Company will adjust the valuation allowance in the period the determination is made (Note 7).

When tax returns are filed, it is highly certain that some positions taken would be sustained upon examination by the taxing authorities, while others are subject to uncertainty about the merits of the position taken or the amount of the position that would be ultimately sustained. The benefit of a tax position is recognized in the financial statements in the period during which, based on all available evidence, management believes it is more-likely-than-not that the position will be sustained upon examination, including the resolution of appeals or litigation processes, if any. Tax positions taken are not offset or aggregated with other positions. Tax positions that meet the more-likely-than-not recognition threshold are measured as the largest amount of tax benefit that is more than 50 percent likely of being realized upon settlement with the applicable taxing authority. The portion of the benefits associated with tax positions taken that exceeds the amount measured as described above is reflected as a liability for unrecognized tax benefits in the accompanying balance sheet along with any associated interest and penalties that would be payable to the taxing authorities upon examination.

The Company has recorded ASC 740, *Income Taxes*, reserves of \$1,074,000 and \$1,020,000 at December 31, 2012 and 2011. The impact of tax related interest and penalties is recorded as a component of income tax expense. At December 31, 2012, the Company has recorded \$-0- for the payment of tax related interest and there were no tax penalties or interest recognized in the statements of operations.

Net Earnings Per Common Share

In accordance with ASC 260, *Earnings Per Share*, basic net earnings per common share is computed by dividing net earnings by the weighted average common shares outstanding during the periods presented. Diluted net earnings per common share is computed by dividing net earnings by the weighted average common and potential dilutive common shares outstanding computed in accordance with the treasury stock method.

The number of shares used in earnings per share computations is as follows for the years ended December 31:

	2012	2011	2010
Weighted average common shares outstanding—	· · · · · · · · · · · · · · · · · · ·		
basic	16,003,932	16,638,078	16,478,206
Effect of dilutive securities	451,797	545,501	530,012
Weighted average common shares outstanding			
diluted	16,455,729	17,183,579	17,008,218

The effect of dilutive securities in the above table excludes 270,000, 70,000, and 50,000 of options for which the exercise price was higher than the average market price for the years ended December 31, 2012, 2011 and 2010, respectively.

Goodwill and Other Intangible Assets

Goodwill is reviewed for impairment annually on December 31st or more frequently if changes in circumstances or the occurrence of events suggest impairment exists using a two-step process. In step 0, the Company can elect to perform an optional quantitative analysis and based on the results skip the remaining two steps. Consistent with prior years, in the current year the Company chose to skip step 0 and perform a quantitative analysis in Step 1. In the step 1, the fair value of each reporting unit is compared to its carrying value, including goodwill. If the fair value exceeds the carrying value, no further work is required and no impairment loss is recognized. If the carrying value exceeds the fair value, the goodwill of the reporting unit is potentially impaired and the Company would then complete step 2 in order to measure the impairment loss. In step 2, the Company would calculate the implied fair value of goodwill by deducting the fair value of all tangible and intangible net assets (including unrecognized intangible assets) of the reporting unit from the fair value of the reporting unit. If the implied fair value of goodwill is less than the carrying value of goodwill, the Company would recognize an impairment loss, in the period identified, equal to the difference. The Company has concluded that no impairment of goodwill existed as of December 31, 2012.

Other intangible assets consist of purchased technology, trademark/tradenames, developed technology, customer relationships and licenses. The Company reviewed intangible assets for impairment as changes in circumstances or the occurrence of events suggested the remaining value was not recoverable.

Amortization on the intangibles is provided on a straight-line basis over the estimated useful lives of the assets as follows:

Trademark/tradename	10 to 11 years
Purchased technology	9 to 11 years
Customer relationships	9 years
Licenses	5 to 10 years

Leases and Deferred Rent

During the majority of the year ended December 31, 2012 the Company leased all office space. Leases are accounted for under the provisions of ASC 840, *Leases*, which requires that leases be evaluated and classified as operating or capital leases for financial reporting purposes. As of December 31, 2012, all of the Company's leases were accounted for as operating leases. For leases that contain rent escalations, the Company records the total rent payable during the lease term on a straight-line basis over the term of the lease and records the difference between the rents paid and the straight-line rent as a deferred rent. For any lease incentives the Company receives for items such as leasehold improvements, the Company records a deferred credit for the amount of the lease incentive and amortizes it over the lease term, which may or may not equal the amortization period of the leasehold improvements in accordance with ASC 840-20.

On November 30, 2012, the Company closed on the purchase of an office building located next to the building which currently houses the Company's principal executive offices. The Company intends to occupy approximately 23,900 square feet of the building beginning in January 2013 and continue the lease of the remaining 47,600 square feet of the building to the current tenants under existing leases.

Recently Issued Accounting Pronouncements

In July 2012, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2012-02, *Intangibles – Goodwill and Other (Topic 350) – Testing Indefinite-Lived Intangible Assets for Impairment*. ASU No. 2012-02 permits an entity to first assess qualitative factors to determine whether it is more likely than not that an indefinite-life intangible asset is impaired as a basis for determining whether it is necessary to perform quantitative impairment in accordance with Subtopic 350-30, *Intangibles – Goodwill and Other – General Intangibles Other than Goodwill*. The more-likely-than-not threshold is defined as having a likelihood of more than 50 percent. ASU No. 2012-02 is effective for annual and interim impairment tests performed for fiscal years beginning after September 15, 2012 and early adoption is permitted. The company adopted ASU No. 2012-02, as permitted, for its annual impairment test for its fiscal year ended December 31, 2012. The adoption did not have a material impact on the company's consolidated financial statements.

In June 2011, the FASB issued ASU No. 2011-05, Comprehensive Income (Topic 220) - Presentation of Comprehensive Income. ASU No. 2011-05 guidance amended the presentation of comprehensive income to allow an entity the option to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. In both choices, an entity is required to present each component of net income along with total net income, each component of other comprehensive income along with a total for other comprehensive income, and a total amount for comprehensive income. The guidance eliminates the option to present the components of other comprehensive income as part of the statement of changes in stockholders' equity. In December 2011, the FASB issued ASU No. 2011-12, Deferral of the Effective Date for Amendments to the Presentation of Reclassifications of Items Out of Accumulated Other Comprehensive Income in Accounting Standards Update No. 2011-05. ASU No. 2011-12 defers the changes in ASU No. 2011-05 of the requirement to present separate line items on the income statement for reclassification adjustments of items out of accumulated other comprehensive income into net income. The effective date for ASU No. 2011-12 is consistent with the effective date for ASU No. 2011-05, which is effective for fiscal years, and interim periods within those years, beginning after December 15, 2011, and is to be applied retrospectively; early adoption is permitted. The company adopted this amended guidance in its fiscal 2012 first quarter. The adoption of this guidance did not have a material impact on the company's consolidated financial statements.

3. Goodwill and Other Intangible Assets

The Company acquired trademark/tradename, developed technology and customer relationships from the following (see Note 15):

- Escalon Vascular Access, Inc., (Escalon) in April 2010,
- Radius Medical Technologies, Inc. in October 2010,
- Zerusa Limited in January 2011,
- Accumed Systems, Inc. (Accumed) in June 2012,
- St. Jude Medical in August 2012, and
- Shepherd Scientific, Inc. (Shepherd Scientific) in December 2012.

