VITAL IMAGES INC
Form POS AM
June 17, 2005

As filed with the Securities and Exchange Commission on June 17, 2005

Registration No. 333-114078

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 1
ON FORM S-1
TO
FORM S-3

REGISTRATION STATEMENT UNDER
THE SECURITIES ACT OF 1933

VITAL IMAGES, INC.

(Exact Name of Registrant as Specified in Its Charter)

Minnesota

(State or Other Jurisdiction of incorporation or organization)

7372

(Primary Standard Industrial Classification Code Number)

42-1321776

(I.R.S. Employer Identification No.)

5850 Opus Parkway, Suite 300

Minnetonka, Minnesota 55343

Telephone: (952) 487-9500

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant s Principal Executive Offices)

Michael H. Carrel

5850 Opus Parkway, Suite 300

Minnetonka, Minnesota 55343

Telephone: (952) 487-9500

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(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies of communications to:

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Approximate date of commencement of proposed sale to the public:

From time to time after the effective date of this Post-Effective Amendment No. 1 on Form S-1 to Form S-3 Registration Statement.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. ý

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration number of earlier effective registration statement for the same offering. o

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. o

Title of Each Class of Securities to Be Registered	**Amount to Be Registered**	**Proposed Maximum Offering Price Per Share(1)**	**Proposed Maximum Aggregate Offering Price(1)**	**Amount of Registration Fee**
Common Stock, $.01 par value	2,234,597 shares	(1)	(1)	(1)

(1) No registration fee is required because the registration fee was paid when the Registration Statements on Form S-3, Registration Nos. 333-106328 and 333-114078, were filed.

Explanatory Note: Pursuant to Rule 429 under the Securities Act of 1933, this is a combined registration statement which relates to the registration under the following Registration Statements on Form S-3, as amended (Registration Statements), of the resale of a total of 2,234,597 shares of the Registrant s common stock: (i) the Registration Statement on Form S-3 filed by the Registrant, Registration No. 333-106328, which became effective on September 29, 2003 and was filed to register the resale by the selling shareholders named in such Registration Statement of 1,500,000 shares of the Registrant s common stock, and (ii) the Registration Statement on Form S-3 filed by the Registrant, Registration No. 333-114078, which was filed to register the resale by the selling shareholders named in such Registration Statement of 734,597 shares of the Registrant s common stock. This Post-Effective Amendment No. 1 on Form S-1 to Form S-3 is being filed to convert the Registration Statements into a Registration Statement on Form S-1.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. The selling shareholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

Prospectus

2,234,597 Shares

VITAL IMAGES, INC.

Common Stock

This prospectus is part of a registration statement of Vital Images, Inc. filed with the Securities and Exchange Commission for the resale of shares of our common stock we issued to former shareholders of HInnovation, Inc. in our acquisition of HInnovation, Inc. completed in February 2004. As part of the acquisition, we agreed to register for resale by the selling shareholders the shares of common stock we issued or may issue in the acquisition. We are also registering the resale of shares of our common stock sold by us to selling shareholders in our private placement completed in June 2003. As part of the private placement, we agreed to register for resale by the selling shareholders the shares sold by us in the placement. In addition, we are registering the resale of outstanding shares and shares subject to warrants that we issued in connection with our December 1999 private placement. This prospectus will be used by the selling shareholders to sell up to 2,234,597 shares of our common stock. This means:

The selling shareholders may sell their shares of common stock from time to time.

For information on the methods of sale of the common stock, you should refer to the section of this prospectus entitled Plan of Distribution beginning on page 68.

Vital Images will not receive any of the proceeds from the sale of the shares by the selling shareholders.

You should read this prospectus and any prospectus supplement carefully in its entirety before you invest in shares of our common stock.

We have agreed with the former shareholders of HInnovation, Inc. that they will pay one-half and we will pay one-half of the fees and expenses up to and including $50,000 related to the registration and resale of their shares, and we will pay the fees and expenses in excess of $50,000.

Our common stock is currently traded on The NASDAQ National Market under the symbol VTAL. On , 2005, the last reported sale price for our common stock reported on The NASDAQ National Market was $ per share.

Investing in our common stock involves a high degree of risk. See Risk Factors beginning on page 3 for certain risks you should consider before purchasing any shares.

Neither the Securities and Exchange Commission or any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2005.

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We have not authorized any dealer, salesperson or other person to give any information or represent anything not contained or incorporated by reference in this prospectus. Neither Vital Images nor the selling shareholders have authorized anyone to provide you with information that is different. This prospectus may be used only in states where it is legal to sell these securities. The information contained or incorporated by reference in this prospectus may be accurate only on the date of this prospectus.

PROSPECTUS SUMMARY

The following information is qualified in its entirety by the more detailed information and financial statements included in this prospectus. This prospectus contains forward-looking statements that involve risks and uncertainties and that are qualified in their entirety by the cautions and risk factors included or incorporated by reference in this prospectus. Purchasers of shares of common stock are cautioned that our actual results may differ significantly from the results discussed in the forward-looking statements. Factors that could cause or contribute to such differences include those factors discussed in the prospectus under Risk Factors.

Vital Images, Inc.

We are a provider of enterprise-wide advanced visualization and analysis solutions for use in clinical diagnosis, disease screening applications and therapy planning. Our technology uses high-speed volume visualization and analysis, as well as network communications based on DICOM and Internet protocols. *Vitrea*® 2, or our flagship software, rapidly creates accurate, interactive 2D, 3D and 4D images from 2D information generated by standard computed tomography (CT), magnetic resonance (MR) and positron emission tomography (PET) scanners. *ViTALConnect* , our Web-enabled medical diagnostic tool, allows physicians anywhere, anytime access to interactive 2D, 3D and 4D advanced visualization.

Our strategy is to address the growing interest among radiologists, cardiologists, oncologists and other specialists to improve their workflow and productivity. Our products provide clinical benefits and allow physicians to collaborate with their peers via Web and picture archiving and communications systems (PACS)-based solutions. PACS enable hospitals and clinics to acquire, distribute and archive medical images and diagnostic reports, eliminating the need for film and enhancing productivity.

We offer two primary software products, *Vitrea* and *ViTALConnect*. *Vitrea* is our flagship advanced visualization product for radiological and surgical applications. *Vitrea* provides image clarity, processing speed, and simplicity and allows clinicians to screen for disease, diagnose less invasively, and plan treatments more accurately. We offer several optional modules so clinicians can customize their *Vitrea* workstations for their specialties. These modules include the following: 3D Angio, Automated Vessel Measurements, CT Brain Perfusion, CT Cardiac, CT Colon, Fusion7D , ImageChecker CT, Lung, SoftRead, Vessel Probe, and VScore. *Vitrea 2* is offered both as a stand-alone software package and as part of an integrated software and hardware system, consisting of *Vitrea 2* software installed on a computer workstation. We licensed approximately 1,900 copies of *Vitrea* and *Vitrea 2* to hospitals, clinics, imaging centers and other sites.

As specialists outside the radiology department increasingly rely on *Vitrea* as a diagnostic and communications tool, demand for access to advanced visualization is growing across the healthcare enterprise. To address this market opportunity, we are forming strategic distribution partnerships with PACS providers and promoting the capabilities of *ViTALConnect*, our thin-client Web-based solution.

ViTALConnect allows physicians and other users to access 2D, 3D and 4D enterprise-wide advanced visualization capabilities, including the ability to measure, rotate, analyze and segment images, all with a personal computer using a Web-enabled browser, thus allowing access to advanced visualization from anywhere and at any time, including critical patient situations. With *ViTALConnect*, users can employ a PC or notebook computer to process, analyze, review and distribute multi-dimensional medical images securely over the Web. In addition, a collaboration mode lets several physicians in different locations confer while interacting with the same images in real time.

Our enterprise-wide advanced visualization and analysis software solutions are used with medical diagnostic equipment, primarily in clinical diagnosis, disease screening and therapy planning. Our software

applies proprietary computer graphics and image processing technologies to a wide variety of data supplied by CT, MR and PET scanners to allow medical clinicians to create 2D, 3D and 4D views of human anatomy and to non-invasively navigate within these images to better visualize and understand internal structures and pathologies. We market *Vitrea 2* and *ViTALConnect* both as standalone software packages and as part of integrated software and hardware systems to radiologists, surgeons, primary care physicians and medical researchers. We market our products directly to end-user customers, such as hospitals and clinics, and to diagnostic imaging companies, digital imaging equipment manufacturers and PACS companies, who sell our products in conjunction with products they either manufacture or acquire from third parties.

Our products work with equipment from all major manufacturers of diagnostic imaging systems, including Toshiba Medical Systems Corporation, GE Medical Systems, Siemens Medical Systems, Inc. and Philips Medical Systems, and can be integrated into PACS, such as those marketed by McKesson Information Systems, Sectra and Stentor.

We were founded and incorporated in Iowa in September 1988, and we re-incorporated in Minnesota in March 1997. Our principal executive offices are located at 5850 Opus Parkway, Suite 300, Minnetonka, MN 55343 (telephone (952) 487-9500, facsimile (952) 487-9510, e-mail info@vitalimages.com). From May 24, 1994 through May 11, 1997, we were a wholly-owned subsidiary of Bio-Vascular, Inc., which is now known as Synovis Life Technologies, Inc.

Summary Financial Information

	Three Months Ended March 31,		Years Ended December 31,		
	2005	2004	2004	2003	2002
	(Unaudited)				
Statement of Operations Data (in thousands, except per share data):					
Revenue	$ 11,325	$ 7,816	$ 36,122	$ 27,300	$ 21,116
Operating income (loss)	1,371	(1,642)	514	1,935	677
Net income (loss)	1,023	(1,352)	296	8,462	790
Net income (loss) per share basic	0.08	(0.12)	0.03	0.83	0.09
Net income (loss) per share diluted	0.08	(0.12)	0.02	0.71	0.08

	March 31, 2005	December 31, 2004	2003	2002
Balance Sheet Data (in thousands):				
Working capital	$ 33,326	30,996	31,915	9,219
Total assets	74,925	69,284	53,063	18,827
Long-term debt				
Total stockholders equity	57,423	54,554	44,594	11,721

The Offering

This prospectus relates to the resale of 1,934,597 outstanding shares of common stock and up to an additional 300,000 shares that we may issue as described below. Of the outstanding shares, 58,335 shares were issued in connection with our private placement in December 1999. An additional 1,500,000 of the outstanding shares were issued in connection with our private placement completed in June 2003. We issued the remaining 376,262 outstanding shares to former shareholders of HInnovation, Inc. in our acquisition of HInnovation, Inc. completed in

February 2004. We must issue up to an additional 300,000 shares of common stock to these shareholders upon the achievement of a performance milestone as provided in our Acquisition Agreement and Plan of Reorganization with HInnovation, Inc. dated January 8, 2004. The number of additional shares issued will depend on the market value of our common stock at the time of issuance, but the maximum number of shares we must issue is 300,000 shares.

RISK FACTORS

An investment in our common stock involves a high degree of risk. You should carefully consider the following risk factors in addition to the other information set forth in this prospectus before making your investment decision.

We may not be able to maintain profitable operations on an annual basis.

For the three months ended March 31, 2005, we had operating income of $1,371,000. For the years ended December 31, 2004, 2003 and 2002, we had operating income of $514,000, $1.9 million and $677,000. However, we had an operating loss of $1.1 million for the year ended December 31, 2001, and we incurred operating losses for each year prior to that since 1990, with the exception of the fiscal year ended October 31, 1995. As of March 31, 2005, our accumulated deficit was $10.3 million. Our ability to maintain profitability will depend on, among other things, our abilities to maintain the technological competitiveness of our current products, develop new products, successfully market our products, respond to competitive developments, and attract and retain qualified sales, technical and management personnel. We may not be able to continue to achieve profitable operations on an annual basis.

If our *Vitrea 2* software does not continue to gain market acceptance, our financial results would be adversely affected.

Our success depends on our ability to successfully market our *Vitrea 2* and *ViTALConnect* software for clinical use and on the ability and willingness of physicians to use enterprise-wide advanced visualization software in disease screening, clinical diagnosis and therapy planning. The enterprise-wide advanced visualization software offered by *Vitrea 2* and *ViTALConnect* represent new alternatives to the conventional methods traditionally used for viewing medical images in a clinical setting. The acceptance of *Vitrea 2* and *ViTALConnect* by physicians and other clinicians will depend on our ability to educate those users as to the speed, ease-of-use and other benefits offered by the *Vitrea 2* and *ViTALConnect* systems, as well as our timely introduction of new features and functions. There can be no assurance that users will prefer enterprise-wide advanced visualization software over less expensive two-dimensional medical imaging software or that we will succeed in our efforts to further develop, commercialize and achieve market acceptance for *Vitrea 2* and *ViTALConnect* or for any other product in the clinical setting.

Nearly all of our revenue is from sales of our *Vitrea 2* system. Sales of our *Vitrea 2* system represented 95% of our total revenue for the three months ended March 31, 2005, 95% of total revenue for the year ended December 31, 2004, 96% of total revenue for 2003 and 98% of total revenue for 2002. A decline in the sales of the system would have a material adverse effect on our results of operations and financial condition.

Revenue from sales and servicing of the *Vitrea 2* system constituted 95% of our total revenue for the three months ended March 31, 2005, 95% of total revenue for year ended December 31, 2004, 96% of our total revenue for the year ended December 31, 2003, and 98% of our total revenue for the year ended December 31, 2002. We anticipate that revenue from the sale of *Vitrea 2* will continue to account for a substantial portion of our revenue for the foreseeable future. As such, the failure of physicians to accept *Vitrea 2* would have a material adverse impact on our business, financial condition and results of operations.

We depend upon growth in the enterprise-wide advanced visualization industry. If that market does not grow as we expect, our business, financial condition and results of operations would be adversely affected.

The enterprise-wide advanced visualization industry in which we market our products is still developing due to:

the fairly recent availability of high performance computers at reduced prices;

the recent adoption of industry standards for the generation, transmission and storage of medical imaging data; and

changing medical practices.

Historically, there has been a perception that enterprise-wide advanced visualization was too slow or difficult for clinical use. This perception was due largely to the relatively slower processing speed of workstations available in the past. We believe that the recent advances in the affordability of high performance computers and in the development of industry standards for the generation, transmission and storage of imaging data will provide opportunities for growth in the enterprise-wide advanced visualization industry. However, given the uncertainties associated with the developing stage of this industry, there can be no assurance that it will continue to develop in the manner we anticipate. Accordingly, there can be no assurance that the enterprise-wide advanced visualization industry will provide growth opportunities for us and our software products or that our business strategies will be successful as the enterprise-wide advanced visualization industry continues to evolve. Ultimately, if the enterprise-wide advanced visualization industry fails to develop as we expect, our business, results of operations and financial condition will be materially and adversely affected.

We participate in a highly competitive industry. If we fail to compete effectively, our results of operations and financial condition would be adversely affected.

We face intense competition in the enterprise-wide advanced visualization industry. We expect technology to continue to develop rapidly, and our success will depend to a large extent on our ability to maintain a competitive position with our products. Our competitors in the enterprise-wide advanced visualization industry include large, established manufacturers of CT and MR imaging equipment. Companies such as GE Healthcare, Siemens Medical Systems, Inc. and Philips Medical Systems typically offer their own enterprise-wide advanced visualization software and workstations as part of their integrated imaging and scanner systems. Our software works on the products offered by each of these companies. In order to win business against the equipment manufacturers, we must convince customers to buy our enterprise-wide advanced visualization software separately from their purchase of imaging equipment, instead of buying integrated systems from our competitors.

In addition to having a competitive advantage in marketing enterprise-wide advanced visualization tools as an integrated part of their imaging products, our competitors have significantly greater capital and staffing resources for research and development that are critical to success in the rapidly changing enterprise-wide advanced visualization industry; more recognizable brand names; and more well-established marketing and distribution networks. Although price has been less significant than other factors, increasing competition may result in price reductions and reduced gross margins. Additionally, we face competition from other entities, such as other software suppliers and PACS vendors. We may not be able to compete effectively with such manufacturers or competing entities.

Our products may become obsolete or non-competitive, which would result in reduced revenue and profit margins.

The enterprise-wide advanced visualization market is characterized by rapid innovation and technological change. We may be unable to compete effectively in the marketplace, and products developed by our competitors may render our products obsolete or non-competitive. Similarly, our competitors may succeed

in developing or marketing products that are viewed as providing superior clinical performance or are less expensive than our current or future products.

Our sales to Toshiba Medical Systems Corporation accounted for 55% of our total revenue for the three months ended March 31, 2005, 50% of our total revenue for the year ended December 31, 2004, 42% of our total revenue for 2003, and 34% of total revenue for 2002. A reduction in sales to Toshiba for any reason could have a material adverse effect on our operating results and financial condition.

