

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)

Edgar Filing: VITAL IMAGES INC - Form POS AM

**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**

**Facsimile: (952) 487-9530**

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

Copies of communications to:

**Michele D. Vaillancourt, Esq.**

**Winthrop & Weinstine, P.A.**

**225 South Sixth Street, Suite 3500**

**Minneapolis, Minnesota 55402**

**Telephone: (612) 604-6400**

**Facsimile: (612) 604-6800**

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.**

Edgar Filing: VITAL IMAGES INC - Form POS AM

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.

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.

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.

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.

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

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.

Edgar Filing: VITAL IMAGES INC - Form POS AM

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.

---

TABLE OF CONTENTS

Prospectus Summary  
Risk Factors  
Forward-Looking Information  
Use of Proceeds  
Market for Common Stock  
Dividend Policy  
Capitalization  
Selected Financial Data  
Management's Discussion and Analysis of Financial Condition and Results of Operations  
Business  
Management  
Beneficial Ownership of Common Stock  
Selling Shareholders  
Plan of Distribution  
Description of Our Common Stock  
Legal Matters  
Experts  
Where You Can Find More Information  
Index to Financial Statements

**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. *Vitre*a® 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, *Vitre*a and *ViTALConnect*. *Vitre*a is our flagship advanced visualization product for radiological and surgical applications. *Vitre*a 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 *Vitre*a 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. *Vitre*a 2 is offered both as a stand-alone software package and as part of an integrated software and hardware system, consisting of *Vitre*a 2 software installed on a computer workstation. We licensed approximately 1,900 copies of *Vitre*a and *Vitre*a 2 to hospitals, clinics, imaging centers and other sites.

As specialists outside the radiology department increasingly rely on *Vitre*a 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

## Edgar Filing: VITAL IMAGES INC - Form POS AM

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 *Vitreia 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,		2004	Years Ended December 31,		2002
	2005	2004		2003	2002	
(Unaudited)						
<b>Statement of Operations Data</b>						
<b>(in thousands, except per share data):</b>						
Revenue	\$	11,325	\$	7,816	\$	36,122
Operating income (loss)		1,371		(1,642)		514
Net income (loss)		1,023		(1,352)		296
Net income (loss) per share basic		0.08		(0.12)		0.03
Net income (loss) per share diluted		0.08		(0.12)		0.02

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

### 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

## Edgar Filing: VITAL IMAGES INC - Form POS AM

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 *Vitreax 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. *Vitreia 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



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.

## Edgar Filing: VITAL IMAGES INC - Form POS AM

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.**



## Edgar Filing: VITAL IMAGES INC - Form POS AM

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 negative. We 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**

## Edgar Filing: VITAL IMAGES INC - Form POS AM

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
<b>2005</b>		
Second Quarter through June 15	\$ 18.46	\$ 14.37
First Quarter	\$ 16.14	\$ 13.60
<b>2004</b>		
Fourth Quarter	\$ 16.95	\$ 12.18
Third Quarter	\$ 12.60	\$ 9.84
Second Quarter	\$ 12.39	\$ 9.26
First Quarter	\$ 20.01	\$ 9.34
<b>2003</b>		
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