The Company is amortizing these intangibles over their useful lives of 9 to 11 years. The goodwill acquired will not be amortized. In December 2011 the Company acquired the exclusive right to sell reprocessing services for ClosureFast radiofrequency catheters in the U.S. and is amortizing the cost over the five year term of the license (see Note 15). In January 2012, the Company acquired the rights, patents and intellectual property relating to a two-lumen catheter for distal protection and material extraction used in the Company's Pronto catheters (see Note 15). Amortization expense was \$1,393,000, \$831,000 and \$304,000 for the years ended December 31, 2012, 2011 and 2010, respectively.

Balances of acquired intangible assets as of December 31, 2012 were as follows:

	Carrying Amount	Accumulated Amortization	Net
Amortizing intangibles:			
Purchased technology	\$ 7,960,000	\$ 1,555,000	\$ 6,405,000
Purchased licenses	4,150,000	505,000	3,645,000
Trademark / tradename	2,170,000	390,000	1,780,000
Customer relationships	620,000	74,000	546,000
Foreign currency translation adjustments	(50,000)	1,000	(51,000)
-	\$ 14,850,000	\$ 2,525,000	\$ 12,325,000

Balances of acquired intangible assets as of December 31, 2011 were as follows:

	Carrying Amount	Accumulated Amortization	Net
Amortizing intangibles:			
Purchased technology	\$ 6,200,000	\$ 873,000	\$ 5,327,000
Trademark / tradename	1,820,000	214,000	1,606,000
Purchased licenses	900,000		900,000
Customer relationships	230,000	43,000	187,000
Foreign currency translation adjustments	(32,000)	40,000	(72,000)
	\$ 9,118,000	\$ 1,170,000	\$ 7,948,000

3. Goodwill and Other Intangible Assets (Continued)

Based on the intangibles assets as of December 31, 2012, future amortization expense was as follows:

2013	\$ 1,544,000
2014	1,618,000
2015	1,618,000
2016	1,610,000
2017	1,438,000
Thereafter	4,497,000
	\$ 12,325,000

The following table provides a summary of additions and disposals of goodwill for each reporting period:

Balance at December 31, 2010	\$ 5,825,000
Acquisition of Zerusa Limited	2,424,000
Radius Medical Technologies, Inc. final payment adjustment	10,000
Foreign currency translation adjustments	(142,000)
Balance at December 31, 2011	\$ 8,117,000
Acquisition of Accumed wrist positioning splint	562,000
Acquisition of St. Jude Medical's Venture wire control catheter	1,444,000
Acquisition of Shepherd Scientific's AngioAssist & Teirstein Edge	210,000
Foreign currency translation adjustments	54,000
Balance at December 31, 2012	\$10,387,000

4. Property, Plant and Equipment

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

	2012	2011
Plant and equipment:		
Manufacturing equipment	\$ 10,174,000	\$ 8,213,000
Buildings	6,407,000	. —
Leasehold improvements	2,269,000	2,101,000
Office and computer equipment	2,265,000	2,082,000
Research and development equipment	1,707,000	1,470,000
Construction-in-process	977,000	442,000
Furniture and fixtures	782,000	714,000
	24,581,000	15,022,000
Less accumulated depreciation and amortization	(11,425,000)	(9,415,000)
Net plant and equipment	13,156,000	5,607,000
Land	1,600,000	- -
Net property, plant and equipment	\$ 14,756,000	\$ 5,607,000

5. Lines of Credit

On December 6, 2012 the Company modified and extended its secured asset-based revolving credit agreement with U.S. Bank National Association dated December 21, 2009 (as amended on December 20, 2010 and December 20, 2011). The revolving credit agreement is a one-year, \$10,000,000 facility with availability based primarily on eligible customer receivables, inventory and property and equipment. The revolving credit agreement bears interest equal to the one-month LIBOR rate plus 1.60% and is secured by a first security interest

5. Lines of Credit (Continued)

on all of the Company's assets. The revolving credit agreement requires a quarterly payment based on an annual fee of 0.125% of the average unused portion of the committed revolving line as determined by the bank and reviewed by management.

The revolving credit agreement includes one covenant that the Company cannot have a maximum cash flow leverage ratio greater than 2.5 to 1. The calculation of this covenant is determined by multiplying annual lease expense times six and adding any loans, then dividing this amount by the sum of earnings before interest, taxes, depreciation, amortization and annual operating lease payments. The covenant is computed quarterly based on a rolling 12-month period. The Company was in compliance with the covenant as of December 31, 2012.

As of and through-out the year ended December 31, 2012, the Company had no outstanding balance against the revolving credit agreement. Based on the Company's eligible customer receivables, inventory, property and equipment and cash balances, \$10,000,000 was available for borrowing as of December 31, 2012.

6. Leases

The Company leases two buildings in Minnesota totaling approximately 106,000 square-feet under an operating lease. On October 23, 2010, the Company amended one of its operating leases to add 12,000 square-feet. The lease continues to remain in effect through September 2015 with an option to renew. The Company leases one building in Ireland totaling approximately 1,150 square feet. This lease is set to auto renew in May 2013. Rent expense related to the operating leases was approximately \$1,273,000, \$1,297,000 and \$1,106,000 for the years ended December 31, 2012, 2011, and 2010, respectively.

Future minimum lease commitments under the operating leases as of December 31, 2012 was as follows:

2013	\$	905,000
2014		907,000
2015		681,000
2016		_
2017		
Thereafter		-
	\$ 2	2,493,000

7. Income Taxes

At December 31, 2012 the Company had recorded the following components of deferred taxes with a finite life:

	Expiration		
	2012	Date	
Federal and Minnesota research and development tax credit			
carryforwards	\$5,610,000	Beginning in 2013	
Operating loss carryforwards	3,425,000	Beginning in 2024	
Foreign operations operating loss carryforwards	375,000	Do not expire	

The Company has recorded an allowance of approximately \$146,000 relating to those research and development tax credit carryforwards expected to expire prior to utilization. The entire U.S. operating loss carryforwards resulted from the exercise of stock options. When these stock option exercise deductions are realized for financial statement purposes they do not result in a reduction in income tax expense, rather the benefit is recorded as additional paid-in-capital.

7. Income Taxes (Continued)

The Company is subject to income tax in numerous jurisdictions and at various rates and the use of estimates is required in determining the provision for income taxes. For the year ended December 31, 2012, the Company recorded tax expense of \$5,983,000 on earnings before tax of \$15,892,000 resulting in an effective income tax rate of 38%. For the year ended December 31, 2012, income before taxes relating to U.S. operations was \$15,594,000, while income before tax from foreign operations was \$298,000. For the year ended December 31, 2011, income before taxes relating to U.S. operations was \$15,922,000, while the loss before tax from foreign operations was \$13,558,000. For the year ended December 31, 2010, income before taxes relating to U.S. operations was \$13,558,000, while income before tax from foreign operations was \$13,558,000, while income before tax from foreign operations was \$-0-.

The Company is subject to income tax examinations in the U.S. Federal jurisdiction, as well as in the Republic of Ireland, Federal Republic of Germany and various state jurisdictions. Remaining open federal tax years at December 31, 2012 are 2009 through 2012 and remaining open state tax years at December 31, 2012 are 2008 through 2012.