One of our principal distribution channels is to sell our *Vitrea 2* medical imaging software in connection with medical imaging equipment sold by Toshiba. Our sales to Toshiba accounted for 55% of our total revenue for the three months ended March 31, 2005, 50% of our total revenue for the year ended December 31, 2004, 42% of our total revenue for the year ended December 31, 2003, and 34% of total revenue for the year ended December 31, 2002. Toshiba s account receivable represented 42% of our accounts receivable at March 31, 2005, 23% of our accounts receivable at December 31, 2004 and 7% at December 31, 2003. Management believes a limited number of large customers may continue to account for a significant portion of our revenue during any given period for the foreseeable future. Except for our marketing and distribution agreements with Toshiba, the Surgical Navigation Technologies, Inc. division of Medtronic, Inc., E-Z-EM, Inc. and McKesson Information Solutions LLC, we currently have no long-term purchase or other agreements with any of our customers, and we generally make sales pursuant to purchase orders. A reduction, delay or cancellation of orders from one or more of our significant customers, or our inability to collect accounts receivable from these customers, likely would have a material adverse effect on our operating results.

Under an agreement with R2 Technology, Inc., certain minimum revenue must be generated due to our marketing efforts from the sale of R2 Technology, Inc. products. If less than the minimum revenue required is generated, we must pay to R2 Technology, Inc. the difference between the minimum required revenue and the lower actual revenue.

On April 21, 2005, we entered into an agreement with R2 Technology, Inc. (R2) to market R2 s lung nodule CAD software product in conjunction with our products. Under the agreement, certain minimum revenue must be generated due to our marketing efforts from the sale of R2 products over a 12-quarter period, beginning with the quarter ended September 30, 2005. If, for any quarter, the actual revenue generated from our marketing efforts is less than the minimum revenue required for the quarter, we are obligated to pay to R2 an amount of cash equal to the difference. Any such payments could have a negative effect on our results of operations and financial condition.

We may experience fluctuations in operating results, which may result in volatility in the price of our common stock.

We may experience significant fluctuations in future annual and quarterly operating results. If these fluctuations occur, they may result in volatility in the price of our common stock. Quarterly revenue and operating results may fluctuate as a result of a variety of factors that are outside of our control including, but not limited to:

- the timing of significant orders,
- the timing of product enhancements and new product introductions by us or our competitors;

the pricing of our products;

changes in customers budgets; and

competitive conditions.

We are subject to government regulation, which can result in additional costs or restrict our ability to market our products.

Our products are subject to regulation by the U.S. Food and Drug Administration (the FDA) and by comparable agencies in foreign countries. In the United States, the FDA regulates the development, introduction, manufacturing, labeling and record keeping procedures for medical devices, including 3D medical imaging software and systems. The process of obtaining marketing clearance from the FDA for new products and new applications for existing products can be time-consuming and expensive. All of our current products have received marketing clearance from the FDA pursuant to 510(k) pre-market notifications. *Vitrea 2, ViTALConnect* and our add-on options have been cleared to be marketed for use with CT, MR and PET scanners. The FDA may not grant clearance with respect to our future products or enhancements, or future FDA reviews may involve delays that could adversely affect our ability to market such future products or enhancements. In addition, our future products or enhancements may be subject to a more lengthy and expensive pre-market approval process with the FDA.

Even if we obtain regulatory clearances and approvals to market a product from the FDA, these clearances and approvals may entail limitations on the indicated uses of the product. Product clearances and approvals by the FDA can also be withdrawn due to failure to comply with regulatory standards or the occurrence of unforeseen problems following initial approval. The FDA could also limit or prevent the distribution of our products and has the power to require the recall of such products. FDA regulations depend heavily on administrative interpretation, and future interpretations made by the FDA or other regulatory bodies may adversely affect us. The FDA may inspect our facilities and operations to determine whether we are in compliance with various regulations relating to specification, development, documentation, validation, testing, quality control and product labeling. If the FDA determines that we are in violation of such regulations, it could impose civil penalties, including fines, recall or seize products and, in extreme cases, impose criminal sanctions.

We market our products both domestically and internationally. International regulatory bodies have established varying regulations governing product standards, packaging requirements, labeling requirements, import restrictions, tariff regulations, duties and tax requirements. Our inability or failure to comply with the varying regulations, or the imposition of new regulations, could restrict our ability to sell our products internationally and could adversely affect our business.

The imposition of requirements under the Health Insurance Portability and Accountability Act of 1996 (HIPAA) could adversely affect our business.

The HIPAA regulations are causing our customers to request that we sign business associate agreements with them. A business associate is a person or entity that performs certain functions or activities that involve the use or disclosure of protected health information on behalf of, or that provides services to, a covered entity. By law, the HIPAA Privacy Rule applies only to covered entities health plans, health care clearinghouses, and certain health care providers. However, most health care providers do not carry out all of their health care activities and functions by themselves. Instead, they often use the services of a variety of other persons or businesses. The Privacy Rule allows covered providers and health plans to disclose protected health information to these business associates if the providers or plans obtain satisfactory assurances that the business associate will use the information only for the purposes for which it was engaged by the covered entity, will safeguard the information from misuse, and will help the covered entity comply with some of the covered entity s duties under the Privacy Rule. Covered entities may disclose protected health information to an entity in its role as a business associate only to help the covered entity carry out its health care functions not for the business associate s independent use or purposes, except as needed for the proper management and administration of the business associate. These agreements are necessary for us in the normal course of

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servicing and supporting our products. If we are not willing to or are unable to enter into a business associate agreement with current and potential customers, such customers may not purchase our products or services, which would have a material adverse effect on our business, financial condition and results of operations.

The protection of our intellectual property may be uncertain, and we may face possible claims of others.

Although we have received patents and have filed patent applications with respect to certain aspects of our technology, we generally do not rely only on patent protection with respect to our products and technologies. We also rely on a combination of trade secret and copyright law, employee and third-party nondisclosure agreements and other protective measures to protect intellectual property rights pertaining to our products and technologies. Such measures may not provide meaningful protection of our trade secrets, know-how or other intellectual property in the event of any unauthorized use, misappropriation or disclosure. Others may independently develop similar technologies or duplicate our technologies. In addition, to the extent that we apply for any patents, such applications may not result in issued patents or, if issued, such patents may not be valid or of value. We do not believe that our products and technologies infringe any existing patents or intellectual property rights of third parties. However, our products and technologies may infringe existing patents or intellectual property rights of third parties. The costs of prosecuting or defending an intellectual property claim could be substantial and could adversely affect our business, even if we were ultimately successful in prosecuting or defending any such claims. If our products or technologies are found to infringe the rights of a third party, we could be required to pay significant damages or license fees or cease production, any of which could have a material adverse effect on our business.

We have product liability insurance ($11,000,000 per occurrence and $12,000,000 in total) and errors and omissions coverage ($11,000,000 per occurrence and in total). Our insurance coverage may not be adequate to pay products liability claims, which could have a material adverse effect on our financial condition.

The manufacture and sale of products used in the practice of medicine entail significant risk of product liability claims. We currently maintain product liability insurance in the amount of $11,000,000 per occurrence and $12,000,000 in total and errors and omissions coverage in the amount of $11,000,000 per occurrence and in total. However, our coverage limits may not be adequate to protect us from any liabilities we might incur in connection with claims made with respect to our products. Further, we may not be able to maintain the same level of coverage in the future. We may also need increased product liability coverage as we release additional products and updates. Such insurance is expensive and may not be available on acceptable terms, if at all. A successful product liability claim or series of such claims against us in excess of our insurance coverage could have a material adverse effect on our business, financial condition and results of operations.

If we fail to attract and retain qualified personnel, our business would be harmed.

Our ability to enhance and develop markets for our current products and to introduce new products to the marketplace depends on our ability to attract and retain qualified scientific and management personnel. We compete for such personnel with other companies, academic institutions, government entities and organizations, many of which have substantially greater capital resources, name recognition, and research and development capabilities. There can be no assurance that we will be successful in recruiting or retaining such personnel. We may not be able to recruit and retain such personnel, which would have a material adverse effect on our business.

If we do not effectively manage changes in our business, these changes could place a significant strain on our management and operations and, as a result, our business might not succeed.

Our ability to grow successfully requires an effective planning and management process. The expansion and growth of our business could place a significant strain on our management systems, infrastructure and other resources. To manage growth successfully, we must continue to improve and expand our systems and infrastructure in a timely and efficient manner. In addition, the success of any acquisition, such as our acquisition of HInnovation, Inc., will depend on our ability to successfully integrate the acquired business with our business. Our controls, systems, procedures and resources may not be adequate to support a changing and growing company. If our management fails to respond effectively to changes and growth in our business, including acquisitions, such failure could have a material adverse effect on our business, financial condition and results of operations.

If we are unable to successfully address the material weaknesses in our internal controls, our ability to report our financial results on a timely and accurate basis may be adversely affected.

In connection with their audit of our combined consolidated financial statements for the year ended December 31, 2004, our independent registered public accounting firm reported a material weakness related to the accuracy and completeness of deferred revenue for maintenance and services, which resulted in the restatement of the Company s consolidated financial statements for the year ended December 31, 2003 and for the first and second quarters of 2004. A material weakness is a control deficiency, or combination of control deficiencies, that results in more than a remote likelihood that a material misstatement of the annual or interim financial statements will not be prevented or detected. Our independent registered public accounting firm reported that we did not maintain effective internal control over financial reporting as of December 31, 2004 because we did not maintain effective controls over (i) the accuracy and completeness of maintenance and services revenues and deferred revenues, (ii) the existence of property and equipment, and (iii) the review and approval of quarterly financial results and related disclosures, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Because of the material weaknesses discussed above, management has concluded that we did not maintain effective internal control over financial reporting as of December 31, 2004 based on the criteria in *Internal Control Integrated Framework*.

During the first quarter of 2005, we implemented the following remediation steps to address the material weaknesses described above:

The process of recognizing revenue related to maintenance and services has been redesigned to ensure more timely receipt of information from operational areas to ensure revenue is recognized in the appropriate period.

New procedures have been established to address the tagging and tracking of fixed assets to ensure that property and equipment can be adequately accounted for.

Controls related to the quarterly financial reporting process are being closely monitored to ensure they are operating as designed. This material weakness was related to the third quarter of 2004. Although the controls related to the review and approval of fourth quarter results did operate as designed, the controls have not operated for a sufficient period of time to demonstrate that they operate effectively.

In addition, we have added a number of additional personnel to our finance and accounting staff to ensure that all of the material weaknesses described above are appropriately remediated in a timely manner.

The additional personnel include a new Senior Director of Finance, a new Controller, and a new Manager of Financial Reporting and Senior Staff Accountant, all of whom have strong public accounting and public company experience. We believe that these remediation steps will correct the material weaknesses described above.

We cannot provide assurance that the measures we have taken to date or any future measures will adequately remediate the material weakness reported by our independent registered public accounting firm. In addition, we cannot be certain that additional material weaknesses in our internal controls will not be discovered in the future. Any failure to remediate the material weakness reported by our independent registered public accounting firm or to implement required new or improved controls, or difficulties encountered in their implementation, could harm our operating results, cause us to fail to meet our reporting obligations or result in material misstatements in our financial statements. Any such failure also could adversely affect the results of the periodic management evaluations and annual auditor attestation reports regarding the effectiveness of our internal control over financial reporting that is required in our Annual Report on Form 10-K for the year ending December 31, 2005 to be filed in early 2006 or in our future Annual Reports on Form 10-K. Inadequate internal controls could also cause investors to lose confidence in our reported financial information, which could cause our stock price to decline.

We depend on third-party reimbursement. A reduction or other change in reimbursement from third parties could negatively affect our business.

Our products are purchased by hospitals, clinics, imaging centers and other users, which bill various third party payers, such as government health programs, private health insurance plans, managed care organizations and other similar programs, for the health care goods and services provided to their patients. There are currently Current Procedural Terminology (CPT) reimbursement codes for most of the diagnostic procedures that use our products. However, the amount of such reimbursement varies by location and is subject to change. Payers may deny reimbursement if they determine that a product used in a procedure was not used in accordance with established payer protocol regarding cost-effective treatment methods or was used for an unapproved indication. Third party payers are increasingly challenging the prices charged for medical services and, in some instances, have put pressure on service providers to lower their prices or reduce their services. We are unable to predict what changes will be made in the reimbursement methods used by third party healthcare payers. Third-party payors may not consider as cost effective the procedures in which our products are used. Reimbursement for such procedures may not be available or, if available, payers low reimbursement levels may adversely affect our ability to sell our products on a profitable basis. In addition, there have been and may continue to be proposals by legislators, regulators and third party payers to curb further these costs in the future. A failure by hospitals and other users of our products to obtain reimbursement from third party payers, changes in third party payers policies toward reimbursement for procedures using our products or legislative action could have a material adverse effect on our business, financial condition and results of operations.

Health care reform may negatively impact our business.

The levels of revenue and profitability of medical technology companies may be affected by the efforts of government and third party payers to contain or reduce the costs of health care through various means. In the United States, there have been, and we expect that there will continue to be, a number of federal, state and private proposals to control health care costs. These proposals may contain measures intended to control public and private spending on health care as well as to provide universal public access to the health care system. If enacted, these proposals may result in a substantial restructuring of the health care delivery system. Significant changes in the nation s health care system could have a substantial impact on the manner in which we conduct business and could have a material adverse effect on our business, financial condition and results of operations.

We may issue shares of preferred stock without the consent of our holders of common stock, which could adversely affect the rights of the holders of our common stock.

Our Articles of Incorporation authorize our board of directors, without any action by the holders of our common stock, to establish the rights and preferences of up to 5,000,000 shares of currently undesignated preferred stock. These shares of preferred stock could possess voting and conversion rights that could adversely affect the voting power of the holders of the common stock and may have the effect of delaying, deferring or preventing a change in control of Vital Images. No shares of preferred stock or other senior equity securities are currently designated, and currently we have no plan to designate or issue any such securities.

We are subject to certain laws and plans which may discourage takeover attempts that could be beneficial for shareholders.

We are subject to anti-takeover provisions of the Minnesota Business Corporation Act. In addition, we have adopted a Shareholder Rights Plan (the Rights Agreement) designed to protect against unsolicited attempts to acquire Vital Images. These measures may deter or discourage takeover attempts and other changes in control that are not approved by our board of directors, and they may have a depressive effect on any market for our common stock. As a result, our shareholders may lose opportunities to dispose of their shares at the higher prices typically available in takeover attempts or that may be available under a merger proposal. In addition, these measures may have the effect of permitting our current directors to retain their positions and place them in a better position to resist changes that shareholders may wish to make if they are dissatisfied with the conduct of our business.

We have never paid any cash dividends and, therefore, our shareholders only opportunity to achieve a return on their investment in Vital Images is if the price of our common stock appreciates.

We have not paid cash dividends on our common stock in the past, and we do not intend to do so in the foreseeable future. Consequently, our shareholders only opportunity to achieve a return on their investment in Vital Images will be if the market price of our common stock appreciates and they sell their shares at a profit. There is no guaranty that the price of our common stock that will prevail in the market after any sales by the selling shareholders under this prospectus will ever exceed the price that a buyer of the shares will pay.

Our directors may not be held personally liable for certain actions, which could discourage shareholder suits against them.

As permitted by Minnesota law, our Articles of Incorporation provide that members of our board of directors shall not be personally liable to us or our shareholders for monetary damages for breach of fiduciary duty as a director, with certain exceptions. These provisions may discourage shareholders from bringing suit against a director for breach of fiduciary duty and may reduce the likelihood of derivative litigation brought by shareholders on our behalf against a director. In addition, our Bylaws provide for mandatory indemnification of directors and officers to the fullest extent permitted by Minnesota law.

The exercise of outstanding warrants and options may adversely affect our stock price.

As of March 31, 2005, we had outstanding options to purchase 2,176,691 shares of our common stock and outstanding restricted stock awards for 36,180 shares. Options to purchase 1,428,360 were exercisable on that date, and none of the restricted stock awards were vested on that date. These options are likely to be exercised at a time when the market price for our common stock is higher than the exercise prices of the options. If holders of these outstanding options and restricted stock awards sell the common stock received upon exercise of the options or the vesting of the awards, it may have a negative effect on the market price of our common stock.

FORWARD-LOOKING INFORMATION

Vital Images desires to take advantage of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and is filing this cautionary statement in connection with the Reform Act. This prospectus and any other written or oral statements made by or on our behalf may include forward-looking statements that reflect our current views with respect to future events and future financial performance. Certain statements in this prospectus are forward-looking statements within the meaning of Section 27(a) of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. You can identify these forward-looking statements by our use of the words believes, anticipates, forecasts, projects, could, plans, expects, may, will, would, intends, estimates and similar expressions, whether in the negativ wish to caution you that any forward-looking statements made by us or on our behalf are subject to uncertainties and other factors that could cause such statements to be wrong. We cannot guarantee that we actually will achieve these plans, intentions or expectations. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements that we make. These statements are only predictions and speak only of our views as of the date the statements were made. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, and/or performance of achievements. We do not assume any obligation to update or revise any forward-looking statements that we make, whether as a result of new information, future events or otherwise.