Edgar Filing: VITAL IMAGES INC - Form POS AM

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 Forma 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
<b>Revenues:</b>					
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
<b>Total revenue</b>	<b>36,122,047</b>	<b>28,000</b>	<b>36,150,047</b>		<b>36,150,047</b>
<b>Cost of revenue:</b>					
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
<b>Total cost of revenue</b>	<b>10,447,081</b>		<b>10,447,081</b>	<b>142,000</b>	<b>10,589,081</b>
<b>Gross profit</b>	<b>25,674,966</b>	<b>28,000</b>	<b>25,702,966</b>	<b>(142,000)</b>	<b>25,560,966</b>
<b>Operating expenses:</b>					
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)	
<b>Total operating expenses</b>	<b>25,160,483</b>	<b>65,641</b>	<b>25,226,124</b>	<b>(979,000)</b>	<b>24,247,124</b>
<b>Operating income (loss)</b>	<b>514,483</b>	<b>(37,641)</b>	<b>476,842</b>	<b>837,000</b>	<b>1,313,842</b>
<b>Interest income</b>	<b>368,080</b>		<b>368,080</b>		<b>368,080</b>
<b>Income (loss) before income taxes</b>	<b>882,563</b>	<b>(37,641)</b>	<b>844,922</b>	<b>837,000</b>	<b>1,681,922</b>
<b>Provision (benefit) for income taxes</b>	<b>587,000</b>		<b>587,000</b>	<b>(77,648)(3)</b>	<b>509,352</b>
<b>Net income (loss)</b>	<b>\$ 295,563</b>	<b>\$ (37,641)</b>	<b>\$ 257,922</b>	<b>\$ 914,648</b>	<b>\$ 1,172,570</b>
<b>Net income per share - basic</b>	<b>\$ 0.03</b>		<b>\$ 0.02</b>		<b>\$ 0.10</b>
<b>Weighted average common shares outstanding - basic</b>	<b>11,632,351</b>		<b>11,632,351</b>	<b>376,262(4)</b> <b>(326,645)(4)</b>	<b>11,681,968</b>
<b>Net income per share - diluted</b>	<b>\$ 0.02</b>		<b>\$ 0.02</b>		<b>\$ 0.09</b>
<b>Weighted average common shares outstanding - diluted</b>	<b>12,535,670</b>		<b>12,535,670</b>	<b>376,262(4)</b> <b>(326,645)(4)</b>	<b>12,585,287</b>

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

## NOTE 1. BASIS OF PRESENTATION



Edgar Filing: VITAL IMAGES INC - Form POS AM

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

## Edgar Filing: VITAL IMAGES INC - Form POS AM

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/employment 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, 2005 (Unaudited)			2004	2003	Years ended December 31, 2002			2001	2000				
<b>Statement of Operations Data (in thousands, except per share data):</b>														
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
		<b>March 31, 2005</b>			<b>2004</b>	<b>2003</b>	<b>December 31, 2002</b>			<b>2001</b>	<b>2000</b>			
<b>Balance Sheet Data (in thousands):</b>														
Working capital	\$	33,326				30,996		31,915		9,219		6,094		2,344
Total assets		74,925				69,284		53,063		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 policies used in the preparation of the consolidated financial statements.

We continually evaluate our critical accounting policies and estimates. We believe the critical accounting policies 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

Edgar Filing: VITAL IMAGES INC - Form POS AM

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.



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



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.

## Edgar Filing: VITAL IMAGES INC - Form POS AM

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.

Edgar Filing: VITAL IMAGES INC - Form POS AM

	For the Three Months Ended March 31,		For the Years Ended December 31,		
	2005	2004	2004	2003	2002
<b>Revenue:</b>					
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
<b>Cost of revenue:</b>					
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
<b>Operating expenses:</b>					
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<sup>®</sup>2 licenses sold and an increase in the number of Vitrea software add-on options sold. Sales from Vitrea<sup>®</sup> 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



Edgar Filing: VITAL IMAGES INC - Form POS AM

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 *Vitreia*<sup>®</sup> 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 *Vitreia 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

## Edgar Filing: VITAL IMAGES INC - Form POS AM

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 *Vitreia 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 *Vitre*a 2 options, including *VScore*, CT Colonography, Automated Vessel Measurements and CT Cardiac. The sale of *Vitre*a 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 *Vitre*a 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 *Vitre*a 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 *Vitre 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 *Vitre 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
<b>Non-contingent Obligations:</b>						
Operating leases (1)	\$ 493,000	\$ 471,000	\$ 618,000	\$ 711,000	\$ 742,000	\$ 821,000
<b>Contingent Obligations:</b>						
Revenue commitment (2)	827,500	1,655,000	2,482,500			
HIInnovation 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 to 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

## Edgar Filing: VITAL IMAGES INC - Form POS AM

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. *Vitre@ 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, *Vitre@* and *ViTALConnect*. *Vitre@* is our flagship advanced visualization product for radiological and surgical applications. *Vitre@* 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 *Vitre@* 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. *Vitre@ 2* is offered both as a stand-alone software package and as part of an integrated software and hardware system, consisting of *Vitre@ 2* software installed on a computer workstation. We licensed approximately 1,900 copies of *Vitre@* and *Vitre@ 2* to hospitals, clinics, imaging centers and other sites.