A reconciliation of the beginning and ending amount of unrecognized tax benefit is as follows	s:
Balance at December 31, 2010	\$ 871,000
Increases as a result of tax positions taken during a prior period	
Increases as a result of tax positions taken during the current period	149,000
Reductions as a result of lapse of the applicable statute of limitations	—
Decreases relating to settlements with taxing authorities	
Balance at December 31, 2011	\$1,020,000
Increases as a result of tax positions taken during a prior period	-
Increases as a result of tax positions taken during the current period	54,000
Reductions as a result of lapse of the applicable statute of limitations	-
Decreases relating to settlements with taxing authorities	
Balance at December 31, 2012	\$1,074,000

The components of the Company's deferred tax assets and liabilities as of December 31, 2012 and 2011 are as follows:

	2012	2011
Deferred tax assets:		
Tax credit carryforwards	\$ 5,610,000	\$ 5,590,000
Stock-based compensation	1,514,000	1,303,000
Net operating loss carryforwards	1,288,000	7,029,000
Federal and state AMT credits	996,000	679,000
Inventory reserve	557,000	417,000
Depreciation and amortization	520,000	271,000
Accrued compensation	487,000	340,000
Deferred revenue	320,000	451,000
Foreign operations net operating loss carryforwards	47,000	_
Other	130,000	117,000
Gross deferred tax assets	11,469,000	16,197,000
Deferred tax liability	(336,000)	(234,000)
Net deferred taxes assets before reserve for uncertain tax	11,133,000	15,963,000
positions and valuation allowances		
Reserve for uncertain tax positions	(906,000)	(901,000)
Less valuation allowances	(1,434,000)	(2,117,000)
Net deferred tax asset	\$ 8,793,000	\$ 12,945,000

7. Income Taxes (Continued)

/ Income Tuxes (Commutely)	2012 2011
Deferred taxes recorded on the balance sheet:	
Net deferred tax assets – current	\$ 6,800,000 \$ 5,500,000
Net deferred tax assets – long-term	1,993,000 7,445,000
Net deferred tax assets	\$ 8,793,000 \$ 12,945,000

The Company regularly assesses the likelihood that the deferred tax assets will be recovered from future taxable earnings. The Company considers projected future taxable earnings and ongoing tax planning strategies, then records a valuation allowance to reduce the carrying value of the net deferred taxes to an amount that is more likely than not to be realized. For the year ended December 31, 2010, based upon the Company's assessment of all available evidence, including the previous three year cumulative earnings before unusual and infrequent expenses (litigation and thrombin qualification expenses), estimates of future profitability, and the Company's overall prospects of future business, the Company determined that it was more likely than not that the Company would be able to realize substantially all of the remaining deferred tax assets in the future with the exception of the amounts relating to the exercise of stock options and Minnesota research and development credits expected to expire prior to being utilized, and as a result recorded a \$12,491,000 income tax benefit. To determine the amount of the reduction in the valuation allowance, the Company used a discounted projection of its revenue and earnings for the years ending December 31, 2011 through 2015. The amount of the valuation allowance reduction at December 31, 2010, was based on the Company's projected discounted taxable earnings. The Company continues to assess the potential realization of deferred tax assets on an annual basis, or an interim basis if circumstances warrant. If the Company's actual results and updated projections vary significantly from the projections used as a basis for this determination, the Company may need to increase or decrease the valuation allowance against the gross deferred tax assets. The Company would adjust earnings for the deferred tax in the period the determination was made. At December 31, 2012 and 2011, the valuation allowance was \$1,434,000 and \$2,117,000, respectively. The increase (decrease) in the valuation allowance was (\$683,000), \$185,000 and (\$12,456,000) for the years ended December 31, 2012, 2011 and 2010, respectively. For the years ended December 31, 2012 and 2011, the Company recorded stock option and employee stock purchase plan tax deductions of \$1,181,000 and \$480,000, respectively. For the year ended December 31, 2012 and 2011, the Company recorded stock option and employee stock purchase plan tax benefits against "additional paid-in capital" and reduced taxes payable by a corresponding amount of \$1,135,000 and \$-0-, respectively.

Reconciliation of the statutory federal income tax rate to the Company's effective tax rate is as follows:

-	2012	2011	2010
Tax at statutory rate	34.0%	34.0%	35.0%
State income taxes, net of federal benefit	6.2	5.8	5.4
Permanent differences	1.9	1.2	1.7
Change in valuation reserve	0.2	(1.1)	(93.9)
R&D credits generated	(1.1)	(3.1)	(5.0)
Reserve for uncertain tax positions	0.1	0.6	1.0
Foreign operations tax rate difference	(0.7)	_	_
Federal rate differential	_	_	(1.0)
Other adjustments	(3.0)	0.6	(0.9)
Effective income tax rate	37.6%	38.0%	(57.7)%

7. Income Taxes (Continued)

	2012	2011	2010
Current taxes	12.2%	3.3%	3.5%
Deferred taxes	26.1	34.7	32.7
Benefit from foreign operation tax rates	(0.7)		
Benefit from release of valuation reserve	_		(93.9)
Effective income tax rate	37.6%	38.0%	(57.7)%

8. Stock Options and Restricted Shares

Stock Option and Stock Award Plan

The Company has a stock option and stock award plan (the Stock Option Plan) which provides for the granting of stock options, restricted shares and stock appreciation rights to employees, directors, and consultants. Incentive stock options may be granted only to employees of the Company. Options which do not qualify as incentive stock options and awards of restricted shares may be granted to both employees and to non-employee directors and consultants. As of December 31, 2012, the Company had reserved 5,000,000 shares of common stock under the Stock Option Plan. Under the Stock Option Plan, stock options must be granted at an exercise price not less than the fair market value of the Company's common stock on the grant date. Vesting requirements of all awards under this plan are time based and vary by individual grant. The options expire on the date determined by the Board of Directors but may not extend more than 10 years from the grant date. The incentive stock options generally become exercisable over a four-year period and the nonqualified stock options generally become exercisable over a four-year period and the nonqualified stock options generally become exercisable on the date of termination of employment and become available under the Stock Option Plan for future grants.

The Company grants annual stock options to its directors under the Stock Option Plan. The ten-year options issued to the Company's directors vest over a one-year period based on the continuation of service as a director of the Company. The Company uses a 0% forfeiture rate for all director options granted.

In January 2012 the Company granted stock options to the chief executive officer under the Stock Option Plan. The ten-year options issued to the Company's chief executive officer vest over five successive one-year periods based on the continuation of service with the Company and contain a \$1 per share escalation in the exercise price each year. The Company used a 0% forfeiture rate for this option grant.

8. Stock Options and Restricted Shares (Continued)

Option activity is summarized as follows:

	Shares Available for Grant (exclusive of restricted shares issued)	Plan Options Outstanding	Exercise Price	Weighted Average Exercise Price	Aggregate Intrinsic Value
Balance at December 31, 2009	3,424,000	1,030,000	\$ 0.78-\$10.89	\$ 6.06	
Shares reserved	500,000	—	_	_	
Granted	(60,000)	60,000	9.61-10.98	9.84	
Exercised	_	(239,000)	0.84- 9.58	4.79	
Forfeited	-	_	-	_	
Expired	14,000	(14,000)	9.46- 10.28	9.95	_
[•] Balance at December 31, 2010	3,878,000	837,000	\$ 0.78-\$10.98	\$ 6.62	
Shares reserved	500,000	_	-	-	
Granted	(70,000)	70,000	11.72	11.72	
Exercised	-	(87,000)	0.84– 9.46	4.00	
Forfeited	_	-	-	_	
Expired	19,000	(19,000)	0.84 9.46	5.45	_
Balance at December 31, 2011	4,327,000	801,000	\$ 0.78-\$11.72	\$ 7.38	
Shares reserved	(1,900,000)	_	-	_	
Granted	(500,000)	500,000	11.03- 15.03	12.89	
Exercised	-	(158,000)	0.84-10.28	3.10	
Forfeited	_	-	_	_	
Expired					
Balance at December 31, 2012	1,927,000	1,143,000	<u>\$ 0.78-\$15.03</u>	\$10.38	\$6,197,000
Exercisable at December 31, 2012		661,000		\$ 8.51	\$4,817,000

The number of common shares available for the grant of future stock awards is limited to 703,000 common shares. The shares available for grant number disclosed in the table above does not include 1,224,000 common shares issued in the form of restricted shares.