Factors that may impact forward-looking statements include, among others, our abilities to maintain the technological competitiveness of our current products, develop new products, successfully market our products, respond to competitive developments, develop and maintain partnerships with providers of complementary technologies, manage our costs and the challenges that may come with growth of our business, and attract and retain qualified sales, technical and management employees. We are also affected by the growth and regulation of the enterprise-wide advanced visualization industry, including the acceptance of enterprise-wide advanced visualization by hospitals, clinics, and universities, and reimbursement and regulatory practices by Medicare, Medicaid, and private third-party payer organizations. We are also affected by other factors identified in our filings with the Securities and Exchange Commission, some of which are set forth in the section entitled Risk Factors in this prospectus (and many of which we have discussed in prior filings). Although we have attempted to list comprehensively these important factors, we also wish to caution investors that other factors may prove to be important in the future in affecting our operating results. New factors emerge from time to time, and it is not possible for us to predict all of these factors, nor can we assess the impact each factor or combination of factors may have on our business.

USE OF PROCEEDS

The selling shareholders will sell all of the common stock covered by this prospectus and receive the proceeds from sale of the shares. We will not receive any of the proceeds from such sales. We will pay certain expenses related to the registration of the shares of common stock.

MARKET FOR COMMON STOCK

Vital Images common stock is listed on The NASDAQ National Market under the symbol VTAL. The table below shows the high and low per share closing sale prices of our common stock as reported by The NASDAQ Stock Market for each of the periods indicated. Such prices reflect inter-dealer prices, do not include adjustments for retail mark-ups, markdowns or commissions, and may not necessarily represent actual transactions.

	High	Low
2005		
Second Quarter through June 15	$ 18.46	$ 14.37
First Quarter	$ 16.14	$ 13.60
2004		
Fourth Quarter	$ 16.95	$ 12.18
Third Quarter	$ 12.60	$ 9.84
Second Quarter	$ 12.39	$ 9.26
First Quarter	$ 20.01	$ 9.34
2003		
Fourth Quarter	$ 21.05	$ 15.75
Third Quarter	$ 24.55	$ 17.42
Second Quarter	$ 19.09	$ 11.12
First Quarter	$ 12.90	$ 9.05

On , 2005, the last reported sale price for our common stock was $.

DIVIDEND POLICY

We have never paid or declared any cash dividends on our common stock and do not intend to pay dividends on our common stock in the near future. To date, we have incurred cumulative operating losses and presently expect to retain our future anticipated earnings to finance the development and expansion of our business.

CAPITALIZATION

The following table sets forth our capitalization as of March 31, 2005. None of the columns shown below reflect the following:

2,178,341 shares of common stock issuable as of March 31, 2005 upon the exercise of outstanding stock options; or

1,322,836 shares of common stock available for issuance as of March 31, 2005 under our 1997 Stock Option and Incentive Plan and 1997 Director Stock Option Plan.

	March 31, 2005
Stockholders equity:	
Preferred stock, $0.01 par value; 5,000,000 shares authorized; none issued or outstanding	$
Common stock, $0.01 par value; 20,000,000 shares authorized; 12,216,419 shares issued and outstanding	$ 122,569

Additional paid-in capital	$	68,204,025
Deferred stock-based compensation	$	(540,603)
Accumulated other comprehensive loss	$	(55,850)
Accumulated deficit	$	(10,307,497)
Total stockholders equity	$	57,422,644

UNAUDITED PRO FORMA COMBINED FINANCIAL INFORMATION

The Unaudited Pro Froma Combined Consolidated Statement of Operations for the year ended December 31, 2004 combine historical Vital Images, Inc. and HInnovation, Inc. statements of operations as if the acquisition of HInnovation, which occurred on February 18, 2004, had been completed on January 1, 2004 for purposes of the presentation of the Unaudited Pro Forma Combined Consolidated Statement of Operations.

The total purchase price of the HInnovation acquisition was approximately $12.6 million. We acquired all of the outstanding common stock of HInnovation in exchange for $5.8 million in cash paid and 376,262 newly-issued shares of common stock issued to the stockholders of HInnovation. The common stock was valued at $6.1 million for accounting purposes. We incurred approximately $400,000 in direct costs of the acquisition and assumed $400,000 of liabilities. We did not assume any stock options or warrants. In addition, the transaction included a maximum of $6.0 million of contingent milestone payments comprised of $3.0 million in common stock and $3.0 million in cash. As of December 31, 2004, no contingent payments had been earned. The first milestone was not met before the February 2005 deadline. As a result, the potential maximum contingent consideration was reduced to $4.5 million, which consists of $3.0 million in common stock and $1.5 million in cash.

The purchase price was allocated to the identified assets of HInnovation. A third-party appraisal firm assisted us with the valuation of the identified intangible assets. The valuation resulted in the allocation of $6.9 million to identifiable intangibles, which will be amortized over periods ranging from three to seven years. The valuation also resulted in the identification of $1.0 million of acquired in-process research and development costs (IPR&D), which was immediately expensed on the closing date and represents a non-deductible charge for income tax purposes.

At the time of acquisition, HInnovation had development projects in process, including the collaboration module of its Web-based product (the Collaboration Module Project). The Collaboration Module Project involves the design and development of innovative features for Web-based consultation meetings with interactive and synchronized viewing of full-quality images, annotation and mouse movement. The Collaboration Module Project includes significant and innovative advancements to the HInnovation software platform in the areas of network synchronization of high quality images and user privilege management for online collaboration. The design, verification and other processes involved in the Collaboration Module Project require tools and skills that are new to HInnovation. The appraisal referenced above estimated that $1.0 million of the purchase price represents the fair value of purchased IPR&D related to the Collaboration Module Project, that it has not yet reached technological feasibility and that it has no alternative future uses. This amount was expensed as a non-recurring, non-tax-deductible charge upon consummation of the acquisition. This amount is not reflected as an expense in the unaudited pro forma combined consolidated statement of operations as it is a non-recurring charge upon consummation of the acquisition.

The Unaudited Pro Forma Combined Consolidated Statement of Operations for the year ended December 31, 2004 does not purport to represent what the actual financial condition or results of operations of the combined businesses would have been if the acquisition of HInnovation had occurred on the dates indicated in the Unaudited Pro Forma Combined Consolidated Statement of Operations nor does this information purport to project our results or financial position for any future periods.

The Unaudited Pro Forma Consolidated Statement of Operations has been prepared from, and should be read in conjunction with, our audited consolidated financial statements for the fiscal year ended December 31, 2004 and the related notes included elsewhere in this prospectus.

UNAUDITED PRO FORMA COMBINED CONSOLIDATED STATEMENT OF OPERATIONS

Year Ended December 31, 2004

	Vital Images, Inc.	HInnovation, Inc.	Combined	Pro Forma Adjustments	Pro Forma Combined
Revenues:					
License fees	$ 24,054,251	$ 28,000	$ 24,082,251	$	$ 24,082,251
Maintenance and services	9,524,791		9,524,791		9,524,791
Hardware	2,543,005		2,543,005		2,543,005
Total revenue	36,122,047	28,000	36,150,047		36,150,047
Cost of revenue:					
License fees	3,993,982		3,993,982	142,000(1)	4,135,982
Maintenance and services	4,660,433		4,660,433		4,660,433
Hardware	1,792,666		1,792,666		1,792,666
Total cost of revenue	10,447,081		10,447,081	142,000	10,589,081
Gross profit	25,674,966	28,000	25,702,966	(142,000)	25,560,966
Operating expenses:					
Sales and marketing	12,204,574	2,626	12,207,200		12,207,200
Research and development	6,329,190	47,918	6,377,108	21,000(1)	6,398,108
General and administrative	5,626,719	15,097	5,641,816		5,641,816
Acquired in-process research and development	1,000,000		(1,000,000)	1,000,000(2)	
Total operating expenses	25,160,483	65,641	25,226,124	(979,000)	24,247,124
Operating income (loss)	514,483	(37,641)	476,842	837,000	1,313,842
Interest income	368,080		368,080		368,080
Income (loss) before income taxes	882,563	(37,641)	844,922	837,000	1,681,922
Provision (benefit) for income taxes	587,000		587,000	(77,648)(3)	509,352
Net income (loss)	$ 295,563	$ (37,641)	$ 257,922	$ 914,648	$ 1,172,570
Net income per share - basic	$ 0.03		$ 0.02		$ 0.10
Weighted average common shares outstanding - basic	11,632,351		11,632,351	376,262(4) (326,645)(4)	11,681,968
Net income per share - diluted	$ 0.02		$ 0.02		$ 0.09
Weighted average common shares outstanding - diluted	12,535,670		12,535,670	376,262(4) (326,645)(4)	12,585,287

VITAL IMAGES, INC. NOTES TO UNAUDITED PRO FORMA COMBINED CONSOLIDATED STATEMENT OF OPERATIONS

NOTE 1. BASIS OF PRESENTATION

The Unaudited Pro Forma Combined Consolidated Statement of Operations included herein has been prepared

by Vital Images, Inc., without audit, pursuant to the rules and regulations of the Securities and Exchange Commission. Certain information and certain footnote disclosures normally included in the financial statements prepared in accordance with generally accepted accounting principles (GAAP) have been condensed or omitted pursuant to such rules and regulations. However, we believe that the disclosures are adequate to make the information presented not misleading.

NOTE 2. PRELIMINARY PURCHASE PRICE ALLOCATION

The total purchase price is as follows:

Fair value of common stock issued (376,262 shares)	$	6,109,554
Cash paid to HInnovation shareholders		5,752,626
Direct acquisition costs		360,259
Liabilities assumed		381,562
	$	12,604,001

The allocation of the total purchase price is as follows:

Existing software technology, subject to amortization - 5 year life	$	3,400,000
Patent and patent applications, subject to amortization - 7 year life		3,000,000
Non-compete/employement agreements, subject to amortization - 3 year life		500,000
Goodwill, not subject to amortization		6,052,744
In-process research and development costs		1,000,000
Deferred tax liabilities, net		(1,405,000)
Fair value of assets acquired		51,468
Fair value of cash acquired		4,789
	$	12,604,001

In-process research and development costs of $1.0 million were expensed in the period in which the acquisition was consummated. The Unaudited Pro Forma Combined Consolidated Statement of Operations does not include the in-process research and development costs of $1.0 million, as it is considered a non-recurring charge.

NOTE 3. PRO FORMA ADJUSTMENTS

The accompanying Unaudited Pro Forma Combined Consolidated Statement of Operations has been prepared as if the acquisition had been completed as of the beginning of the year ended December 31, 2004 and reflects the following pro forma adjustments:

(1) The amortization of intangibles for the period of January 1, 2004 through the acquisition date of February 18, 2004.

(2) The in-process research and development costs associated with the acquisition, which were not tax deductible.

(3) The tax benefit of the amortization of intangibles.

(4) The adjustment of weighted-average shares outstanding for the Vital Images shares issued in the acquisition.

SELECTED FINANCIAL DATA

	Three Months Ended March 31,		Years ended December 31,				
	2005	2004	2004	2003	2002	2001	2000
	(Unaudited)						
Statement of Operations Data (in thousands, except per share data):							
Revenue	$ 11,325	$ 7,816	$ 36,122	$ 27,300	$ 21,116	$ 15,196	$ 10,628
Gross profit	8,653	5,479	25,675	20,229	14,808	10,723	7,168
Operating expenses	7,282	7,121	25,161(2)	18,294	14,131	11,778	9,955
Operating income (loss)	1,371	(1,642)	514	1,935	677	(1,055)	(2,787)
Net income (loss)	$ 1,023	$ (1,352)	$ 296	$ 8,462(1)	$ 790	$ (1,012)	$ (2,637)
Net income (loss) per share-basic	$ 0.08	$ (0.12)	$ 0.03	$ 0.83	$ 0.09	$ (0.14)	$ (0.39)
Weighted average common shares outstanding - basic	12,071	11,339	11,632	10,189	8,861	7,075	6,760
Net income (loss) per share - diluted	$ 0.08	$ (0.12)	$ 0.02	$ 0.71	$ 0.08	$ (0.14)	$ (0.39)
Weighted average common shares outstanding - diluted	12,953	11,339	12,536	11,848	9,822	7,075	6,760

	March 31, 2005	December 31,				
		2004	2003	2002	2001	2000
Balance Sheet Data (in thousands):						
Working capital	$ 33,326	30,996	31,915	9,219	6,094	2,344
Total assets	74,925	69,284	53063	18,827	13,269	7,287
Long-term debt						
Total stockholders equity	57,423	54,554	44,594	11,721	8,051	3,765

(1) Includes a net tax benefit of $6,313 resulting from the reversal of Vital Images valuation allowance for its net deferred tax assets, net of other current year state and federal income taxes.

(2) Includes $1,000 of acquired in-process research and development charge relating to the acquisition of HInnovation, Inc. in February 2004.

MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Executive Summary

Vital Images achieved significant growth in the first quarter of 2005 and in the year ended December 31, 2004. Our balance sheet remains strong: total cash, cash equivalents and marketable securities were $32.9 million as of March 31, 2005 compared to $35.7 million as of December 31, 2004; working capital was $33.3 million as of March 31, 2005 compared to $31.0 million as of December 31, 2004; and working capital included deferred revenue of $9.7 million as of March 31, 2005 and $8.1 million as of December 31, 2004.

For the three months ended March 31, 2005, total revenue increased 45% to $11.3 million compared to $7.8 million in the first quarter of 2004. Pretax income for the first quarter of 2005 was $1.5 million, which included amortization of identified intangibles of $351,000 and a charge related to our operating lease for our old office facility of $493,000. We recorded net income of $1.0 million, or $0.08 per diluted share, in the first quarter of 2005 compared to a net loss of $1.4 million, or $0.12 per diluted share, in the first quarter of 2004, which included a write-off of in-process research and development costs of $1.0 million related to the HInnovation, Inc. acquisition, which closed in February 2004. Operating costs in the first quarter of 2005 included a bad debt expense recovery of $184,000 relating to a partial recovery of an outstanding receivable that was written off in the first quarter of 2004; the recovery resulted in a $684,000 change in bad debt expense from the first quarter of 2004 to the first quarter of 2005.

Total revenue increased 32% to $36.1 million in 2004 compared to $27.3 million in 2003. Operating income was $514,000 in 2004, which included amortization of identified intangibles of $1.1 million and an acquired in-process research and development charge of $1.0 million related to the acquisition of HInnovation, compared to $1.9 million in 2003.

We recorded net income of $296,000, or $0.02 per diluted share, in 2004 compared to $8.5 million of net income, or $0.71 per diluted share, in 2003. Full-year earnings for 2003 include a net tax benefit of $6.3 million, or $0.53 per diluted share.

Throughout our history, a significant portion of our revenue has been generated from the U.S. computed tomography (CT) market. Going forward, we anticipate a growing contribution from other sources, including an expanding picture archive and communication systems (PACS) market, sales of Web-based products and our installed customer base. In February 2004, we acquired HInnovation, Inc., a privately-held provider of software solutions that allow physicians to use PCs or notebook computers to access 2D, 3D and 4D medical imaging applications securely over the Internet, which represents another step towards expanding our presence in the PACS and Web-based markets.

Overview

We develop, market and support enterprise-wide advanced visualization software for use primarily in clinical diagnosis, disease screening and therapy planning. Our software applies proprietary computer graphics and image processing technologies to a wide variety of data supplied by CT, magnetic resonance (MR) and positron emission tomography (PET) scanners. Our products allow clinicians to create 2D, 3D and 4D views of human anatomy and to non-invasively navigate within these images to better visualize and understand internal structures and pathologies. We believe that our high-speed visualization technology and customized protocols cost-effectively bring 3D visualization and analysis into the routine, day-to-day practice of medicine. Vital Images, which operates in a single business segment, markets its products to healthcare providers and to manufacturers of diagnostic imaging systems and PACS through a direct sales force in the United States and independent distributors in international markets.

On October 28, 1996, the board of directors of Bio-Vascular, Inc. (Bio-Vascular), now known as Synovis Life Technologies, Inc., the former parent company of Vital Images, approved a plan to spin off and establish Vital Images as an independent, publicly-owned company. On May 12, 1997, Bio-Vascular distributed all of the shares of Vital Images to the stockholders of Bio-Vascular, and on that date Vital Images began operating as an independent public company. All Bio-Vascular stockholders of record as of May 5, 1997 received one share of Vital Images common stock for each two shares of Bio-Vascular stock held on that date, and cash in lieu of fractional shares. Vital Images common stock is currently listed on The NASDAQ National Market under the symbol VTAL.

Critical Accounting Policies and Estimates

Management s discussion and analysis of financial condition and results of operations are based upon Vital Images audited consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. The notes to the consolidated financial statements contained in this prospectus describe Vital Images significant accounting polices used in the preparation of the consolidated financial statements.

We continually evaluate our critical accounting policies and estimates. We believe the critical accounting polices listed below reflect significant judgments, estimates and assumptions used in the preparation of our consolidated financial statements.