As specialists outside the radiology department increasingly rely on *Vitre@* 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 *Vitre@ 2* and

## Edgar Filing: VITAL IMAGES INC - Form POS AM

*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 *Vitreia 2* and *ViTALConnect* software. In particular, we will be focused on developing additional protocols that enhance the ease-of-use of *Vitreia 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 *Vitreia 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 *Vitre* 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 *Vitreia 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 *Vitreia 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, *Vitreia 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 *Vitreia 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.

**Vitre***a*. *Vitre**a* 2 is our advanced medical imaging software for diagnostic evaluation of computed tomography (CT), magnetic resonance (MR) and positron emission tomography (PET) image data. *Vitre**a* 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, *Vitre**a* 2 utilizes an intuitive clinical workflow and automatic settings to improve speed and simplicity over other visualization techniques.

We conceived of *Vitre**a* 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 *Vitre**a*, were developed in early 1996, with software development beginning in late spring of that year. We submitted 510(k) documentation in September 1996 for *Vitre**a*, 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. *Vitre**a* was first released for sale to customers in October 1997. Due to its speed and ease-of-use, we believe *Vitre**a* 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. *Vitre**a* 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 *Vitre**a* 2, a Microsoft® Windows and Intel®-architecture-based version of our *Vitre**a* software for 2D/3D visualization and analysis of medical image data. *Vitre**a* 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 *Vitre**a* 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.

*Vitre**a* 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. *Vitre**a* 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 *Vitre**a* 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. *Vitre**a* 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 *Vitreia 2* license within a facility. While limiting the number of simultaneous users to the number of *Vitreia 2* licenses purchased, the Concurrent License option allows *Vitreia 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 *Vitreia* 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 *Vitreia 2* and *ViTALConnect* software, we offer annual maintenance and support services for both *Vitreia 2* and *ViTALConnect* software, as well as for the integrated *Vitreia 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 *Vitreia 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 *Vitreia 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 *Vitreia 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

## Edgar Filing: VITAL IMAGES INC - Form POS AM

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 *Vitre*a, *Vitre*a 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 *Vitre*a 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 lung nodules and with Mirada for Mirada's Fusion 7D

software application for the anatomical alignment of two different image data sets from two different types of diagnostic equipment, such as combining images from CT and PET scanners.

**Governmental Regulation**

As medical devices, our enterprise-wide advanced visualization software solutions are subject to extensive and rigorous regulation by numerous governmental authorities, principally the FDA and

corresponding foreign agencies. In the United States, the FDA administers the Federal Food, Drug and Cosmetic Act and its amendments. These regulations classify medical devices as either Class I, II or III devices, which are subject to general controls, special controls or pre-market approval requirements, respectively. Most Class I and II devices, as well as some Class III devices, can be cleared for marketing pursuant to a 510(k) pre-market notification. The process of obtaining a 510(k) clearance typically can take several months to a year or longer.

Class III devices generally require more stringent clinical investigation and pre-market clearance requirements. In such cases, the FDA will require that the manufacturer submit a pre-market approval ( PMA ) application that must be reviewed and approved by the FDA prior to the sale and marketing of the device in the United States. The process of obtaining a PMA can be expensive, uncertain and lengthy, frequently requiring anywhere from one to several years from the date of FDA submission, if approval is obtained at all. Moreover, a PMA, if granted, may include significant limitations on the indicated uses for which a product may be marketed.

*Vitreia 2* and *ViTALConnect* are classified as Class II medical devices and have received marketing clearances from the FDA as the result of 510(k) pre-market notifications. Specifically, *Vitreia*, *ViTALConnect* and our add-on options have been cleared to be marketed for use with CT, MR, and PET scanners. The PMA application for our CT Lung software option is currently being reviewed for approval by the FDA. Future products, add-on options to existing software, and expanded claims of efficacy will likely require additional 510(k) pre-market notifications.