The weighted average remaining contractual term of options exercisable at December 31, 2012, was 3.8 years. The total intrinsic value of options exercised during fiscal 2012, 2011 and 2010, was \$1,464,000, \$677,000, and \$1,353,000, respectively.

8. Stock Options and Restricted Shares (Continued)

	Ор	Options Outstanding			Exercisable
Range of Exercise Prices	Outstanding as of December 31, 2012	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Exercisable as of December 31, 2012	Weighted Average Exercise Price
\$ 0.78-\$ 6.39	123,000	3.8	\$ 4.50	123,000	\$ 4.50
6.40- 7.88	131,000	1.8	7.12	131,000	7.12
7.89– 9.41	53,000	4.2	9.38	53,000	9.46
9.42- 9.46	119,000	2.1	9.46	119,000	7.14
9.47-10.89	137,000	3.9	10.08	137,000	10.08
10.90- 11.63	150,000	9.1	11.23	39,000	11.46
11.64-12.03	160,000	8.7	11.89	59,000	11.72
12.04-15.03	270,000	9.1	14.03	_	_
	1,143,000	6.1	\$10.38	661,000	\$ 8.51

The following table summarizes information about stock options outstanding at December 31, 2012:

As of December 31, 2012, there was \$1,795,000 of total unrecognized compensation costs related to the outstanding stock options, which is expected to be recognized over a weighted average period of 1.97 years.

The holder of a restricted share award is generally entitled at all times on and after the date of issuance of the restricted shares to exercise the rights of a shareholder of the Company, including the right to vote the shares and the right to receive dividends on the shares. These shareholders do not have the ability to sell, transfer or otherwise encumber the restricted share awards until they fully vest. During 2012, 2011 and 2010 the Company granted restricted shares to employees under the Stock Option Plan. During 2012 the Company granted restricted shares to one of its directors under the Stock Option Plan. The restricted shares granted to employees of the Company vest over a four-year period based on the continuation of employment. The restricted shares granted to the Company's director's vest over a one-year period based on the continuation of service as a director.

Restricted share activity is summarized as follows:

	Shares Outstanding	Weighted Average Grant Date Fair Value
Balance at December 31, 2009	445,000	\$ 8.07
Granted	260,000	8.45
Vested	(133,000)	7.00
Forfeited	(109,000)	8.50
Expired	_	_
Balance at December 31, 2010	463,000	\$ 8.49
Granted	274,000	10.77
Vested	(132,000)	8.72
Forfeited	(38,000)	10.05
Expired	_	—
Balance at December 31, 2011	567,000	\$ 9.43
Granted	245,000	11.10
Vested	(167,000)	8.12
Forfeited	(32,000)	10.67
Expired		
Balance at December 31, 2012	613,000	\$10.39

8. Stock Options and Restricted Shares (Continued)

As of December 31, 2012, there was \$1,807,000 of total unrecognized compensation costs related to the outstanding restricted shares, which is expected to be recognized over a weighted average period of 1.15 years. The Company estimates the forfeiture rate for restricted stock using 0% for directors, 10% for key employees and 15% for non-key employees.

9. Employee Stock Purchase Plan

The Company has an Employee Stock Purchase Plan (the Purchase Plan) under which 2,500,000 shares of common stock have been reserved for issuance. Eligible employees may contribute 1% to 10% of their compensation to purchase shares of the Company's common stock at a discount of 15% of the market value at certain plan-defined dates up to a maximum of 2,000 shares per purchasing period. The Purchase Plan terminates in July 2020. In fiscal 2012, 2011 and 2010, 114,100 shares, 115,500 shares, and 132,600 shares, respectively, were issued under the Purchase Plan. At December 31, 2012, 889,000 shares were available for issuance under the Purchase Plan.

As of December 31, 2012, there was \$294,000 of total unrecognized compensation costs related to the Purchase Plan, which is expected to be recognized over a weighted average period of 0.64 years.

10. Employee Retirement Savings Plan

The Company has an employee 401(k) retirement savings plan (the Plan). The Plan provides eligible employees with an opportunity to make tax-deferred contributions into a long-term investment and savings program. All employees over the age of 21 are eligible to participate in the Plan beginning with the first quarterly open enrollment date following start of employment. The Plan allows eligible employees to contribute up to 50% of their annual compensation, subject to a maximum limit determined by the Internal Revenue Service, with the Company contributing an amount equal to 25% of the first 5% contributed to the Plan. The Company recorded an expense of \$204,000, \$194,000 and \$184,000 for contributions to the Plan for the years ended December 31, 2012, 2011, and 2010, respectively.

11. Concentrations of Credit and Other Risks

In the United States the Company sells its products directly to hospitals and clinics. In all international markets, the Company sells its products to distributors who, in turn, sell to hospitals and clinics. Loss, termination, or ineffectiveness of distributors to effectively promote the Company's product could have a material adverse effect on the Company's financial condition and results of operations.

No customer represented more than 10% of total revenue for any year ended December 31, 2012, 2011 and 2010.

The Company performs credit evaluations of its customers and does not require collateral to extend credit to an account. No customer represented more than 10% of gross accounts receivable at December 31, 2012 and 2011. There have been no material losses on customer receivables.

Product revenue by geographic destination as a percentage of total product revenues were as follows for the years ended December 31:

	2012	2011	2010
Domestic	84%	84%	85%
Foreign	16	16	15

12. Related Party Activity

During the years ended December 31, 2012, 2011 and 2010, the Company sold \$451,000, \$504,000 and \$473,000, respectively, of product to a company of which a board member of the Company is an officer. As of December 31, 2012 and 2011, the Company had an accounts receivable balance due of \$39,000 and \$38,000, respectively, from this related party. In addition, the Company purchases product from this related party and during the years ended December 31, 2012, 2011 and 2010 the Company purchased \$10,000, \$15,000 and \$20,000, respectively, of product from this related party. As of December 31, 2012 and 2011, the Company had an accounts payable balance due of \$-0- to this related party.

From time to time the Company utilizes development consulting services from a company owned by the spouse of an employee. During the year ended December 31, 2012 and 2011, the Company utilized services in the amount of \$404,000 and \$353,000, respectively, from this vendor. At December 31, 2012 and 2011, the Company had an accounts payable balance due of \$-0- to this related party.