Allowance for Doubtful Accounts

We maintain an allowance for doubtful accounts at an amount estimated to be sufficient to provide adequate protection against losses resulting from extending credit to our customers. In judging the adequacy of the allowance for doubtful accounts, we consider multiple factors, including historical bad debt experience, the general economic environment, the need for specific client reserves and the aging of our receivables. This provision is included in operating expenses as a general and administrative expense in the consolidated statements of operations. A considerable amount of judgment is required in assessing these factors. If the factors utilized in determining the allowance do not reflect future performance, then a change in the allowance for doubtful accounts would be necessary in the period such determination has been made which would impact future results of operations. As of March 31, 2005, the allowance for doubtful accounts was $583,000 for gross accounts receivable of $14.6 million.

Deferred Taxes

Significant judgment is required in determining the realizability of our deferred tax assets. We must assess the likelihood that our net deferred tax assets will be recovered from future taxable income, and to the extent we believe that recovery is not likely, we must establish a valuation allowance. To the extent we establish a valuation allowance, we must include an expense within the tax provision in the statement of operations. As of March 31, 2005, the consolidated balance sheet included net deferred tax assets of $9.3 million.

Our methodology for determining the realizability of our deferred tax assets involves estimates of future taxable income from our core business, the estimated impact of future tax deductions from the exercise of stock options outstanding as of each balance sheet date, and the expiration

dates and amounts of net operating loss carryforwards and other tax credits. These estimates are projected through the life of the related deferred tax

assets based on assumptions which management believes to be reasonable and consistent with current operating results.

Although we had cumulative pre-tax income for financial reporting purposes for the three years ended December 31, 2004, we did not pay any significant income taxes over that period due to tax deductions from the exercise of stock options as well as our utilization of net operating losses. In assessing the realizability of our deferred tax assets as of each balance sheet date, we considered evidence regarding our ability to generate sufficient future taxable income to realize our deferred tax assets. The primary evidence considered included the cumulative pre-tax income for financial reporting purposes for the past three years; the cumulative tax operating loss for the past three years; the estimated impact of future tax deductions from the exercise of stock options outstanding as of each balance sheet date; and the estimated future taxable income based on historical operating results.

After giving consideration to these factors, we concluded that it was more likely than not that tax loss carryforwards that expire in 2005 and other tax credits that expire within the next four years will not be utilized due to the estimated future tax deductions from the exercise of stock options outstanding as of December 31, 2004. As a result, we recorded a valuation allowance of $183,000 for the year ended December 31, 2004. We also recorded a full valuation allowance of $43,000 relating to 2004 foreign net operating losses that are subject to uncertainty regarding utilization.

As of March 31, 2005, we updated our analysis to reflect the necessary changes in estimates and determined that no increase in the valuation allowance was necessary related to previously recorded deferred tax assets.

We also concluded that it was more likely than not that the net deferred tax assets of $9.3 million as of March 31, 2005 and the estimated future tax deductions from the exercise of stock options outstanding as of March 31, 2005 would be utilized prior to expiring. Based on this conclusion, we would require approximately $40 million in cumulative future taxable income to be generated at various times over the next 20 years to realize the related net deferred tax assets of $9.3 million as of March 31, 2005 as well as the estimated future tax deductions from the exercise of stock options outstanding and in-the-money as of March 31, 2005.

If we adjust our estimates of future taxable income or tax deductions from the exercise of stock options, or if our stock price increases significantly without an increase in taxable income, we may need to establish additional valuation allowances, which could materially impact our financial position and results of operations.

Long-Lived Assets

We review long-lived assets for impairment whenever events or changes in circumstances indicate the carrying amount may not be recoverable, in accordance with Statement of Financial Accounting Standards (SFAS) No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets. Events or changes in circumstances that indicate the carrying amount may not be recoverable include, but are not limited to, a significant decrease in the market value of the business or asset acquired, a significant adverse change in the extent or manner in which the business or asset acquired is used, or a significant adverse change in the business climate. If such events or changes in circumstances are present, the undiscounted cash flows method is used to determine whether the asset is impaired. Cash flows would include the estimated terminal value of the asset and exclude any interest charges. To the extent the carrying value of the asset exceeds the undiscounted cash flows over the estimated remaining life of the asset, the impairment is measured using the discounted cash flows. The discount rate utilized would be based on management s best estimate of the related risks and return at the time the impairment assessment is made.

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Our long-lived assets consisted of property and equipment of $5.3 million, licensed technology of $300,000 and other intangible assets subject to amortization of $5.5 million as of March 31, 2005.

Goodwill and Other Intangible Assets with Indefinite Lives

We account for goodwill and other intangible assets in accordance with the provisions of SFAS No. 142, Goodwill and Other Intangible Assets. Under SFAS No. 142, goodwill and intangible assets with indefinite lives are not amortized to expense and must be reviewed for impairment annually or more frequently if events or changes in circumstances indicate that the asset might be impaired. The first step of the goodwill impairment test, used to identify potential impairment, compares the fair value of a reporting unit with its carrying amount, including goodwill. Vital Images operates as one reporting unit and therefore compares the book value to the market value (market capitalization plus a control premium). If the market value exceeds the book value, goodwill is considered not impaired, thus the second step of the impairment test is not necessary. If Vital Images book value exceeds the market value, the second step of the goodwill impairment test is performed to measure the amount of impairment loss, if any. The second step of the goodwill impairment test, used to measure the amount of impairment loss, compares the implied fair value of the goodwill with the book value of the goodwill. If the carrying value of the goodwill exceeds the implied fair value of the goodwill, an impairment loss would be recognized in an amount equal to the excess. Any loss recognized cannot exceed the carrying amount of goodwill. After a goodwill impairment loss is recognized, the adjusted carrying amount of goodwill is its new accounting basis. Subsequent reversal of a previously recognized goodwill impairment loss is prohibited once the measurement of that loss is completed. We completed the annual goodwill impairment assessment as of December 31, 2004, upon which no impairment was recorded.

Commitments and Contingencies

In April 2005, we entered into a new agreement with R2 Technology, Inc. (R2) to market R2 s lung nodule CAD software product to our customers. The new agreement replaces our November 2002 agreement with R2. Under the new agreement, all previous commitments were cancelled and replaced with a new commitment. Beginning in the third quarter of 2005, we have committed to R2 certain minimum revenues from the sale of R2 products over a 12-quarter period. We will receive a commission from R2 as consideration for our marketing efforts and access to our customers. This commission will be the only revenue we will recognize under the new agreement. The new agreement states that to the extent the quarterly minimum revenue commitments are not met, we will pay R2 the difference between the minimum revenue commitment and the actual revenues achieved (shortfall payments). The maximum total revenue commitment over the 12-quarter period beginning in the third quarter of 2005 is $5.0 million. However, beginning in the second quarter of 2006, the quarterly minimum revenue commitments will be reduced i) to the extent revenue generated by R2 under this agreement is below the minimum revenue commitment or ii) to the extent R2 is unable to generate revenue outside of its relationship with us. If R2 generates no revenue under this agreement, the estimated maximum shortfall payments would total approximately $2.5 million.

Based on current estimates, management believes it is probable that the minimum revenue commitments will be met such that we will earn commissions under this arrangement that will exceed direct selling costs and that we will not take a loss on this agreement. However, this is a subjective determination, and any changes to these estimates could have an adverse impact on our financial position and results of operations.

We are subject to the possibility of various loss contingencies in the normal course of business. We accrue for loss contingencies when a loss is estimable and probable. In March 2004, we signed a non-cancelable operating lease for a new office facility in Minnetonka, Minnesota. The new lease term started in February 2005 and expires in January 2012. We moved into the Minnetonka location and moved out of our Plymouth, Minnesota location in February 2005. Our office facility in Plymouth expires on July 31, 2005 with the exception of a small portion of the space that is under lease until May 31, 2006. Under the terms of the new

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lease, the Minnetonka lessor will pay the monthly base rent payments and taxes and operating cost rent obligation payments for our former office facility in Plymouth beginning in February 2005. In accordance with generally accepted accounting principles, we recorded a lease loss of $493,000 for the estimated lease payments to be made by the Minnetonka landlord to the Plymouth landlord as well as estimated other costs to be paid by us to the Plymouth landlord. Any changes to these estimates could have an impact on our financial position and results of operations.

Revenue Recognition

We follow specific and detailed guidelines in determining the proper amount of revenue to be recorded; however, certain judgments affect the application of our revenue recognition policy. Revenue results are difficult to predict, and any shortfall in revenue or delay in recognizing revenue could cause our operating results to vary significantly from period to period.

The significant judgments for revenue recognition typically involve whether collectibility can be considered probable and whether fees are fixed or determinable. In addition, our transactions often consist of multiple element arrangements, which must be analyzed to determine the relative fair value of each element, the amount of revenue to be recognized upon shipment, if any, and the period and conditions under which deferred revenue should be recognized.

We license our software and sell products and services to end-users and also indirectly through original equipment manufacturers (OEMs) and independent distributors (collectively Resellers). Terms offered by us do not generally differ based on whether the customer is an end-user or a Reseller. We offer terms that require payment within 30 to 90 days after product delivery. We do not generally offer rights of return, acceptance clauses or price protection to our customers. In rare situations where we provide rights of return or acceptance clauses, revenue is deferred until the clause expires.

License fees revenue is derived from the licensing of computer software. Hardware revenue is derived from the sale of system hardware, including peripheral equipment. Maintenance and service revenue is derived from software maintenance and from telephone support, installation, training and engineering services. Our software licenses are always sold as part of an arrangement that includes maintenance and support and often installation and training services.

Engineering services consist of software modification or development services that are sold separately to OEMs. We generally sell hardware as part of a system sale, but we occasionally sell hardware as part of a system upgrade or additional product sale.

We recognize revenue in accordance with American Institute of Certified Public Accountants (AICPA) Statement of Position (SOP) 97-2, Software Revenue Recognition, as amended by SOP 98-4 and SOP 98-9, as well as Technical Practice Aids issued from time to time by the AICPA and SEC Staff Accounting Bulletin No. 104. We recognize revenue when it is realized or realizable and earned. We consider revenue realized or realizable and earned when we have persuasive evidence of an arrangement, the product has been shipped or the services have been provided to the customer, the sales price is fixed or determinable, and collectibility is probable. Provided all other revenue recognition criteria are met, license revenue from Resellers is recognized on a sell-in or sell-through basis depending on the arrangement with the Reseller. We recognize revenue from Resellers on a sell-in basis provided the Reseller i) assumes all risk of the purchase, ii) has the ability and obligation to pay regardless of receiving payment from the end user, and iii) has a history of timely payments.

We evaluate the credit worthiness of all customers. In circumstances where we do not have experience selling to a customer and lack adequate credit information to conclude that collection is probable, revenue is

deferred until the arrangement fees are collected and all other revenue recognition criteria in the arrangement have been met.

In addition to the aforementioned general policy, the following are the specific revenue recognition policies for services and multiple-element arrangements.

Software and Hardware Revenue from license fees and hardware is recognized when shipment of the product has occurred, none of our significant obligations with regard to implementation remain and our services are not considered essential to the functionality of other elements of the arrangement. See also Multiple Element Arrangements below for further information.

Services Revenue from maintenance and support arrangements is deferred and recognized ratably over the term of the maintenance and support arrangements. Revenue from training and installation services is recognized as the services are provided to customers. Revenue from engineering services, where we are performing significant customization or modification of software, is recognized using contract accounting on a percentage-of-completion basis. We record revenue by reference to actual hours incurred to date and the estimated hours remaining to complete the services.

Multiple-Element Arrangements We enter into arrangements with customers that include a combination of software products, system hardware, specified upgrades, maintenance and support, or installation and training services. For such arrangements, we recognize revenue using the residual value method. We allocate the total arrangement fee among the various elements of the arrangement based on the relative fair value of each of the undelivered elements determined by vendor-specific objective evidence. The fair value of maintenance and support services is based upon the renewal rate for continued service arrangements. The fair value of installation and training services is established based upon separate pricing for the services. In software arrangements for which we do not have vendor-specific objective evidence of fair value for all elements, revenue is deferred until the earlier of when vendor-specific objective evidence is determined for the undelivered elements (residual method) or when all elements for which we do not have vendor-specific objective evidence of fair value have been delivered.

The following table sets forth information from our Statements of Operations, expressed as a percentage of total revenue.

	For the Three Months Ended March 31,		For the Years Ended December 31,		
	2005	2004	2004	2003	2002
Revenue:					
License fees	64.7%	70.9%	66.6%	67.4%	67.3%
Maintenance and services	29.6	25.4	26.4	25.1	19.0
Hardware	5.7	3.7	7.0	7.5	13.7
Total revenue	100.0	100.0	100.0	100.0	100.0
Cost of revenue:					
License fees	9.5	12.8	11.1	6.7	5.9
Maintenance and services	10.8	13.9	12.8	13.8	13.6
Hardware	3.2	3.2	5.0	5.4	10.4
Total cost of revenue	23.5	29.9	28.9	25.9	29.9
Gross profit	76.5	70.1	71.1	74.1	70.1
Operating expenses:					
Sales and marketing	30.2	34.6	33.8	34.1	32.2
Research and development	15.7	21.5	17.5	18.9	19.6
General and administrative	14.1	22.2	15.6	14.0	15.1
Acquired in-process research and development		12.8	2.8		
Loss on operating lease	4.4				
Total operating expenses	64.4	91.1	69.7	67.0	66.9
Operating income (loss)	12.1	(21.0)	1.4	7.1	3.2
Interest income	1.4	0.8	1.0	0.8	0.6
Income (loss) before income taxes	13.5	(20.2)	2.4	7.9	3.8
Provision (benefit) for income taxes, net	4.5	(2.9)	1.6	(23.1)	0.1
Net income	9.0%	(17.3)%	0.8%	31.0%	3.7%

Results of Operations

Three Months Ended March 31, 2005 and 2004

Revenue. Total revenue increased 45% to $11.3 million in the first quarter of 2005 from $7.8 million in the same period in 2004. The revenue growth was driven by significant increases in software license fees through distribution partners and direct sales, and maintenance and service revenue from an increasing customer base. Revenue through our distribution partnership with Toshiba Medical Systems Corporation (Toshiba) was $6.2 million, or 55% of total revenue, in the first quarter of 2005, compared to $5.4 million, or 68% of revenue, in the first quarter of 2004. The remaining increases were driven by direct sales and continued growth in maintenance and service revenue from an increasing customer base.

License fee revenue increased 32% to $7.3 million from $5.5 million in the first quarter of 2004. The increase in software license fee revenue was driven by an increase in the number of *Vitrea*®2 licenses sold and an increase in the number of Vitrea software add-on options sold. Sales from *Vitrea*® 2 software options increased 27% to $4.1 million, or 36% of license fee revenue, compared to $3.2 million, or 41% of revenue, in

the first quarter of 2004, while the Vessel Probe, CT Cardiac and CT Colon options continue to lead option sales. The number of options sold increased to approximately 625 for the three months ended March 31, 2005 from approximately 490 for the three months ended March 31, 2004.

Maintenance and services revenue increased 69% to $3.4 million for the first three months of 2005 compared to $2.0 million for the first quarter of 2004. Of the $1.4 million increase for the first quarter of 2005 compared to the same period in 2004, $1.1 million consisted of an increase in maintenance revenue, $126,000 consisted of increased training revenue and $73,000 consisted of increased installation revenue. The increases in all categories of maintenance and service revenue were due to a significant increase in our customer base and improved pricing. The increase in training revenue in the first quarter of 2005 was due in part to the introduction of the offsite regional training program and overall increased sales of *Vitrea*® 2.

Hardware revenue increased $356,000 to $643,000 in the first quarter of 2005 from $287,000 in the first quarter of 2004. The increase was primarily due to overall increased sales of hardware in the first quarter of 2005.

Gross margin. Our gross margin was 76% in the first quarter of 2005, compared to 70% in the first quarter of 2004 and 71% for the year ended December 31, 2004. Improved margins were primarily associated with maintenance and services revenue growth and lower than expected costs related to our training services. We anticipate that these gross margin rates are not sustainable in the long-term. In order to maintain similar levels of service going forward, we will continue to invest in our training and customer support areas.

License fee gross margin increased to 85% from 82% for the three months ended March 31, 2005 and 2004, respectively. Sales directly to end users increased as a percentage of revenue, versus sales through distribution relationships with partners such as Toshiba. License sales through strategic partnerships carry a slightly lower margin than sales directly to end users. Included in the cost of revenue for license fees in the first quarter of 2005 are royalty expenses of $375,000 and amortization of intangibles of $279,000 related to the HInnovation acquisition, versus $427,000 and $142,000 in the same period in 2004, respectively. We pay royalties to third parties who supply technology that is embedded into our products. Management expects that as additional new products and features are developed, we will continue to increase our use of such third party technology. In addition, we sell third party software products, including lung visualization products and a fusion technology product, and gross margin earned on third party software products is considerably less than the gross margins we earn on our own internally-developed software products. As a result, license fee gross margins will continue to fluctuate based on the composition of the customers as well as the amount of third party software products sold and third party technology that is embedded into our products.