13. Dependence on Key Suppliers

King Pharmaceuticals

The Company purchases certain key components from single-source suppliers. Any significant component delay or interruption could require the Company to qualify new sources of supply, if available, and could have a material adverse effect on the Company's financial condition and results of operations. The Company purchases its requirements for thrombin (a component in the Hemostat products) under a Thrombin-JMI Supply Agreement entered into with King Pharmaceuticals, Inc. (King) on January 9, 2007. Under the terms of the Thrombin-JMI Supply Agreement, King agrees to manufacture and supply thrombin to the Company on a non-exclusive basis. The Thrombin-JMI Supply Agreement does not contain any minimum purchase requirements. King agrees to supply the Company with such quantity of thrombin as the Company may order at a fixed price throughout the term of the Thrombin-JMI Supply Agreement as adjusted for inflation, variations in potency and other factors. The Thrombin-JMI Supply Agreement has an initial term of 10 years, followed by successive automatic one-year extensions, subject to termination by the parties under certain circumstances, including: (i) termination by King without cause any time after the fifth anniversary of the date of the Thrombin-JMI Supply Agreement upon five years prior written notice to the Company, and (ii) termination by the Company without cause any time after the fifth anniversary of the date of the Thrombin-JMI Supply Agreement upon five years prior written notice to King provided that the Device Supply Agreement, which the Company also entered into with King on January 9, 2007, has expired on its terms or the parties have agreed to terminate it.

14. Commitments and Contingencies

All legal cost related to litigation are charged to operations as incurred, except settlements which are expensed when a claim is probable and estimatable.

Governmental Proceedings

On June 28, 2011, the Company received a subpoena from the U.S. Attorney's Office for the Western District of Texas under the Health Insurance Portability & Accountability Act of 1996 (HIPAA) requesting the production of documents related to the Company's Vari-Lase products, and in particular the use of the Vari-Lase[®] Short Kit for the treatment of perforator veins. The Vari-Lase Short Kit has been sold under a 510(k) clearance for the treatment of incompetence and reflux of superficial veins in the lower extremity since 2007 with total U.S. sales through December 31, 2012 of approximately \$432,000 (0.1% of the Company's total U.S. sales) and has not been the subject of any reported serious adverse clinical event. On August 14, 2012, the U.S. District Court for

14. Commitments and Contingencies (Continued)

the Western District of Texas unsealed a *qui tam* complaint that had been filed on November 19, 2010 by Desalle Bui, a former sales employee of the Company, which is the basis for the U.S. Attorney's investigation, to which the federal government, after three extensions of time, has elected to intervene. The complaint contains allegations of off-label promotion of Vari-Lase products for the treatment of perforator veins, re-use of single-use Vari-Lase products and Company-provided kickbacks to physicians, resulting in alleged damages to the government of approximately \$20 million. An amended complaint limited to allegations of off-label promotion of the Vari-Lase Short Kit resulting in an unspecificed amount of damages and penalties was filed by the U.S. Attorney's Office in December 2012. On January 31, 2013 the Company filed a motion to dismiss the amended complaint. The Company believes the allegations are factually inaccurate and without merit, and therefore the Company intends to both fully comply with the U.S. Attorney's investigation and defend the litigation.

From time to time, the Company is involved in additional legal proceedings arising in the normal course of business. As of the date of this report the Company is not a party to any legal proceeding not described in this section in which an adverse outcome would reasonably be expected to have a material adverse effect on the Company's results of operations or financial condition.

King Agreements

On January 9, 2007, the Company entered into three separate agreements with King: a License Agreement, a Device Supply Agreement and a Thrombin-JMI Supply Agreement (See Note 9). King was acquired by Pfizer, Inc. on February 28, 2011. Under the License Agreement, the Company licensed the exclusive rights to the Company's products Thrombi-Pad[®], Thrombi-Gel[®] and Thrombi-Paste[®] to King in exchange for a one-time license fee of \$6,000,000. Under the Device Supply Agreement, the Company agreed to manufacture the licensed products for sale to King in exchange for two separate \$1,000,000 milestone payments; one upon the first commercial sale of Thrombi-Gel (which was received on May 31, 2007), and one upon the first commercial sale of Thrombi-Bet (which has not been received and is not expected to be received). The Company was amortizing the \$6,000,000 license fee on a straight-line basis over 10 years. The Company was amortizing the \$1,000,000 milestone payment that was received on May 31, 2007 over the remaining 10-year license period.

Under the Device Supply Agreement the Company agreed to pursue on behalf of King a surgical indication for the use of the Thrombi-Gel and Thrombi-Paste products from the FDA. The Device Supply Agreement requires the Company to make a one-time payment of \$2,500,000 to King if the FDA does not approve the surgical indication of Thrombi-Gel and a one-time payment of \$2,500,000 to King if the FDA does not approve the surgical indication of Thrombi-Paste after performing a clinical study and submitting the application. In 2009, King suspended further development of the Thrombi-Paste products. In 2010, King suspended further work on the pursuit of a surgical indication for the Thrombi-Gel products.

On July 6, 2011, King notified the Company that King was terminating the development of the Thrombi-Paste products and terminating efforts to obtain the surgical indication for the Thrombi-Gel products. As a result of King making the decision to not proceed, the Company is not required to make either of the \$2,500,000 payments to King, and instead the Company recognized revenue of \$2,762,000 in the third quarter of 2011 as the remaining deferred license revenue originally allocated to the Thrombi-Paste products and the surgical indication of the Thrombi-Gel products as part of the King agreements. Going forward, amortization of this deferred revenue will continue to be \$51,000 per quarter for the remainder of the 10-year license period, reflecting the remaining amortization allocated to the topical use indication of the Thrombi-Gel and Thrombi-Pad[®] products. The unamortized license fee was \$815,000, \$1,019,000 and \$4,241,000 at December 31, 2012, 2011 and 2010, respectively. The amortization of license fee was \$204,000, \$3,222,000, and \$704,000 for the years ended December 31, 2012, 2011 and 2010, respectively.

14. Commitments and Contingencies (Continued)

Nicolai, GmbH Agreement

Effective April 1, 2008 the Company entered into a five-year distribution agreement with Nicolai, GmbH. As a result of entering into this distribution agreement, the Company no longer maintains a direct sales force in Germany. In connection with this distribution agreement, the Company received 500,000 Euros from Nicolai, GmbH, which was deferred and is being recognized ratably over the five-year term of the distribution agreement.

The agreement also includes provisions requiring the Company to pay Nicolai, GmbH specific amounts if the Company terminates the distribution agreement prior to the end of the five-year term. The Company does not intend to terminate the distribution agreement and, as such, has not recorded a liability relating to these potential future payments to Nicolai, GmbH. The unamortized license fee was \$36,000, \$182,000 and \$327,000 at December 31, 2012, 2011 and 2010, respectively. The amortization of license fee was \$146,000, \$145,000 and \$145,000 and \$145,000 for the years ended December 31, 2012, 2011 and 2010, respectively.

15. Business Combinations and Asset Acquisitions

During the first quarter of fiscal year 2010, the Company adopted ASC 805, *Business Combinations*, related to business combinations. This authoritative guidance establishes principles and requirements for how an acquirer recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed, any noncontrolling interests in the acquiree and the goodwill acquired. The underlying purchase method of accounting for acquisitions was retained, but the new guidance incorporates a number of changes. These changes include the capitalization of purchased in-process research and development, expensing of acquisition related costs and the recognition of contingent purchase price consideration at fair value at the acquisition date.