Maintenance and services gross margins increased to 63% from 45% for the three months ended March 31, 2005 and 2004, respectively. The increased maintenance and services gross margin was due in part to changes in pricing structure and an increase in maintenance and services revenue from Toshiba in the first quarter of 2005 compared with the first quarter of 2004, with minimal associated cost increases. We plan to increase our cost infrastructure primarily through additional personnel during 2005 to support our growing customer base.

Hardware gross margins increased to 43% from 15% for the three months ended March 31, 2005 and 2004, respectively. Hardware gross margins have been and will continue to be volatile based on the composition of the customers and mix of third party hardware sold.

Sales and marketing. Sales and marketing expenses increased to $3.4 million for the three months ended March 31, 2005 from $2.7 million for the three months ended March 31, 2004, a 27% increase. The increase was due to increases in commission expense resulting from significantly higher revenues. Commission expense increased $302,000 to $873,000 compared to $571,000 for the three months ended March 31, 2004. In addition, the number of total sales and marketing personnel increased from 45 at March 31, 2004 to 55 at March 31, 2005. Due to this increase in the number of personnel, employment related costs, travel and entertainment expenses and overhead allocation expenses

increased $186,000 for the three months ended March 31, 2005 as compared to the three months ended March 31, 2004.

We expect sales and marketing costs to increase in future periods as a result of the hiring of additional sales and marketing personnel and increased marketing activities for our products.

Research and development. Research and development expenses increased 6% to $1.8 million for the three months ended March 31, 2005, compared with $1.7 million for the same period last year. The increase in expenses was primarily due to increased salaries and benefits expense from the addition of personnel, which increased $97,000 to $1.2 million from $1.1 million for the period ended March 31, 2004. Research and development expenses for the three months ended March 31, 2004 also included $192,000 of costs related to severance for our former vice-president of engineering and two other employees.

We anticipate that research and development costs will increase in future periods as we develop software tools for applications with large potential markets, such as cardiovascular disease, disease screening applications such as colon cancer, and surgical and therapy planning. We are making significant investments in tools that offer increased productivity, flexibility and efficiency for our customers.

General and administrative. General and administrative expenses decreased 8% to $1.6 million for the three months ended March 31, 2005, compared with $1.7 million in the first quarter of 2004. General and administrative expenses in the first quarter of 2005 included a bad debt expense recovery of $184,000 relating to a partial recovery of an outstanding receivable that was written off in the first quarter of 2004; the recovery resulted in a $684,000 change in bad debt expense from the first quarter of 2004 to the first quarter of 2005. In addition, legal and audit related fees increased $119,000 in the first quarter of 2005 compared to the first quarter of 2004, primarily due to costs related to compliance with the requirements of the Sarbanes-Oxley Act of 2002. Costs for contract labor and temporary workers increased $93,000 in the first quarter of 2005 compared to the same period in 2004. Salaries and benefits expense increased $209,000 to $728,000 in the first quarter of 2005 from $519,000 in the first quarter of 2004 due primarily to increased personnel in the finance and accounting department. In the first quarter of 2005, we also paid severance to our former Chief Financial Officer in the amount of $105,000.

We anticipate that general and administrative expenses will increase in future periods due to growing compliance requirements and increasing infrastructure costs as the business grows.

Other items. Loss on operating lease In March 2004, we signed a non-cancelable operating lease for a new office facility in Minnetonka, Minnesota. The new lease term started in February 2005 and expires in January 2012. We moved into the Minnetonka location and moved out of our Plymouth, Minnesota location in February 2005. Our office facility in Plymouth expires on July 31, 2005 with the exception of a small portion of the space that is under lease until May 31, 2006. Under the terms of the new lease, the Minnetonka lessor will pay the monthly base rent payments and taxes and operating cost rent obligation payments for our former office facility in Plymouth beginning in February 2005. In the first quarter of 2005, we recorded a lease loss of $493,000 related to the abandonment of the Plymouth office facility. The estimated lease payments to be made by the Minnetonka landlord to the Plymouth landlord are considered a lease incentive and recorded as an immediate charge and deferred rent, which is amortized as a reduction of rent expense through the term of the lease.

Acquired in-process research and development Results for the first quarter of 2004 included a $1.0 million write-off of in-process research and development costs related to the HInnovation acquisition.

Interest income. Interest income increased to $163,000 from $65,000 for the three months ended March 31, 2005 and 2004, respectively, due to increasing interest rates and to a higher average balance of cash, cash equivalents and marketable securities during the period in 2005 compared with the same period in 2004.

Income taxes. Our quarterly consolidated effective income tax rate was 33.3% for the three months ended March 31, 2005, which is based on our estimated effective income tax rate for fiscal 2005, compared to 14.2% for the same period in 2004 and the consolidated effective income tax rate of 66.5% for fiscal 2004. The 2005 effective income tax rate is anticipated to be lower than our combined federal and state statutory rates of 38% as a result of research and development credits, which are a direct reduction of taxes. The 2004 effective income tax rate was impacted by the $1.0 million in-process research and development costs related to the HInnovation acquisition, which was not tax deductible.

The provision for income taxes consists of provisions for federal and state income taxes. Losses incurred by our China subsidiary are not recognized as a benefit to the provision for income taxes because such losses are fully reserved, as it has been determined that it is more likely than not that no tax benefit will be realized relating to these losses in the future. The consolidated income tax rate is a composite rate reflecting the earnings in the various locations and the applicable rates.

We review our annual effective income tax rate on a quarterly basis and make changes as necessary. The estimated annual effective income tax rate may fluctuate due to changes in forecasted annual operating income; changes to the valuation allowance for net deferred tax assets; changes to actual or forecasted permanent book to tax differences; impacts from future tax settlements with state, federal or foreign tax authorities; or impacts from tax law changes. In addition, we identify items which are not normal and recurring in nature and treat these as discrete events. The tax effect of discrete items is booked entirely in the quarter in which the discrete event occurs.

Our effective income tax rate can be volatile because based on the level of operating income achieved, the level of research and development credits available to us, the mix between our U.S. operating results, for which we record income taxes, and our foreign operating results, for which we do not record an income tax benefit due to the uncertainty of realizing these tax benefits in future years in our foreign jurisdictions. Based on current estimates, we anticipate an effective tax rate of 30% to 35% for fiscal 2005. Any future valuation allowance recorded on our net deferred tax assets of $9.3 million as of March 31, 2005 would have an adverse effect on our tax provision and results of operations.

Years Ended December 31, 2004 and 2003

Revenue. Total revenue increased 32% to $36.1 million in 2004 from $27.3 million in 2003. Total revenue increased 29% to $27.3 million in 2003 from $21.1 million in 2002. The revenue growth was driven by the increase in our core revenue components of software license fees and maintenance and service revenue. License fee revenue increased 31% to $24.1 million from $18.4 million in 2003 and increased 29% to $18.4 million in 2003 from $14.2 million in 2002. The increase in software license fee revenue was driven by an increase in the number of *Vitrea 2* licenses sold, principally to Toshiba Medical Systems Corporation (Toshiba), and an increase in the number of Vitrea add-on options sold. In addition, the sale of third-party software products increased to $1.8 million in 2004 from $194,000 in 2003. The installed base of Vitrea customers increased from approximately 850 at December 31, 2002, to approximately 1,300 at December 31, 2003, and to approximately 1,900 at December 31, 2004. The number of Vitrea add-on modules we sold increased from approximately 660 in 2002, to 1,200 in 2003, and to 2,400 in 2004.

Maintenance and services revenue increased 39% to $9.5 million for 2004 compared to $6.8 million for 2003 and increased 70% to $6.8 million in 2003 from $4.0 million in 2002. Of the $2.7 million increase for 2004 compared to 2003, $2.0 million consisted of an increase in

maintenance revenue and $1.1 million was an increase in training revenue. The increases for 2004 were partially offset by a $380,000 decrease in engineering services rendered under product development agreements with Medtronic Surgical Navigation Technologies (SNT), E-Z-EM, Inc. and Toshiba and a $44,000 decrease in installation revenue due to Toshiba performing its own installations of *Vitrea 2*. The increase in training revenue in 2004 was due in part to the introduction of

the offsite regional training program. Maintenance revenue increased $2.8 million from 2002 to 2003. Maintenance revenue increased in all periods primarily due to an increased customer base and improved pricing.

For 2004, we generated 57% revenue growth from the sale of *Vitrea 2* options, including *VScore* , CT Colonography, Automated Vessel Measurements and CT Cardiac. The sale of *Vitrea 2* options totaled $14.1 million for 2004 compared with $9.0 million for 2003 and $6.0 million for 2002. For 2004, software license fee revenue from sales to Toshiba totaled $12.9 million compared with $8.3 million for 2003 and $6.0 million for 2002. Toshiba represented 50%, 42% and 34% of total revenue in 2004, 2003 and 2002, respectively.

Hardware revenue increased 23% to $2.5 million in 2004 from $2.1 million in 2003. The increase from 2003 to 2004 was due to price increases in hardware and overall increases in sales of *Vitrea* licenses. Hardware revenue decreased 28% to $2.1 million in 2003 from $2.9 million in 2002. The decrease from 2002 to 2003 was due to a decrease in the number of complete system sales and lower unit pricing for hardware platforms shipped in 2003.

Gross Margin. Our gross margin was 71% in 2004, down from 74% in 2003, in part due to the increase in the cost of third-party software, which is up $1.1 million over 2003. In addition, $976,000 of expense was incurred due to amortization of intangibles throughout the year related to the HInnovation acquisition that was charged to cost of revenue. These factors led to reduced software margins of 83% in 2004, compared to 90% in 2003. Maintenance and services margins were 51% in 2004, up from 45% in 2003, in part due to changes in pricing structure for maintenance and training services. Hardware margins were 30% in 2004 compared to 28% in 2003. Gross margin in 2003 increased to 74% from 70% in 2002, as total revenue included higher margin license revenue and less hardware revenue, which carries a lower margin.

Sales and Marketing. Sales and marketing expenses were $12.2 million, $9.3 million and $6.8 million for 2004, 2003 and 2002, respectively. The increases were mostly due to increases in compensation costs as a result of additional personnel required to drive and support recent growth and increased sales commissions as a result of increased revenue. Compensation costs, including commissions, increased $1.8 million from 2003 to 2004 and $1.5 million from 2002 to 2003, due to more sales and marketing personnel and higher commissions related to the increase in revenue. There were 53, 42, and 33 sales and marketing personnel as of December 31, 2004, 2003 and 2002, respectively. Due to the increase in the number of personnel from 2003 to 2004, travel and entertainment expenses increased $440,000. Tradeshow, advertising and marketing brochure costs increased $425,000 and $65,000 from 2003 to 2004 and 2002 to 2003, respectively, because we attended more tradeshows and increased our presence at tradeshows by purchasing more booth space.

From 2002 to 2003, there was a $356,000 increase in expenses related to utilizing outside consultants to help sell and promote *Vitrea 2* and related options for 2003 as compared to 2002. We expect sales and marketing costs to increase in future periods as a result of the cost of additional sales and marketing personnel and increased sales of our product.

Research and Development. Research and development expenses were $6.3 million, $5.2 million and $4.1 million in 2004, 2003 and 2002, respectively. Of the $1.2 million expense increase from 2003 to 2004, $677,000 was due to increased

compensation costs resulting from additional personnel supporting software and product development and additional employees related to our acquisition of HInnovation, Inc. Total research and development personnel increased from 38 at December 31, 2003 to 50 at December 31, 2004.

Due to more training and increased personnel, training and hiring costs increased $64,000 from 2002 to 2003, respectively. There was a $189,000 expense increase due to a decrease in expenses classified in cost of revenue in connection with engineering services provided to certain third parties under various product development agreements in 2003 as compared to 2002. We anticipate that research and development costs will

increase in future periods as we develop software tools for applications with large potential markets, such as cardiovascular disease, disease screening applications such as colon cancer, and surgical and therapy planning.

General and Administrative. General and administrative expenses were $5.6 million, $3.8 million, and $3.2 million in 2004, 2003 and 2002, respectively. Of the $1.8 million increase from 2003 to 2004, $404,000 was due to an increase in compensation costs related to additional personnel. Fees related to accounting, legal, consulting, regulatory filings and temporary worker services increased $518,000 in 2004. These fees were primarily due to costs related to implementation of Section 404 of the Sarbanes-Oxley Act of 2002, as well as additional costs incurred as a result of a restatement at the end of the third quarter of 2004. In addition, bad debt expense increased $580,000 during 2004 as a result of reserves established for specific accounts in the first quarter of 2004. Total general and administrative personnel increased from 21 at December 31, 2003 to 23 at December 31, 2004.

Legal fees increased $227,000 during 2003 as compared to 2002 due to business development, patent work and SEC filings related to the registration statement covering the resale of shares from a private placement in June 2003. Registration and filing fees increased $104,000 in 2003 as compared to 2002, which includes a $100,000 NASDAQ National Market registration fee. This registration fee was paid for the first time in June 2003 when our common stock qualified for listing on the NASDAQ National Market. These increases were partially offset by a $230,000 decrease due to severance costs paid in 2002 to our former chief executive officer. We believe that general and administrative expenses will increase in future periods due to increased infrastructure costs as the business grows and as the legal and regulatory environment continues to place increased emphasis on administrative functions.

Operating Income. The increased revenue from *Vitrea 2* and add-on software options and related service revenues, net of the increased expenses attributable to the development of our infrastructure and the development and promotion of the *Vitrea 2* product, resulted in operating income of $514,000 for 2004 compared with $1.9 million for 2003 and $677,000 for 2002.

Operating income was $514,000 in 2004, which included amortization of identified intangibles of $1.1 million and an acquired in-process research and development charge of $1.0 million related to the acquisition of HInnovation, compared to $1.9 million in 2003.

Interest Income. There was $368,000 of interest income for 2004, compared with $214,000 in 2003 and $135,000 in 2002. These increases were primarily due to increases in cash, cash equivalents and marketable securities. The increases in cash, cash equivalents and marketable securities were due to the increased cash flows from operations from 2002 to 2003 and from 2003 to 2004 and the $19.0 million of cash generated from the private placement in June 2003.

Income Taxes. Our methodology for determining the realizability of our deferred tax assets involves estimates of future taxable income from our core business, the estimated impact of future tax deductions from the exercise of stock options outstanding as of December 31, 2004, and the expiration dates and amounts of net operating loss carryforwards and other tax credits. These estimates are projected through the life of the related deferred tax assets based on assumptions which management believes to be reasonable and consistent with current operating results.

Although we had cumulative pre-tax income for financial reporting purposes for the three years ended December 31, 2004, we did not pay any significant income taxes over that period due to tax deductions from the exercise of stock options as well as utilization of net operating losses. In assessing the realizability of our deferred tax assets as of December 31, 2004, we considered evidence regarding our ability to generate sufficient future taxable income to realize our deferred tax assets. The primary evidence considered included the cumulative pre-tax income for financial reporting purposes for the past three years; the cumulative tax operating

loss for the past three years; the estimated impact of future tax deductions from the exercise of stock options outstanding as of December 31, 2004; and the estimated future taxable income based on historical operating results.

After giving consideration to these factors, we concluded that it was more likely than not that tax loss carryforwards that expire in 2005 and other tax credits that expire within the next four years will not be utilized due to the estimated future tax deductions from the exercise of stock options outstanding as of December 31, 2004. As a result, we recorded a valuation allowance of $183,000 for the year ended December 31, 2004. We also recorded a valuation allowance of $43,000 relating to 2004 foreign net operating losses that are subject to uncertainty regarding utilization and, therefore, a full valuation allowance was recorded.

We also concluded that it was more likely than not that the net deferred tax assets of $9.1 million as of December 31, 2004 and the estimated future tax deductions from the exercise of stock options outstanding as of December 31, 2004 would be utilized prior to expiring. Based on this conclusion, we would require approximately $42 million in cumulative future taxable income to be generated at various times over the next 20 years to realize the related net deferred tax assets of $9.1 million as of December 31, 2004 as well as the estimated future tax deductions from the exercise of stock options outstanding and in-the-money as of December 31, 2004.

If we adjust our estimates of future taxable income or tax deductions from the exercise of stock options, or if our stock price increases significantly without a corresponding increase in taxable income, we may need to establish additional valuation allowances, which could materially impact our financial position and results of operations.

During 2003, we concluded that it is more likely than not that substantially all of our net deferred tax assets would be realized, and we reversed substantially all of our valuation allowance for net deferred tax assets, which resulted in the recording of a net tax benefit in 2003. The reversal of the deferred tax assets valuation allowance is based upon our historical operating performance and management s expectation that we will generate taxable income of at least $25 million in future periods to allow us to realize our deferred tax assets resulting from the tax benefits associated with our net operating loss carryforwards and a significant portion of our research and development tax credit carryforwards, as well as certain other tax benefits related to book and tax income timing differences. The reversal of the valuation allowance resulted in a tax benefit of $7.2 million. This reversal net of other current year state and federal income taxes resulted in a net tax benefit of $6.5 million in 2003.