When the Company acquires another company or a group of assets, the purchase price is allocated, as applicable, among in-process research and development, other identifiable intangible assets, net tangible assets and the remainder, if any, gets recognized to goodwill, as required by U.S. GAAP. Goodwill represents the excess of the aggregate purchase price over the fair value of net assets of acquired businesses, which is not amortized in accordance with ASC 350, *Intangibles-Goodwill and Other*. The values assigned to other identifiable intangible assets are based on valuations as determined by the Company or independent third party appraisers. The techniques used by these appraisers include estimating the future cash flows of each project or technology and discounting the net cash flows back to their present values utilizing an appropriate risk-adjusted rate of return (discount rate). The discount rate used is determined at the time of the acquisition in accordance with accepted valuation methods.

Shepherd Scientific, Inc.

On December 21, 2012, the Company acquired the assets relating to the Teirstein Edge[™] device organizer and AngioAssist[™] docking station from Shepherd Scientific, Inc. (Shepherd Scientific). Under the terms of the agreement, the Company agreed to pay Shepherd Scientific a total of \$500,000, which was paid on December 21, 2012 at closing. The Teirstein Edge assists in the organization of guidewires and catheters during interventional procedures, while the AngioAssist facilitates the introduction of guidewires into catheters and atherectomy burrs.

The Company accounted for the transaction as a business combination in the fourth quarter of 2012. In accordance with ASC 805 the purchase price is being allocated based on estimates of the fair value of assets acquired, as no liabilities were assumed.

The purchase price was allocated as follows:

Purchased technology	\$	170,000
Inventory and equipment		70,000
Other intangibles		50,000
Goodwill		210,000
	<u>\$_</u>	<u>500,000</u>

Amortizable Acquired Assets

Purchased technology. Purchased technology consists of \$170,000 of developed technology acquired. The technology was valued using the income method utilizing a discounted cash flow model. The Company is amortizing the technology assets on a straight line basis over their estimated useful life of nine years.

Other intangibles. Other intangibles consist of \$30,000 representing trademarks and trade names relating to the Teirstein Edge and AngioAssist products and \$20,000 representing customer relationships. The customer relationships relate to the ability to sell existing and future services to existing customers of Shepherd Scientific. The fair value of trademarks and trade names and customer relationships has been estimated using the income method utilizing a discounted cash flow model. The Company is amortizing the trademark and trade name intangible assets on a straight line basis over their estimated useful life of approximately ten years. The customer relationship intangible assets are being amortized on a straight line basis over nine years.

The weighted average amortization period for total amortizable intangible assets acquired in connection with the acquisition of the Teirstein Edge and AngioAssist products is nine years.

Goodwill

Goodwill represents the excess of the purchase price over the fair value of the net tangible and intangible assets acquired. The establishment of goodwill was primarily due to the expected revenue growth that is attributable to increased market penetration from future customers. All of the goodwill is expected to be deductible for income tax purposes.

With the exception of sales to one customer, the Company was the sole U.S. distributor of Teirstein Edge and AngioAssist products prior to the acquisition, and expects to realize additional revenue and improved margins in the coming years as a result of the acquisition.

St. Jude Medical, Cardiology Division, Inc.

On August 16, 2012, the Company acquired the assets related to the Venture wire control catheter from St. Jude Medical, Cardiology Division, Inc. ("St. Jude Medical"). Under the terms of the agreement, the Company agreed to pay St. Jude Medical a total of \$3,000,000, consisting of \$2,250,000 paid in cash at August 16, 2012 and \$750,000 payable in cash upon the successful completion of the transfer of the manufacturing processes from St. Jude Medical to the Company. The Venture wire control catheter is used as a deflectable tip catheter for steering a 0.014 inch guidewire via the arterial system to the coronary or peripheral vasculature. This acquisition provides the Company with additional products that are sold directly into the Company's existing customer base to generate incremental revenue.

The Company accounted for the transaction as a business combination in the third quarter of 2012. In accordance with ASC 805 the purchase price is being allocated based on estimates of the fair value of assets acquired, as no liabilities were assumed.

The purchase price was allocated as follows:

Purchased technology	\$ 850,000
Other intangibles	500,000
Inventory and equipment	189,000
Goodwill	 1,461,000
	\$ 3,000,000

Amortizable Acquired Assets

Purchased technology. Purchased technology consists of \$850,000 of developed technology acquired. The technology was valued using the income method utilizing a discounted cash flow model. The Company will start amortizing the technology assets on a straight line basis over their estimated useful life of nine years once the Company starts selling the products, currently estimated to start during the second quarter of 2013.

Other intangibles. Other intangibles consist of \$220,000 representing trademarks and trade names relating to the Venture wire control catheter products and \$280,000 representing customer relationships. The customer relationships relate to the ability to sell existing and future products and services to existing customers of St. Jude. The fair value of trademarks and trade names and customer relationships has been estimated using the income method utilizing a discounted cash flow model. The Company will start amortizing the trademark and trade name intangible assets on a straight line basis over their estimated useful life of approximately ten years once the Company starts selling the products, currently estimated to start during the second quarter of 2013. The customer relationship intangible assets will be amortized on a straight line basis over nine years once the Company starts selling the products, currently estimated to start during the second quarter of 2013.

The weighted average amortization period for total amortizable intangible assets acquired in connection with the acquisition of the Venture wire control catheter products is nine years.

Goodwill

Goodwill represents the excess of the purchase price over the fair value of the net tangible and intangible assets acquired. The establishment of goodwill was primarily due to the expected revenue growth associated with this new product for the Company and possibility of selling additional products to these new customers. All of the goodwill is expected to be deductible for income tax purposes.

The Company has recognized additional revenue of \$50,000 and net earnings of approximately \$5,000 relating to the sale of the acquired Venture wire control catheter inventory through December 31, 2012. The amount of additional revenue and net earnings is expected to increase significantly in coming years once the transfer of the manufacturing processes from St. Jude Medical to the Company is completed in 2013.

Accumed Systems, Inc.

On June 11, 2012, the Company acquired the assets related to the AccumedTM wrist positioning splint business from Accumed Systems, Inc. ("Accumed"). Under the terms of the agreement, the Company paid Accumed a total of \$1,500,000 at closing and no additional payments are required to be made. The Accumed wrist positioning splint product consists of a plastic molded brace that simplifies arterial access by holding the wrist and forearm in an appropriate, comfortable position. This acquisition provides the Company with an additional product that is sold directly into the Company's existing customer base to generate incremental revenue.

The Company accounted for the transaction as a business combination in the second quarter of 2012. In accordance with ASC 805 the purchase price is being allocated based on estimates of the fair value of assets acquired, as no liabilities were assumed.

The purchase price was allocated as follows:

Purchased technology	\$	740,000
Other intangibles		190,000
Inventory and equipment		8,000
Goodwill		562,000
	<u>\$</u>	<u>1,500,000</u>

Amortizable Acquired Assets

Purchased technology. Purchased technology consists of \$740,000 of developed technology acquired. The technology was valued using the income method utilizing a discounted cash flow model. The Company is amortizing the technology assets on a straight line basis over their estimated useful life of nine years.

Other intangibles. Other intangibles consist of \$100,000 representing trademarks and trade names relating to the Accumed wrist positioning splint products and \$90,000 representing customer relationships. The customer relationships relate to the ability to sell existing and future products and services to existing customers of Accumed. The fair value of trademarks and trade names and customer relationships has been estimated using the income method utilizing a discounted cash flow model. The Company is amortizing the trademark and trade name intangible assets on a straight line basis over their estimated useful life of approximately ten years. The customer relationship intangible assets are being amortized on a straight line basis over nine years.