Our effective income tax rate is volatile based on the level of operating income achieved, the level of research and development credits available to us, the mix between our U.S. operating results, for which we record income taxes, and our foreign operating results, for which we do not record an income tax benefit due to the uncertainty of realizing these tax benefits in future years in our foreign jurisdictions. Based on current estimates, we anticipate an effective tax rate of 36% to 39% for fiscal 2005. Any future valuation allowance recorded on our net deferred tax assets of $9.1 million as of December 31, 2004 would have an adverse effect on our tax provision and operating results.

The income tax provision for 2002 consists solely of certain state minimum fees. As a result of our history of generating net operating losses, we had established a valuation allowance to completely reserve for our deferred tax asset at December 31, 2002.

Liquidity and Capital Resources

As of March 31, 2005, we had $32.9 million in cash, cash equivalents, and marketable securities, working capital of $33.3 million and no borrowings, as compared to $35.7 million in cash, cash equivalents, and marketable securities, working capital of $31.0 million and no borrowings as of December 31, 2004.

Operating Activities

During the three months ended March 31, 2005, cash used in operations was $1.6 million, which consisted of a decrease of $4.4 million from changes in working capital accounts offset by $2.8 million increase from other operating activities. Changes in the working capital accounts primarily related to a $5.7 million increase in accounts receivable due to an increase in days sales outstanding on an annualized basis to 113 days as of March 31, 2005 from 67 days as of December 31, 2004 (based on the fourth quarter on an annualized basis). The increase in days sales outstanding was primarily due to a significant increase of $3.7 million in current accounts receivable to $9.9 million from $6.2 million, as the majority of sales were closed in the second half of the first quarter of 2005 and payment was not due until the second quarter of 2005. Another component of the increase in days sales outstanding included a deterioration of accounts receivable aging. Other significant changes in working capital accounts consisted of: an increase of $1.6 million in deferred revenue due to increased sales and customer base; a decrease of $1.6 million in accrued liabilities due to the payout of the 2004 annual bonus in the first quarter of 2005 as well as the payout of accrued commissions as of December 31, 2004 in the first quarter of 2005; and an increase of $1.2 million in deferred rent relating to payments and estimated payments to be made by our Minnetonka landlord for our benefit.

During the three months ended March 31, 2004, cash provided by operations was $553,000, which consisted of an increase of $31,000 from changes in working capital accounts and an increase of $522,000 for other operating activities. Changes in the working capital accounts primarily related to an increase of $1.2 million in accounts receivable due to increased revenues. Other significant changes in working capital accounts consisted of an increase of $829,000 in deferred revenue due to increased sales and customer base in the first quarter of 2004.

Investing Activities

We used cash of $2.2 million and $12.1 million for investing activities during the first three months of 2005 and 2004, respectively.

We used $2.1 million and $147,000 of cash for property and equipment purchases during first three months of 2005 and 2004, respectively. The purchases in the first quarter of 2005 were related to our move to a new office facility in February 2005, which included expenditures for leasehold improvements, furniture and equipment. Management anticipates that we will continue to purchase property and equipment as necessary in the normal course of business. The amount and timing of these purchases and the related cash outflows in future periods is difficult to predict and depends on a number of factors, including the hiring of employees and the rate of change of computer hardware.

We used $3.1 million and $6.9 million of cash to purchase marketable securities during first three months of 2005 and 2004, respectively. We realized $3.0 million and $1.5 million of proceeds from sales of marketable securities during the first three months of 2005 and 2004, respectively. The marketable securities are invested in U.S. government obligations, U.S. government agency obligations, corporate commercial obligations and certificates of deposits.

Financing Activities

Cash provided by financing activities totaled $1.1 million and $526,000 for the three months ended March 31, 2005 and 2004, respectively. The cash provided by financing for the first three months of 2005 and 2004 resulted from the sale of common stock under our stock plans.

We have never paid or declared any cash dividends and do not intend to pay dividends in the near future.

The following summarizes our contractual obligations due each period, including purchase commitments as of March 31, 2005 and the effect such obligations are expected to have on our liquidity and cash flow:

	Payments Due by Year					
	Remainder of 2005	2006	2007	2008	2009	2010 through 2013
Non-contingent Obligations:						
Operating leases (1)	$ 493,000	$ 471,000	$ 618,000	$ 711,000	$ 742,000	$ 821,000
Contingent Obligations:						
Revenue commitment (2)	827,500	1,655,000	2,482,500			
HInnovation acquisition (3)	4,500,000					
	$ 5,820,500	$ 2,126,000	$ 3,100,500	$ 711,000	$ 742,000	$ 821,000

(1) We currently lease our office facilities in Minnetonka, Minnesota under a lease that expires in January 2012. In March 2004, we signed a non-cancelable operating lease for new office space. The new lease term started in February 2005 and expires in January 2012. Under the terms of the new lease, the lessor for the Minnetonka office began making the minimum lease payments for our former facilities located in Plymouth, Minnesota in February 2005. As part of the new lease, we are also required to pay a portion of the lessor s operating costs for the new facilities. The minimum lease payments listed include both the Plymouth and Minnetonka office locations.

(2) In April 2005, we entered into a new agreement with R2 Technology, Inc. (R2) to market R2 s lung nodule CAD software product to our customers. The new agreement replaces our November 2002 agreement with R2. Under the new agreement, all previous commitments were cancelled and replaced with a new commitment. Beginning in the third quarter of 2005, we have committed to R2 certain minimum revenues from the sale of R2 products over a 12-quarter period. We will receive a commission from R2 as consideration for our marketing efforts and access to our customers. This commission will be the only revenue we will recognize under the new agreement. The new agreement states that to the extent the quarterly minimum revenue commitments are not met, we will pay R2 the difference between the minimum revenue commitment and the actual revenues achieved (shortfall payments). The maximum total revenue commitment over the 12-quarter period beginning in the third quarter of 2005 is $5.0 million. However, beginning in the second quarter of 2006, the quarterly minimum revenue commitments will be reduced i) to the extent revenue generated by R2 under this agreement is below the minimum revenue commitment or ii) to the

extent R2 is unable to generate revenue outside of its relationship with us. If R2 generates no revenue under this agreement, the estimated maximum shortfall payments would total approximately $2.5 million.

(3) We have a contingent consideration agreement related to the acquisition of HInnovation, Inc. in February 2004. The contingent consideration consists of a maximum of $6.0 million of contingent milestone payments comprised of $3.0 million in common stock and $3.0 million in cash. The contingent milestone payments are based on 1) the achievement of certain revenue targets resulting from the sale of products containing HInnovation technology during the period from the closing date of the acquisition through March 25, 2005; 2) the porting of Vital Images product to HInnovation s product platform and the commercial launch thereof; and 3) licensing the HInnovation patented technology within 24 months after the closing date, which is February 18, 2006. The number of shares issued under the contingent milestone payments will be determined based on the average closing price of our common stock during the 10 trading days before completion of the milestone objective. However, the Acquisition Agreement provides that the number of shares of Vital Images common stock comprising the contingent consideration cannot exceed 300,000 shares. If, at the time of its issuance, the value of such stock is less than $3.0 million due to this limitation on the number of shares, we will pay the shortfall in cash. Any contingent payments made by us will result in an increase in goodwill.

As of March 31, 2005, no contingent payments had been earned. As of March 31, 2005, the remaining potential maximum contingent consideration was $4.5 million, which consisted of $3.0 million in common stock and $1.5 million in cash.

If our operations progress as anticipated, of which there can be no assurance, management believes that our cash and cash equivalents on hand and generated from operations should be sufficient to satisfy our cash requirements, including commitments, for at least the next 12 months. The timing of our future capital requirements, however, will depend on a number of factors, including the ability and willingness of physicians to use three-dimensional visualization and analysis software in clinical diagnosis, surgical planning, patient screening and other diagnosis and treatment protocols; our ability to successfully market our products; our ability to differentiate our volume rendering software from competing products employing surface rendering or other technologies; our ability to build and maintain an effective sales and distribution channel; the impact of competition in the medical visualization business; our ability to obtain any necessary regulatory approvals; and our ability to enhance existing products and develop new products on a timely basis. To the extent that our operations do not progress as anticipated, additional capital may be required. There can be no assurance that any required additional capital will be available on acceptable terms or at all, and the failure to obtain any such capital would have a material adverse effect on our business.

Foreign Currency Transactions

Substantially all of our foreign transactions are negotiated, invoiced and paid in U.S. dollars.

Inflation

Management believes inflation has not had a material effect on our operations or on our financial condition.

Quantitative and Qualitative Disclosures About Market Risk

Market risk refers to the risk that a change in the level of one or more market prices, interest rates, indices, volatilities, correlations or other market factors such as liquidity will result in losses for a certain financial instrument or group of financial instruments. We do not hold or issue financial instruments for trading purposes, and we do not enter into forward financial instruments to manage and reduce the impact of changes in foreign currency rates because substantially all of our foreign transactions are negotiated, invoiced and paid in U.S. dollars. Based on the controls in place and the relative size of the financial instruments entered into, we believe the risks associated with not using these instruments would not have a material adverse effect on our consolidated financial position or results of operations.

In addition, we do not engage in speculative transactions and do not use derivative instruments or engage in hedging activities. See the Notes to the Consolidated Financial Statements for a description of our accounting policies and other information related to these financial instruments.

In the normal course of business, we are exposed to market risks, including changes in interest rates and price changes that could affect our operating results. As of March 31, 2005, fluctuations in interest rates, exchange rates and price changes would not have had a material effect on our financial position or operating results.

Interest Rate Risk

We place our cash and cash equivalents, which generally have a term of less than 90 days, with a high-quality financial institution and have investment guidelines relative to diversification and maturities designed to maintain safety and liquidity. As of March 31, 2005, we had cash and cash equivalents totaling $21.4 million.

Due to the short-term nature of these instruments, the carrying value approximates market value. If, during 2005, average short-term interest rates decreased by 1.0% from 2004 average rates, our projected interest income from short-term investments would decrease by approximately $214,000, assuming a similar level of investments in 2005.

Price Risk

As of March 31, 2005, we held marketable securities with an aggregate fair market value of $11.5 million. All of our marketable securities are classified as available-for-sale and all mature in one year or less. Available-for-sale investments are recorded at market value, which is based on quoted market prices, with unrealized holding gains and losses included as a separate component of stockholders equity. We use a specific identification cost method to determine the gross realized gains and losses on the sale of our securities. Had market prices of such securities declined 10% as of March 31, 2005, the values of these instruments would have decreased by approximately $1.2 million.

Foreign Currency Risk

Substantially all of our foreign transactions are negotiated, invoiced and paid in U.S. dollars. Therefore, fluctuations in the value of the dollar as compared to other foreign currencies have not had an effect on us.

Recent Accounting Pronouncement

In December 2004, the Financial Accounting Standards Board (FASB) issued SFAS No. 123 (revised 2004), Share-Based Payment. SFAS No. 123R supersedes APB Opinion No. 25, which requires recognition of an expense when goods or services are provided. SFAS No. 123R requires the determination of the fair value of the share-based compensation at the grant date and the recognition of the related expense over the period in which the share-based compensation vests. SFAS No. 123R permits a prospective or two modified versions of retrospective application under which financial statements for prior periods are adjusted on a basis consistent with the pro forma disclosures required for those periods by the original SFAS No. 123. We are required to adopt the provisions of SFAS No. 123R effective January 1, 2006, at which time we will begin recognizing an expense for unvested share-based compensation that has been issued or will be issued after that date. Under the retroactive options, prior periods may be restated either as of the beginning of the year of adoption or for all periods presented. We have not yet finalized our decision concerning the transition option we will utilize to adopt SFAS No. 123R. We are currently assessing our stock-based compensation strategy and related tax implications. Future stock-based compensation may differ from pro forma amounts. We expect the impact of the adoption of SFAS No. 123R to be material to our consolidated financial statements.

Forward-Looking Statements

This prospectus contains certain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and information that is based on management s beliefs as well as on assumptions made by, and upon information currently available to, management. When used in this prospectus, the words expect, anticipate, intend, plan, believe, seek, and estimate or similar expressions are intended identify such forward-looking statements. However, this prospectus also contains other forward-looking statements. Forward-looking statements are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions including, but not limited to, the following factors, which could cause our future results and shareholder values to differ materially from those expressed in any

forward-looking statements made by us or on our behalf: the dependence on market growth of the industry in which we operate; the extent to which our products gain market acceptance; the potential for litigation regarding patent and other intellectual property rights; the introduction of competitive products by others; dependence on major customers; fluctuations in quarterly results; the progress of product development; the availability of third party

reimbursement; and the receipt and timing of regulatory approvals and other factors detailed from time to time in our filings with the Securities and Exchange Commission, including those set forth under the heading Risk Factors included in this prospectus.

BUSINESS

We are a provider of enterprise-wide advanced visualization and analysis solutions for use in clinical diagnosis, disease screening applications, and therapy planning. Our technology utilizes high-speed volume visualization and analysis, as well as network communications based on DICOM and Internet protocols. *Vitrea*® 2, our flagship software, rapidly creates accurate, interactive 2D, 3D, and 4D images from 2D information generated by standard computed tomography (CT), magnetic resonance (MR), and positron emission tomography (PET) scanners. *ViTALConnect* , our Web enabled medical diagnostic tool, allows physicians anywhere, anytime access to interactive 2D, 3D, and 4D advanced visualization.

Our strategy is to address the growing interest among radiologists, cardiologists, oncologists and other specialists to improve their workflow and productivity. Our products provide clinical benefits and allow physicians to collaborate with their peers via Web and picture archiving and communications systems (PACS)-based solutions. PACS enable hospitals and clinics to acquire, distribute and archive medical images and diagnostic reports, eliminating the need for film and enhancing productivity.

We offer two primary software products, *Vitrea* and *ViTALConnect*. *Vitrea* is our flagship advanced visualization product for radiological and surgical applications. *Vitrea* provides image clarity, processing speed, and simplicity and allows clinicians to screen for disease, diagnose less invasively, and plan treatments more accurately. We offer several optional modules so clinicians can customize their *Vitrea* workstations for their specialties. These modules include the following: 3D Angio, Automated Vessel Measurements, CT Brain Perfusion, CT Cardiac, CT Colon, Fusion7D , ImageChecker CT, Lung, SoftRead, Vessel Probe, and VScore. *Vitrea 2* is offered both as a stand-alone software package and as part of an integrated software and hardware system, consisting of *Vitrea 2* software installed on a computer workstation. We licensed approximately 1,900 copies of *Vitrea* and *Vitrea 2* to hospitals, clinics, imaging centers and other sites.

As specialists outside the radiology department increasingly rely on *Vitrea* as a diagnostic and communications tool, demand for access to advanced visualization is growing across the healthcare enterprise. To address this market opportunity, we are forming strategic distribution partnerships with PACS providers and promoting the capabilities of *ViTALConnect*, our thin-client Web-based solution.

ViTALConnect allows physicians and other users to access 2D, 3D and 4D enterprise-wide advanced visualization capabilities, including the ability to measure, rotate, analyze and segment images, all with a personal computer using a Web-enabled browser, thus allowing access to advanced visualization from anywhere and at any time, including critical patient situations. With *ViTALConnect*, users can employ a PC or notebook computer to process, analyze, review and distribute multi-dimensional medical images securely over the Web. In addition, a collaboration mode lets several physicians in different locations confer while interacting with the same images in real time.

Our enterprise-wide advanced visualization and analysis software solutions are used with medical diagnostic equipment, primarily in clinical diagnosis, disease screening and therapy planning. Our software applies proprietary computer graphics and image processing technologies to a wide variety of data supplied by CT, MR and PET scanners to allow medical clinicians to create 2D, 3D and 4D views of human anatomy and to non-invasively navigate within these images to better visualize and understand internal structures and pathologies. We market *Vitrea 2* and

ViTALConnect both as standalone software packages and as part of integrated software and hardware systems to radiologists, surgeons, primary care physicians and medical researchers. We market our products directly to end-user customers, such as hospitals and clinics, and to

diagnostic imaging companies, digital imaging equipment manufacturers and PACS companies, who sell our products in conjunction with products they either manufacture or acquire from third parties.

Our products work with equipment from all major manufacturers of diagnostic imaging systems, including Toshiba Medical Systems Corporation, GE Medical Systems, Siemens Medical Systems, Inc. and Philips Medical Systems, and can be integrated into PACS, such as those marketed by McKesson Information Systems, Sectra and Stentor.

We were founded and incorporated in Iowa in September 1988, and we re-incorporated in Minnesota in March 1997. Our principal executive offices are located at 5850 Opus Parkway, Suite 300, Minnetonka, MN 55343 (telephone (952) 487-9500, facsimile (952) 487-9510, e-mail info@vitalimages.com). From May 24, 1994 through May 11, 1997, we were a wholly-owned subsidiary of Bio-Vascular, Inc., which is now known as Synovis Life Technologies, Inc.

The Offering

This prospectus relates to the resale of 1,934,597 outstanding shares of common stock and up to an additional 300,000 shares that we may issue as described below. Of the outstanding shares, 58,335 shares were issued in connection with our private placement in December 1999. An additional 1,500,000 of the outstanding shares were issued in connection with our private placement completed in June 2003. We issued the remaining 376,262 outstanding shares to former shareholders of HInnovation, Inc. in our acquisition of HInnovation, Inc. completed in February 2004. We must issue up to an additional 300,000 shares of common stock to these shareholders upon the achievement of a performance milestone as provided in our Acquisition Agreement and Plan of Reorganization with HInnovation, Inc. dated January 8, 2004. The number of additional shares issued will depend on the market value of our common stock at the time of issuance, but the maximum number of shares we must issue is 300,000 shares.

Market Opportunity

Medical practices in the areas of diagnostic imaging, surgery and cancer treatment have changed dramatically over the past 20 years, due in part to the introduction of a variety of new imaging, visualization, analysis, computer, networking, catheter and navigation technologies. The result has been the rapid adoption and increased use of CT, MR and PET scanners and the incorporation of new physician-care practices based on the imaging information provided by these devices.

CT, MR and PET imaging technologies capture data that provide a physician with a graphical representation of the inside of the human body. These images have traditionally been viewed as a series of two-dimensional, cross-sectional slices on x-ray-type film. As computer processing speed increased, software performance improved and networking technologies developed, manufacturers of scanning equipment began offering integrated systems that allowed clinicians to view, analyze and manipulate these medical images in a digital environment.

Medical imaging systems first visualized individual slices, or pictures, on a computer monitor and later provided views of multiple slices. More recently, medical imaging systems began to permit viewing and manipulation of large, multiple slice data sets as a single, three-dimensional image on a computer workstation. Today, the enterprise-wide advanced visualization industry involves the creation, visualization, manipulation, analysis and communication of medical images in two, three and four dimensions (collectively, enterprise-wide advanced visualization

software).

Initially, the enterprise-wide advanced visualization industry and the markets for enterprise-wide advanced visualization products lagged the market for imaging devices due to the lack of industry standards for

the generation, transmission and storage of medical imaging data and due to computer costs and performance considerations. After a time, many of the technical and cost barriers to growth in the enterprise-wide advanced visualization industry and the PACS industry began to erode. In particular, the medical industry embraced an image transmission and archiving standard called Digital Imaging and Communications in Medicine (DICOM), which is promulgated by the American College of Radiology and the National Electronic Manufacturer s Association. This standard permits imaging, visualization, networking and archiving systems from different vendors to work cooperatively within a single network. In addition, the cost-to-performance ratio of computer products used in visualization and PACS has improved dramatically, bringing the prices for enterprise-wide advanced visualization capabilities and PACS within the grasp of most healthcare providers. We believe that the acceptance of industry standards such as DICOM and the improvements in the cost-to-performance ratio for clinical workstations will support continued market growth in the enterprise-wide advanced visualization and PACS industries.

We believe that growing acceptance of 3D medical imaging offers us numerous market expansion opportunities. Research and development efforts are currently focused on using our base of visualization technology to expand to other imaging modalities, such as x-ray angiography, as well as expanding the features and functions in the current modalities. We are also enhancing our enterprise-wide advanced visualization software tools for less-invasive screening applications, such as CT colonography for colon cancer screening, CT Lung to diagnose lung cancer and CT cardiac for diagnosis of heart disease.

The diagnostic medical imaging market continues to expand both its geographic boundaries and its definitive boundaries. Long defined as the market for CT, MR, PET, ultrasound and other imaging modalities, the diagnostic imaging market has grown to include both PACS and enterprise-wide advanced visualization systems, which have become integral technologies for many radiology practices around the world.

The use of enterprise-wide advanced visualization software and systems to assist in surgical planning and navigation has begun to emerge in clinical practice only in the last few years. Although enterprise-wide advanced visualization solutions have been used in these applications and to support cancer treatment planning in the past, we believe that perspective, three-dimensional volume rendering represents an underutilized resource to practitioners for diagnostic screening and radiology, surgical planning and navigation and cancer treatment planning.

Today, a minority of hospitals, clinics and imaging centers use enterprise-wide advanced visualization products in diagnostic imaging. Technological advances over the last several years in both computer hardware and software development have dramatically improved the cost-to-performance ratio, bringing the prices for enterprise-wide advanced visualization products within the reach of most healthcare providers. In addition, increasing clinical awareness, improving utility of applications and an exponential increase in CT slice volumes are driving demand for enterprise-wide advanced visualization products.

Hospitals recognize that PACS solutions, or picture archiving and communications systems, enhance workflow and boost productivity by eliminating the need to store and transfer bulky film. In fact, hospitals are investing in this area, and the PACS market is growing 30 percent annually. However, adopting a PACS solution is a significant investment for a hospital. Sales of PACS tend to encompass more decision makers and follow a longer sales cycle than sales of typical software systems. Ultimately, PACS opportunities involve more Vitrea licenses and make our software accessible to more physicians in an organization.

We also expect market growth due to a number of other advantages of enterprise-wide advanced visualization products, including the following:

Recent technology improvements in CT and MR scanners enable them to generate an increasing number of slices per exam, sometimes resulting in over 5,000 images, which is more than 30 times

as many images as were possible to obtain in exams five years ago. Obtaining this many printed images on traditional x-ray film is quite expensive and may be logistically impractical.

Medicare, Medicaid, private insurance companies and managed care organizations are increasingly approving reimbursement for procedures utilizing PET scanners, which has greatly increased the number of procedures performed. In addition, recent advances in integrating CT and PET technologies into a single scanner have also contributed to an increase in the number of procedures performed utilizing such technology. Through our partnership with Mirada Solutions Limited (Mirada), we offer an optional module to *Vitrea 2* that uses Mirada s fusion technology to provide clinicians with an integrated view of images generated by PET and PET/CT scanners.

The use of imaging procedures as medical planning tool procedures is growing, and physicians are increasingly recognizing the clinical value of enterprise-wide advanced visualization imaging. In addition, the Baby Boom generation has a strong interest in screening procedures for the early detection of cancer and heart disease. Accordingly, these factors are driving a demand for an increased number of scanning procedures.

Driven by a shortage of radiologists, hospital radiology departments are under pressure to perform as efficiently as possible. As a result, an increased workload must be completed with the same or fewer people. Speed in interpreting images is essential for increasing workflow productivity. Thus, there is a clear need for fast and efficient integrated 2D, 3D and 4D visualization and analysis tools, which can be used to generate and interpret images at a much greater speed than traditional X-ray technology.

Diagnoses based on 2D images, or slices, require the clinician to assemble a 3D view mentally to understand the true anatomy and pathology. Given the industry pressure to produce cost-effective outcomes, 3D visualization is a valuable tool for accelerating diagnoses, potentially eliminating unnecessary tests and treatment, optimizing the use of minimally invasive surgery and therapies, and gaining additional insight for clinical decisions.

Spatial relationships are of paramount importance in surgery, and 3D views displaying anatomy and pathology can greatly aid in surgical planning. Enterprise-wide advanced visualization has the potential to promote improved surgical outcomes by giving surgeons a better road map that they can use to plan their operative procedures. Interactive navigation of volume data from scanners may also have the capability to spare patients from invasive procedures like endoscopy or conventional angiography.

Increased use of enterprise-wide advanced visualization technology has the potential to enhance radiologists ability to communicate their findings to fellow clinicians, referring physicians and patients. In addition, the integration of these clinical disciplines through electronic visualization, networking and the Internet could allow for greater cross-discipline coordination due to increased speed, access to information and the resulting ability to perform consultative, interactive planning and examination on computer workstations.

Strategy

Our goal is to be a leading provider of enterprise-wide advanced visualization and analysis solutions that improve clinical outcomes and reduce costs. To achieve this goal, we intend to implement the following key strategies:

Develop and maintain leading-edge technology. We intend to continue our overall strategy of developing and marketing leading-edge enterprise-wide advanced visualization solutions for a variety of medical applications. As part of this strategy, we will continue to improve the speed and performance of *Vitrea 2* and *ViTALConnect* software. In particular, we will be focused on developing additional protocols that enhance the ease-of-use of *Vitrea 2* and *ViTALConnect*, as well as increasing the number of platforms on which the software operates.

Further develop applications for our enterprise-wide advanced visualization solutions. We intend to leverage our core competencies in volume rendering, computer graphics and clinical applications. We plan to develop and offer a full range of enterprise-wide advanced visualization solutions for diagnostic imaging, disease screening and therapy planning. We believe that significant new opportunities exist for the application of our innovative technologies for the diagnosis and treatment of cardiovascular disease, cancer and orthopedics.

Further penetrate the enterprise-wide advanced visualization market. We intend to expand our sales and marketing staff and increase our marketing efforts in order to continue building momentum for the acceptance and purchase of *Vitrea 2* and *ViTALConnect*. We have a multiple-point strategy to increase our market penetration. This strategy includes contacting and educating physicians and clinicians as to the benefits of our high-performance advanced visualization software; expanding our partnership with Toshiba; developing and growing our technology and marketing relationships with PACS vendors so that we can expand physician access within the healthcare enterprise through PACS- and Web-based solutions; offering high-performance advanced visualization software options, as well as maintenance and service, to our growing installed base; and working with other manufacturers of diagnostic imaging equipment and other hardware that works with enterprise-wide advanced visualization solutions. By convincing users of the benefits of our system, we believe that we can successfully influence purchasing decisions for medical institutions that are making initial purchases of or upgrades to their imaging technology. In addition, we will continue to work to expand our appeal by implementing additional 2D capability as well as ensuring that our technology will easily integrate into PACS networks.

Continue to seek collaborative partnerships with leading medical institutions. We have historically sought out and developed collaborative relationships with many prestigious medical institutions to develop and test our enterprise-wide advanced visualization solutions. We will continue to pursue collaborations to focus on developing products that will improve clinical outcomes and reduce costs for the practices of medical imaging and surgery.

Continue to seek collaborative partnerships with leading medical technology companies. In addition to collaborations with medical institutions, we intend to selectively pursue relationships with leading medical technology companies to expand our clinical, distribution, financial and/or technical capabilities for our enterprise-wide advanced visualization solutions. Such relationships include our development, marketing and/or distribution agreements with Toshiba America Medical Systems; the Surgical Navigation Technologies division of Medtronic, Inc.; E-Z-EM, Inc.; R2 Technology, Inc. (R2); McKesson Information Solutions (McKesson); Sectra; Mirada; and Stentor, Inc. Referring physicians, surgeons and other clinicians, who understand 3D and 4D images better than 2D images, are placing greater demands on radiologists. In fact, 3D images are becoming a common

language between radiology and the surgical and interventional worlds. Delivering *Vitrea* through a hospital s PACS solution, coupled with our floating license capabilities which give multiple end-users the opportunity to share access to enterprise-wide advanced visualization, is an efficient way to put advanced visualization in the hands of more

physicians throughout a healthcare enterprise. See Business-Marketing and Distribution, Intellectual Property and Manufacturing and Service.

Our Solution and Technology

Two core technologies underlying our products are customized protocols and a visualization technique known as volume rendering. We believe that our customized protocols make our products simple to use. This feature is critical to *Vitrea 2* s speed and ease-of-use, as it provides automated 2D, 3D and 4D renderings of scanner data, automated presentation of appropriate software tools, and automated image analysis algorithms optimized for individual clinical applications. Our engineers and clinical collaborators have selected specific views for each type of exam *Vitrea 2* supports in order to provide immediate, useful 2D, 3D and 4D views for the user. 4D is defined as 3D images showing changes over time, such as images of a beating heart. After the selected patient data has been retrieved, *Vitrea 2* provides the clinician with up to six views, with all visualization parameters pre-set for the specific type of clinical exam. The visualization settings for these views are stored in *Vitrea 2* s software and are automatically and adaptively applied to each patient study, optimizing the views displayed. By applying this proprietary protocol technique, the system anticipates the clinician s needs and immediately provides useful views of the patient data. The use of customized protocols automates the complex and time-consuming approaches inherent in many competing enterprise-wide advanced visualization products and eliminates the need for the user to be proficient in operating complex graphics programs. We have been issued Patent No. 5,986,662 from the U.S. Patent and Trademark Office for our mechanism for automated protocol selection, Patent No. 6,130,671 for the mechanism to calculate simulated lighting in 3D images, and Patent No. 6,219,059 for the user interface and mechanism used to control the relative transparency of 3D data in volume renderings of medical images.

Volume rendering is an advanced technique for displaying three-dimensional views on a computer monitor that we believe has significant advantages over the alternative technique, known as surface rendering. Volume rendering permits the direct display of all of the imaging data without mathematical modeling and allows interactive control of the level of transparency of the data. By comparison, surface rendering requires the creation of artificial surfaces based on selected imaging data, and the usefulness of the resulting visual image is largely dependent on where these surfaces are set by the clinical technician. Volume rendering is not dependent on the creation of artificial surfaces and allows visualization of varying components that might otherwise be eliminated from a surface rendered image due to surface approximation. Because volume rendering uses all of the data and information collected by the imaging equipment, we believe visualization processes that use volume rendering provide clinicians with better images to define and display pathology and anatomy in a more useful manner.

Enterprise-wide advanced visualization companies largely overlooked volume rendering because the computer power necessary to perform volume rendering was significantly more expensive and intensive than the requirements for surface rendering. Our experience with volume rendering has its basis in the efforts of Vincent J. Argiro, Ph.D., who founded Vital Images and developed enterprise-wide advanced visualization software using volume rendering as an aid in his research in developmental neuroscience. Dr. Argiro focused on accelerating the performance of volume rendering on standard computer platforms. As a result of his work, he developed expertise in accelerated volume rendering, which forms the core of our volume rendering technology. Because the performance of standard computer platforms has increased while the relative cost of such performance has decreased, we believe that volume rendering has become a more accessible imaging solution for routine clinical applications.

We believe the combination of customized protocols and accelerated volume rendering offered by our products, together with improved computer performance, allow us to deliver simple, fast and affordable enterprise-wide advanced visualization products.

Products and Product Development

License fees accounted for 65% of our total revenue in the quarter ended March 31, 2005 and 67% of our total revenue in each of the fiscal years ended December 31, 2004, 2003, and 2002, respectively. Maintenance and services comprised 30% of our total revenue in the quarter ended March 31, 2005 and 26%, 25% and 19% of total revenue for the years ended December 31, 2004, 2003, and 2002, respectively. Hardware sales accounted for 6% of our total revenue in the quarter ended March 31, 2005 and 7%, 8% and 14% of total revenue for the years ended December 31, 2004, 2003, and 2002, respectively.

Vitrea. *Vitrea 2* is our advanced medical imaging software for diagnostic evaluation of computed tomography (CT), magnetic resonance (MR) and positron emission tomography (PET) image data. *Vitrea 2* features real-time navigation of 3D volume data, permitting the user to create two- and three-dimensional views of human anatomy and to interactively navigate within these images to better visualize and understand internal structures and disease conditions. In addition, *Vitrea 2* utilizes an intuitive clinical workflow and automatic settings to improve speed and simplicity over other visualization techniques.

We conceived of Vitrea in December 1995, when we assessed our business strategy and determined that to optimize our dedicated participation in the medical field, we needed to create a new product for direct clinical application. The objective for this new product effort was to produce an easy-to-use clinical software tool to allow radiologists and other clinicians to use two- and three-dimensional visualization in their routine clinical processes. Specifications for this new product, called *Vitrea,* were developed in early 1996, with software development beginning in late spring of that year. We submitted 510(k) documentation in September 1996 for *Vitrea*, which was granted marketing clearance by the U.S. Food and Drug Administration (the FDA) in November 1996 for use as a clinical diagnostic and surgical planning device when used with CT and MR medical imaging data. *Vitrea* was first released for sale to customers in October 1997. Due to its speed and ease-of-use, we believe *Vitrea* was the first advanced visualization product with the ability to appeal primarily to the clinical market. Historically, 3D medical imaging software was slow, difficult to use, and operated only on expensive workstations. Consequently, the functionality of such software was appealing only for research applications. *Vitrea* combined speed with ease-of-use to enable a physician to access, manipulate and analyze 2D, 3D and 4D images, typically in less than five to ten minutes.

In December 1999, we released *Vitrea 2*, a Microsoft® Windows and Intel®-architecture-based version of our *Vitrea* software for 2D/3D visualization and analysis of medical image data. *Vitrea 2* was Vital Images first advanced visualization software product available for the Microsoft Windows operating system and provides the speed and ease-of-use the medical community demands for diagnosis and treatment planning in a clinical environment. In June 2004, we released *Vitrea 2 Version 3.5*, which has improved usability and networking features to meet the diagnostic, screening and therapy planning needs of busy radiology departments and operates on the Microsoft Windows XP operating system.