The weighted average amortization period for total amortizable intangible assets acquired in connection with the acquisition of the Accumed wrist positioning splint products is nine years.

Goodwill

Goodwill represents the excess of the purchase price over the fair value of the net tangible and intangible assets acquired. The establishment of goodwill was primarily due to the expected revenue growth that is attributable to increased market penetration from future customers. All of the goodwill is expected to be deductible for income tax purposes.

The Company has recognized additional revenue of \$310,000 and net earnings of approximately \$31,000 relating to the sales of the Accumed wrist positioning splint products from June 11, 2012 through December 31, 2012.

Dr. Pedro Silva and Affiliates

On January 6, 2012, the Company entered into an agreement with Dr. Pedro Silva and his affiliates, whereby the Company paid \$3,250,000 for the rights, patents and intellectual property relating to a two-lumen catheter for distal protection and material extraction used in the Company's Pronto catheters. Upon payment, the existing License Agreement between N.G.C. Medical S.p.A. and the Company has been deemed paid-in-full, and no future royalties will be owed on any sale of a Pronto catheter after December 31, 2011.

The Company has accounted for the transaction as a non-business license acquisition in the first quarter of 2012. In accordance with ASC 805, the purchase price was assigned to a license intangible asset equivalent to the cash amount paid on January 6, 2012, and no goodwill was recognized. The Company is amortizing the license intangible on a straight-line basis over a period of ten years.

Northeast Scientific

On December 22, 2011, the Company entered into a license agreement with Northeast Scientific, Inc. (NES), a FDA-registered reprocessor of medical devices, whereby the Company acquired the exclusive rights to NES' reprocessing services for the ClosureFast radiofrequency catheter in the United States for a term of five years. The ClosureFast catheter is owned and marketed by VNUS Medical Technologies, Inc., a subsidiary of Covidien, and is used in the treatment of varicose veins. Under the reprocessing service, the customer will send its used ClosureFast catheters to NES, where they will be inspected, cleaned, tested, repackaged, resterilized and shipped back to the customer. In exchange for the exclusive rights, the Company paid a total of \$900,000 to NES and a former third party distributor on December 22, 2011.

The Company has accounted for the transaction as a non-business asset acquisition in the fourth quarter of 2011. In accordance with ASC 805 the purchase price is being assigned to an intangible and no goodwill was recognized. The Company is amortizing the license intangible on a straight-line basis over the five-year term of the agreement.

Zerusa Limited

On January 27, 2011, the Company entered into an asset purchase agreement of substantially all the assets of Zerusa Limited ("Zerusa"), a Galway, Ireland based medical device company engaged in the manufacture and distribution of the Guardian[®] hemostasis valves. Under the terms of the agreement the Company paid Zerusa a total of 3,121,000 Euros (\$4,272,000), consisting of 2,850,000 Euros (\$3,882,000) paid in cash at January 27, 2011 and 271,000 Euros (\$390,000) which was paid on September 2, 2011. The final payment amount was subject to adjustment based upon the value of inventory transferred. The Guardian hemostasis valves are designed to maintain hemostasis during interventional catheterization procedures through a novel sealing system which allows simple introductions and removal of interventional devices while providing the option to lock guidewires in place.

The Company accounted for the transaction as a business combination in the first quarter of 2011. In accordance with ASC 805 the purchase price is being allocated based on estimates of the fair value of assets acquired, as no liabilities were assumed.

The purchase price was allocated as follows:

Purchased technology	\$	1,000,000
Other intangibles		800,000
Inventory and equipment		48,000
Goodwill		2,424,000
	<u>\$</u>	4,272,000

Amortizable Acquired Assets

Purchased technology. Purchased technology consists of \$1,000,000 of developed technology acquired. The technology was valued using the income method utilizing a discounted cash flow model. The Company is amortizing the technology assets on a straight line basis over their estimated useful lives of 11 years.

Other intangibles. Other intangibles consist of \$800,000 representing trademarks and trade names relating to the Guardian hemostasis valve products. The fair value of trademarks and trade names has been estimated using the income method utilizing a discounted cash flow model. The Company is amortizing the trademark and trade name intangible assets on a straight line basis over their estimated useful life of approximately 11 years.

The weighted average amortization period for total amortizable intangible assets acquired in connection with the acquisition of the Guardian hemostasis valve products is 11 years.

Goodwill

Goodwill represents the excess of the purchase price over the fair value of the net tangible and intangible assets acquired. The establishment of goodwill was primarily due to the expected revenue growth that is attributable to increased market penetration from future customers. All of the goodwill is expected to be deductible for income tax purposes.

Unaudited Supplemental Pro Forma Financial Information

The following unaudited supplemental pro forma information combines the Company's results with those of Shepherd Scientific, St. Jude, Accumed and Zerusa as if the acquisitions had occurred at the beginning of each of the periods presented. This unaudited pro forma information is not intended to represent or be indicative of the Company's consolidated results of operations or financial condition that would have been reported for the periods presented had the acquisition been completed at the beginning of each of the periods presented, and should not be taken as indicative of the Company's future consolidated results of operations or financial condition for the periods presented.

	Years Ended December 31,		
	2012	2011	
Revenue	\$99,051,000	\$93,379,000	
Net earnings	9,691,000	9,373,000	
Net earnings per share			
Basic	\$ 0.61	\$ 0.56	
Diluted	\$ 0.59	\$ 0.55	

Certain pro forma adjustments have been made to reflect the impact of the purchase transaction, primarily consisting of amortization of intangible assets with determinable lives and income taxes to reflect the Company's effective tax rate for the periods presented.

2012	Fourth Quarter	Third Quarter	Second Quarter	First Quarter
Net revenue:		T		
Product	\$25,215	\$24,465	\$24,650	\$23,706
License	89	87	87	87
Total net revenue	25,304	24,552	24,737	23,793
Selected costs and expenses:				
Costs of goods sold	8,309	8,183	8,231	7,838
Operating earnings	4,688	4,150	3,940	3,127
Net earnings	3,051	2,565	2,384	1,909
Basic net earnings per share	\$0.19	\$0.16	\$0.15	\$0.12
Diluted net earnings per share	\$0.18	\$0.16	\$0.15	\$0.12
	Fourth	Third	Second	First
2011	Quarter	Quarter	Quarter	Quarter

16. Quarterly Financial Data (Unaudited, in Thousands, Except per Share Data)

2011	Fourth Quarter	Third Quarter	Second Quarter	First Quarter
Net revenue:			C	
Product	\$22,009	\$21,450	\$22,059	\$21,071
License	88	2,854	212	213
Total net revenue	22,097	24,304	22,271	21,284
Selected costs and expenses:				
Costs of goods sold	7,582	7,463	7,571	7,228
Operating earnings	3,456	6,005	3,395	2,730
Net earnings	2,159	3,710	2,159	1,711
Basic net earnings per share	\$0.13	\$0.22	\$0.13	\$0.10
Diluted net earnings per share	\$0.13	\$0.22	\$0.13	\$0.10

17. Subsequent Events

The Company has evaluated subsequent events occurring after the date of the consolidated financial statements for events requiring recording or disclosure in the financial statements.

Vascular Solutions, Inc.