Vitrea 2 capitalizes on our experience in enterprise-wide advanced visualization and provides clinicians with an easy-to-use tool for disease screening, radiological diagnosis and therapy planning. It represents our most important step to date as a provider of a range of clinical tools for broad distribution to the enterprise-wide advanced visualization market. *Vitrea 2* s primary features are its high-speed rendering capability and its ability to provide 2D, 3D and 4D viewing for routine diagnosis and therapy planning without requiring the user to be trained in computer graphics techniques. We believe that both of these features − speed and ease-of-use − now make it possible to use enterprise-wide advanced visualization solutions in daily clinical routines. A *Vitrea 2* user, following a built-in clinical workflow, can view the image data in two, three or four dimensions using visualization settings based on specific clinical applications stored within the system as dedicated visualization protocols. The user may then interactively navigate around, or fly through, the image to view clinically relevant anatomies and pathologies. *Vitrea 2* software also allows the user to capture views by taking

snapshots, which can be integrated into customized reports for electronic transmission and archiving through a DICOM network or sent to another location via the Internet.

Vitrea 2 software conforms to the latest medical imaging and computer industry standards, such as the *OpenGL* computer graphics application programming interface and DICOM.

We offer *Vitrea 2* both as an integrated software and hardware system, consisting of *Vitrea 2* software integrated on a personal computer (PC), and as a stand-alone software package. Pursuant to purchasing arrangements we have with computer resellers, we purchase personal computers at a nominal discount, install *Vitrea 2*, and market the package as an integrated enterprise-wide advanced visualization solution. Some customers prefer to purchase their own hardware. For such customers, as well as when selling to our diagnostic imaging OEM and PACS partners, we sell software licenses only for use on hardware qualified for use with *Vitrea 2*. The list price for a base model integrated workstation and software package is approximately $87,000, and the list price for the *Vitrea 2* software without a workstation is approximately $72,000.

In addition to its immediate clinical applications, *Vitrea 2* software incorporates a number of additional technological advances, thereby making it adaptable to routine clinical use in surgical navigation and cancer treatment planning and for integration into diagnostic imaging equipment and PACS networks manufactured and sold by other companies. In particular, *Vitrea 2* software was written using advanced programming techniques, a modular, object-oriented design, C++ programming language, and a shared messaging structure. We believe these characteristics make it practical to modify *Vitrea 2* software to suit the clinical needs of surgical navigation and oncology, as well as allowing diagnostic equipment and PACS network manufacturers to integrate *Vitrea 2* software into their product offerings, thereby providing us the opportunity to leverage the *Vitrea 2* software development investment into new commercial areas.

Software options. We have developed a number of value-added software options that work with the base *Vitrea 2* software platform. These options provide a variety of clinical information for specialized uses. Our options include the following:

VScore . Our *VScore* software option allows clinicians to non-invasively quantify calcium in the four major coronary arteries using CT image data. We introduced *VScore* in August 1999, and it was the first add-on option to our *Vitrea 2* enterprise-wide advanced visualization software product.

CT Brain Perfusion. Our CT Brain Perfusion software option helps radiologists analyze blood flow of stroke victims where the speed of diagnosis and treatment is often the primary factor in determining the extent of recovery. We introduced CT Brain Perfusion in October 2001.

Innerview GI . Our Innerview GI software option generates 2D and 3D images of the entire colon, increasing the speed and ease of locating and analyzing polyps. This option provides a less invasive, more comfortable diagnostic procedure than previously possible, improving patient compliance for screening.

Automated Vessel Measurements. Our Automated Vessel Measurements software option helps physicians characterize the course and dimensions of diseased blood vessels. Automated Vessel Measurements is designed to support activities such as pre-surgical diagnosis, evaluation and stent planning in the abdominal aorta, carotid arteries, coronary arteries and renal arteries. We introduced Automated Vessel Measurements in October 2001.

CT Cardiac. Our CT Cardiac software option defines the coronary anatomy and the degree of luminal obstruction of the coronary arteries. It is commonly used to determine the extent of obstructive coronary artery disease and to assess the feasibility and appropriateness of various forms of therapy or surgical

interventions. We introduced CT Cardiac in February 2003. In the first quarter of 2005, we enhanced the CT Cardiac option with the addition of the cardiac functional analysis (CFA) capability that enables measurement of blood volume changes in the left ventricle of the heart.

Vessel Probe. Our Vessel Probe software option is a complementary product to the CT Cardiac software option. It is used to define vascular anatomy and the degree of luminary obstruction in vessels other than the coronary arteries. With this option, physicians can determine the extent of obstructive vascular disease and assess the feasibility of various forms of therapy or surgical interventions. We introduced Vessel Probe in December 2003.

Concurrent License. In December 2003, we introduced our Concurrent License option, which gives multiple end-users the ability to share a single *Vitrea 2* license within a facility. While limiting the number of simultaneous users to the number of *Vitrea 2* licenses purchased, the Concurrent License option allows *Vitrea 2* software to be accessed from multiple reading stations within an enterprise.

SoftRead. Our SoftRead option, when used in conjunction with concurrent licensing, allows physicians to view studies in 2D when the Vitrea workstation is already in use. It supports data from multiple sources of diagnostic equipment, and can provide comparisons between multiple studies.

CT Lung. Our CT Lung software option provides fast and simple-to-use visualization of nodules in the lung. CT Lung can play a key role in diagnosis, treatment, follow up comparisons and inter-departmental communication. The pre-market approval application for our CT Lung software option is currently being reviewed for approval by the FDA.

3D-Angio. Our 3D-Angio software option converts and displays Toshiba digital angiograms, allowing views of patient angiographic data in 2D and 3D from an unlimited number of viewing angles. Most of Vitrea s standard visualization capabilities for CT and MR images are available for use with 3D-Angio datasets.

ImageChecker® CT. Through our partnership with R2 Technology, Inc., we began offering the ImageChecker CT, which is a clinically-focused option that seamlessly integrates the ImageChecker® CT (ICCT) software into the Vitrea software. R2 Technology, Inc. s ICCT software is an advanced image analysis and visualization system designed to assist radiologists in the detection of pulmonary nodules during review of multidetector CT (MDCT) exams of the chest. This separately-licensed Vitrea option allows users to detect lung nodules and visualize studies of the chest from data acquired by a multi-slice CT scanner. There are two ImageChecker CT models: LN-500 a full-featured chest CT review system, and LN-1000 a full-featured, lung nodule detection system that uses computer-aided detection (CAD) technology.

Fusion7D . Through our partnership with Mirada Solutions, we offer the Fusion7D software option. Fusion7D is the only commercially available package with the deformable fusion component, making it the most comprehensive solution on the market. Fusion7D enables physicians to visualize images, fuse studies, calculate and display Standard Uptake Values and effectively communicate their findings to referring physicians. In addition, Fusion7D allows physicians to eliminate unnecessarily repeating an exam due to patient motion; accurately fuse images to combine anatomical and metabolic information about lesions; distinguish between scar tissue and tumor; and perform temporal comparisons, enabling physicians to monitor disease progression and therapy effectiveness.

ViTALConnect. *ViTALConnect* is a thin-client Web-enabled medical diagnostic tool that allows physicians to use PCs or notebook computers to access interactive 2D, 3D and 4D advanced visualization. Building on our knowledge and understanding of advanced diagnostic workflow, *ViTALConnect* offers users the

access that is critical in today s hospital enterprise. *ViTALConnect* enables users to make quick diagnostic decisions, review studies and perform advanced analysis from anywhere at any time. It is also a communications tool − *ViTALConnect* includes collaboration capabilities that enable multiple physicians in different locations to confer while interacting with the same data in real-time.

We acquired the predecessor product to *ViTALConnect* when we acquired HInnovation, Inc. in February 2004. HInnovation s core product, iConnection , was refined and re-introduced to the market in the fall of 2004 as *ViTALConnect.*

As specialists outside the radiology department increasingly rely on *Vitrea* as a diagnostic and communications tool, demand for access to advanced visualization is growing across the healthcare enterprise. *ViTALConnect* allows these specialists to use enterprise-wide advanced visualization. With *ViTALConnect*, users can employ a PC or notebook computer to process, analyze, review and distribute multi-dimensional medical images securely over the Web.

Maintenance and Support

In addition to system and software products, we also market maintenance and support services, as well as certain other services, such as installation and training. In connection with licensing *Vitrea 2* and *ViTALConnect* software, we offer annual maintenance and support services for both *Vitrea 2*and *ViTALConnect* software, as well as for the integrated *Vitrea 2* system, pursuant to which we provide software updates, minor feature enhancements, error correction, telephone support and other general support services. Our maintenance and support services do not include installation, training and other services, whether on- or off-site, which can be purchased separately. Additionally, because our products are classified by the FDA as medical devices, we are required by FDA regulations to provide certain levels of support to end-users, whether or not those end-users have purchased any maintenance or support services.

Marketing and Distribution

We market *Vitrea 2* and *ViTALConnect* both as standalone software packages and as part of integrated software and hardware systems to radiologists, surgeons, primary care physicians and medical researchers. We market our products directly to end-user customers, such as hospitals and clinics, and to diagnostic imaging companies, digital imaging equipment manufacturers and PACS companies, who sell our products in conjunction with products they either manufacture or acquire from third parties.

We have signed several agreements with manufacturers of complementary products in which we collaborate in marketing our products. Effective September 1, 2001, we signed a marketing and distribution agreement with Toshiba America Medical Systems (TAMS), a primary manufacturer of diagnostic equipment, which named *Vitrea 2* as TAMS primary 3D software for use with its CT scanners in the United States. In February 2002, we announced that we had entered into a marketing and distribution agreement with Toshiba Medical Systems Corporation to offer *Vitrea 2* to its subsidiaries and distributors, including TAMS, in more than 50 countries in North and South America, Europe, the Middle East, Africa, Australia and Asia, except Japan. The agreement has been amended three times. The third amendment, which we signed in March 2005, extended the Toshiba agreement through December 2006.

We work collaboratively on products and services in image-guided surgery and surgical planning with the Surgical Navigation Technologies (Medtronic SNT) division of Medtronic, Inc. Under our agreement with SNT, our advanced visualization technology will be integrated into

Medtronic SNT s image-guided surgery products, and the two companies will collaborate on new surgical planning software and service offerings. We also have an agreement with E-Z-EM, Inc. to market and develop our CT colonography product. We have a joint distribution agreement with McKesson Information Systems, a primary provider of PACS,

under which each company has been granted the right to distribute the other party s products. We also have a distribution agreement with Stentor, Inc. to integrate Vitrea with Stentor s iSite PACS solution a unique technology for distributing and managing images over the Web. Current and future Stentor customers will have the ability to access Vitrea at their Stentor workstations. In November 2004, we entered into an agreement with London-based Medicsight to integrate Medicsight s Colon CAR, or computer-assisted reader an image analysis software tool to detect colon polyps into InnerviewGI, our CT colon option.

We market our products directly to select OEMs on either a standard basis or, in the case of Medtronic SNT, on a customized basis. In connection with OEM opportunities, we either will provide complete systems for resale by such OEMs or will provide discrete elements of our technology for incorporation into the products and systems of such OEMs.

We market our products both domestically and internationally. In the United States, we market our products through a direct sales force as well as through OEMs and resellers. Internationally, we market our products through OEMs and resellers. See Note 9 to the Financial Statements - Major Customers and Geographic Data for information regarding our export sales.

Relationship with Toshiba Medical Systems Corporation. Our marketing and distribution agreement with Toshiba Medical Systems Corporation (Toshiba) names *Vitrea 2* as Toshiba s primary enterprise-wide advanced visualization software for use with their CT scanners in the United States and in more than 50 countries in North and South America, Europe, the Middle East, Africa, Australia and Asia, except Japan. Sales to Toshiba accounted for approximately 55% of our total revenue in the quarter ended March 31, 2005 and 50%, 42%, and 34% of our total revenue for the years ended December 31, 2004, 2003, and 2002, respectively. In March 2005, we signed an amendment to our agreement with Toshiba, renewing it through December 31, 2006.

Collaborative Relationships

We have formed collaborative relationships with some of the leading universities and physicians in medicine and medical imaging to develop what we believe to be the most innovative and clinically relevant medical imaging solutions. We have entered into clinical collaboration agreements with universities and physicians to:

Identify new clinical applications where enterprise-wide advanced visualization can improve clinical outcomes and reduce costs;

Assist in the development of clinical routines that incorporate our enterprise-wide advanced visualization solutions in normal diagnostic, screening and therapy planning practices;

Consult in the development of new features that facilitate and improve diagnosis and therapy planning for our future products;

Assess the clinical value of our enterprise-wide advanced visualization solutions for given applications; and

Develop automated rendering protocols for CT or MR data.

Our collaborative partners do not receive any ownership of technology we develop in connection with the collaboration, nor do they receive any fees or royalties under the collaboration agreements.

Competition

The enterprise-wide advanced visualization market is developing and growing rapidly. It is intensely competitive, subject to rapid change and significantly affected by new product introductions and other market activities of industry participants. Our primary competitors are diagnostic imaging system suppliers, which are typically large, multinational companies with far greater financial and technical resources. They also have well-established sales and distribution networks for their products. These companies, including GE Medical Systems, Siemens Medical Systems, Inc. and Philips Medical Systems, Inc., develop and market medical imaging systems, such as CT and MR equipment, which may be purchased with integrated medical imaging capabilities. Our software works on the products offered by each of these companies. In order to win business against equipment manufacturers, we must convince customers to buy our enterprise-wide advanced visualization software separately from their purchase of imaging equipment, instead of buying integrated systems from our competitors.

We also face competition from PACS vendors and other suppliers of medical imaging systems and software. PACS companies sometimes provide medical imaging capability in addition to their image archiving and networking products. Vendors of hospital, clinical and radiology information systems have also diversified into the PACS and medical imaging product lines, either through internal development or business development. These companies, which may be large or small, attempt to offer an integrated system covering a full range of administrative, clinical and radiology information management capabilities to healthcare providers. Other suppliers of medical imaging systems and software compete on the basis of volume rendering or other visualization technologies, specific applications or market niches. Most of these suppliers, including Voxar Ltd., Viatronix, Inc. and TeraRecon, Inc., are smaller than or similar in size to us.

Our competitive strength is based on several factors, including our ability to do the following:

Provide differentiated enterprise-wide advanced visualization and analysis solutions that operate in multi-vendor network and image source environments;

Provide clinical quality, integrated 2D, 3D and 4D images, volume rendered at high speed with interactive navigation on a relatively low-cost standard computer;

Integrate clinical knowledge from our collaborative clinical partners into our products;

Leverage our visualization technology across multiple clinical disciplines, including clinical diagnosis, disease screening and therapy planning;

Offer a DICOM client product, which can operate on any DICOM network, independent of the imaging system and network provider; and

Serve original equipment manufacturers (OEMs), PACS vendors and end-user customers through the development of a modular end-user product that can easily be segmented for OEM customers or integrated into a PACS environment.

We believe that product quality, performance, functionality and features, quality of support and service, reputation, and price are also important competitive factors. We believe that customers will prefer our solutions because they are the best-in-class productivity tools for doctors. While price has been less significant than other factors, increasing competition in the enterprise-wide advanced visualization market may result in price reductions and reduced gross margins. In particular, should one or more of the diagnostic imaging system suppliers choose to provide or distribute more competitive medical imaging products than ours, our business, financial condition and results of operations could be materially adversely affected.

Customers and Customer Support

Through March 31, 2005, we had sold approximately 2,000 separate software licenses for *Vitrea*, *Vitrea 2,* InnerviewGI and *ViTALConnect* for use at over 1,500 different sites, including hospitals and teaching hospitals, clinics and imaging centers, both in major cities as well as in smaller population areas.

We are committed to rapid response to customer service requests. Customer support representatives are available during business hours to answer questions about the operation, maintenance and repair of our products.

Intellectual Property

Although we have filed patent applications and have received patents with respect to certain aspects of our technology, we generally do not rely only on patent protection with respect to our products and technologies. We also rely on a combination of trade secret and copyright law, employee and third-party nondisclosure agreements and other protective measures to protect intellectual property rights pertaining to our products and technologies. Because of the rapid pace of technological change in the enterprise-wide advanced visualization industry, we believe that the knowledge, ability and experience of our personnel; new product developments and enhancements; and ongoing, reliable product maintenance and support are also significant factors in our competitive position.

We do not own all of the software and other technologies used in our products, but we believe we have the necessary licenses from third parties for using that technology in our current products. It may be necessary to renegotiate with such third parties for any new versions of current products or any new products. Such third party licenses may not be available on reasonable terms, or at all.

Manufacturing and Service

Our manufacturing efforts are limited to the production, quality assurance and distribution of our software, which is distributed on CD-ROM. After we send software to our customers, it will be loaded into a workstation, either by our personnel, personnel from one of our authorized resellers, or our customers personnel. If our personnel load the software, it is as part of our installation services, which we price and bill incrementally based on the price for our software. In addition to loading software into the workstation, our installation services generally include integrating *Vitrea 2* workstations and *ViTALConnect* software into customers computer networks, configuring the network requirements and verifying software operability on site.

We rely primarily on our own software development as our core competence. We obtain certain application and utility software from third parties (see Intellectual Property above) and use a third party operating system for integrated computer workstations. In addition, we obtain systems components, computers and computer peripherals from third party suppliers.

We have also signed reseller distribution agreements that allow us to distribute products from certain third parties. We currently have agreements with R2 for R2 s ImageChecker® CT software applications for the detection of lun