•

SCHEDULE II VALUATION AND QUALIFYING ACCOUNTS YEARS ENDED DECEMBER 31, 2012, 2011 AND 2010

		Additions Charged			
	Balance at Beginning	to Costs and	Less		Balance at End of
Description	of Year	 Expenses	 Deductions	_	Year
YEAR ENDED DECEMBER 31, 2012:					
Sales return allowance	\$ 30,000	\$ 45,000	\$ (20,000)	\$	55,000
Allowance for doubtful accounts	120,000	75,000	(65,000)	_	130,000
Total	\$ 150,000	\$ 120,000	\$ (85,000)	\$_	185,000
YEAR ENDED DECEMBER 31, 2011:					
Sales return allowance	\$ 45,000	\$ 30,000	\$ (45,000)	\$	30,000
Allowance for doubtful accounts	115,000	87,000	(82,000)		120,000
Total	\$ 160,000	\$ 117,000	\$ (127,000)	\$_	150,000
YEAR ENDED DECEMBER 31, 2010:					
Sales return allowance	\$ 45,000	\$ _	\$ _	\$	45,000
Allowance for doubtful accounts	105,000	33,000	(23,000)		115,000
Total	\$ 150,000	\$ 33,000	\$ (23,000)	\$_	160,000

.

Now that we've attained the \$100 million revenue milestone, we have begun to chart the path toward our next goal of doubling our annual sales to \$200 million.

developed product that targets a specialized clinical need. We expect strong growth for GuideLiner to continue as more physicians discover the clinical utility of this unique device. We also were pleased in 2012 to have stabilized sales of our biggest-selling catheter product, the Pronto extraction catheter, despite ongoing competitive and pricing challenges.

Our hemostat products category remained challenging in 2012 with a 2% decline in revenue compared to 2011. During the year we took several steps designed to restore growth to this category starting in 2013. Radial artery access is the fastest growing trend in U.S. cardiac catheterizations, and we are targeting new products to meet this growth. Specifically, during 2012 we acquired the Accumed[™] wrist positioning splint and we partnered to distribute the R-Band[®] radial hemostatic band, both of which are already adding material revenue in hemostat products. Also during 2012 we levered our biologics hemostat products expertise with the launch of the Gel-Block™ embolization pledgets, the first of several planned embolization products that we believe will contribute to renewed growth in hemostat products revenue starting in 2013.

As shareholders, I'm sure we all are pleased that Wall Street took notice of Vascular Solutions' strong performance in 2012, with our stock price gaining 42% over the year, well ahead of all the broader indices and the vast majority of our medical device industry peers. During the year, we also were pleased to see institutional ownership of our stock increase by more than ten percentage points to 43% of our shares outstanding.

Looking forward, management is focused on sustaining the level of solid execution that has lead to our superior financial performance and stock appreciation. We have provided guidance to Wall Street that calls for 2013 to be our 10th consecutive year of greater than 10% product revenue growth, with continued improvements in our operating margin resulting in an even higher percentage increase in profitability. As we begin 2013, our R&D pipeline is full, with approximately 30 programs at various stages of development and 11 of these devices targeted for launch during the year. At the same time, we remain focused on opportunities to expand our growth through collaborations and tuck-in acquisitions.

Now that we've attained the \$100 million revenue milestone, we have begun to chart the path toward our next goal of doubling our annual sales to \$200 million. As we examine our strategy and our results, we remain encouraged by the durability of our business model, and we believe that no strategic changes are required, even in light of the tough, and potentially worsening, operating environment for medical device companies. By sticking with our existing call-points and continuing to launch new products - but without having to make significant additions to the size of our direct sales force, alter our international distributor strategy, or change our underlying cost structure – we are confident that we can continue to succeed as long as we continue to execute. And with 9 consecutive years of solid execution, we like our chances and our future.

Thank you for continuing to support our company.

Very truly yours,

Howard Root Chief Executive Officer February 6, 2013

Financial Highlights

Statements of Operations Data

(in thousands)		Year E	nded December	31,	
	2012	2011	2010	2009	2008
Net revenue	\$98,386	\$89,956	\$78,443	\$68,427	\$61,221
Product margin	66.8%	65.5%	65.8%	65.7%	65.4%
Operating expenses	\$48,527	\$43,695	\$41,621	\$37,344	\$36,032
Litigation expenses (gain)			(\$3,529)		\$1,484
Operating income	\$15,905	\$15,586	\$13,582	\$8,166	\$3,015
Operating margin	16%	17%	17%	12%	5%
Income tax benefit (expense)	(\$5,983)	(\$5,960)	\$7,819	(\$2,788)	\$13,045
Net income	\$9,909	\$9,739	\$21,377	\$5,378	\$16,173

Balance Sheet Data

(in thousands) December 31,		ber 31,
	2012	2011
Cash and cash equivalents	\$11,554	\$13,726
Total assets	\$88,002	\$76,483
Total debt		
Shareholder's equity	\$76,867	\$66,706
Total shares outstanding	16,004	16,379

Stock Price Comparison



VASC 10-Year Stock Price

parison

	VASC	Russel 2000 Index
1 Year	42% 🛧	15% 🛧
3 Years	88% 个	36% 🛧
5 Years	143% 🛧	11% 🛧
10 Years	1464%	122% 🛧

Corporate Information

Board of Directors John Erb Chairman of the Board and Compliance Officer Chief Executive Officer Cardia Access, Inc.

Martin Emerson President & Chief Executive Officer Galil Medical

Michael Kopp Medical Device Industry Consultant

Richard Nigon Senior Vice President Cedar Point Capital, Inc.

Paul O'Connell President B. Braun Interventional Systems, Inc.

Howard Root Chief Executive Officer Vascular Solutions, Inc.

Jorge Saucedo, M.D. Professor of Medicine University of Oklahoma Health Sciences Center

Annual Meeting The Company's Annual Meeting of Shareholders will be held on Friday, May 3, 2013, 1:30pm at:

Crowne Plaza Minneapolis West 3131 Campus Drive Plymouth, Minnesota 55441

Additional Information A copy of Vascular Solutions' filings with the Securities and Exchange Commission are available upon request by contacting Investor Relations or by accessing our website at www.vasc.com.

Stock Exchange Listing NASDAQ National Market System Symbol: VASC Investor Relations James Hennen Chief Financial Officer Telephone: 763.656.4300 E-mail: jhennen@vasc.com

Transfer Agent and Registrar Wells Fargo Bank, N.A. Wells Fargo Shareowner Services PO Box 64854 St Paul MN 55164-0854 Website: shareowneronline.com Phone: 1-800-468-9716

Independent Auditors Baker Tilly Virchow Krause, LLP Minneapolis, Minnesota

Legal Counsel Dorsey & Whitney, LLP Minneapolis, Minnesota **Executive Officers Howard Root** Chief Executive Officer

James Hennen Sr. Vice President of Finance, Chief Financial Officer, Treasurer and Secretary

William Rutstein Sr. Vice President of Worldwide Sales

Charmaine Sutton Sr. Vice President of Operations

Susan Christian Vice President of Sales Operations

Brett Demchuk Vice President of Product Quality

Jonathan Hammond Vice President of Manufacturing Engineering

Phil Nalbone Vice President of Corporate Development

Carrie Powers Vice President of Marketing

GuideLiner and R-Band are registered trademarks of Vascular Solutions, Inc. Accumed and Gel-Block are trademarks of Vascular Solutions, Inc. ClosureFast is a registered trademark of Tyco Healthcare Group, LP.



Vascular Solutions, Inc. 6464 Sycamore Court North Minneapolis, Minnesota 55369 763.656.4300 www.vasc.com