There can be no assurance that current or future FDA review processes will not involve delays or that any clearances will be granted on a timely basis. If our current or future products become classified as Class III devices, they could be subject to a more expensive, uncertain and lengthy approval process, and approval, if granted, could include significant limitations on the indicated uses for which a product may be marketed.

We are also increasingly becoming subject to regulation in foreign countries in which we sell our products. Many of the regulations applicable to our products in such countries are similar to those of the FDA. Our ability to successfully market and sell our products in foreign markets depends in large part on our ability to comply with such foreign regulatory requirements. *Vitreia 2* software has been Conformitee Europeene ( CE ) marked, indicating conformance with applicable sections of the Medical Device Directive 93/42/EEC, which allows the products to be marketed in the member countries of the European Communities.

We are also subject to periodic inspections by the FDA and similar foreign regulatory agencies, whose primary purpose is to audit our compliance with quality system regulations established by the FDA and other applicable government standards. Regulatory action may be initiated in response to audit deficiencies or to product performance problems. We believe that our manufacturing and quality control procedures are in compliance with all applicable requirements of the FDA and foreign regulatory agencies in countries in which we sell our products. We have received ISO 13485 Certification.

Medicare and Medicaid laws and regulations may impact the financial arrangements through which we market, sell and distribute our products and services to patients who are Medicare or Medicaid beneficiaries. Violations of these laws and regulations may result in civil and criminal penalties, including substantial fines and imprisonment. In a number of states, the scope of these laws and regulations has been extended to include the provision of services or products to all patients, regardless of the source of payment, although there is variation from state to state as to the exact provisions of such laws or regulations. In other states and, on a national level, several health care reform initiatives have been proposed which would have a similar impact. We believe that our operations and our marketing, sales and distribution practices currently comply with all current fraud and abuse and physician anti-referral laws and regulations, to the extent they are applicable.



### **Third Party Reimbursement and Cost Containment**

Our products are purchased primarily by hospitals, clinics, imaging centers and other users that bill various third party payers for the services provided to the patients. These payers, which include Medicare, Medicaid, private insurance companies and managed care organizations, reimburse part or all of the costs and fees associated with the diagnostic procedures utilizing our products. The medical imaging services performed using our software, except for disease screening procedures, are covered by current CPT codes (Current Procedural Terminology, as defined by the Centers for Medicare & Medicaid Services). As such, hospitals providing services using our enterprise-wide advanced visualization solutions can seek reimbursement for such services by using existing approved CPT codes. Medicare and Medicaid reimbursement for hospitals is based on a fixed amount for admitting a patient with a specific diagnosis. Because of this fixed reimbursement method, hospitals have incentives to use less costly methods in treating Medicare and Medicaid patients, and they will frequently make capital expenditures to take advantage of less costly treatment technologies. Often, reimbursement is reduced to reflect the availability of a new procedure or technique and, as a result, hospitals are generally willing to implement new cost-saving technologies before these downward adjustments take effect. Likewise, because the rate of reimbursement for certain physicians who perform certain procedures has been, and may in the future, be reduced in the event of changes in the resource-based relative value scale method of payment calculation, physicians may seek greater cost efficiency in treatment to minimize any negative impact of reduced reimbursement. Any amendments to existing reimbursement rules and regulations that restrict or terminate the reimbursement eligibility (or the extent or amount of coverage) of medical procedures using our products or the eligibility (or the extent or amount of coverage) of our products could have a material adverse impact on business.

In response to the focus of national attention on rising health care costs, a number of changes to reduce costs have been proposed or have begun to emerge. There have been, and may continue to be, proposals by legislators and regulators and third party payers to reduce these costs. There has also been a significant increase in the number of Americans enrolling in some form of managed care plan and, in addition, many hospitals participate in or have agreements with HMOs. It has become a typical practice for hospitals to affiliate themselves with as many managed care plans as possible. Higher managed care penetration typically drives down the prices of healthcare procedures, which in turn places pressure on medical supply prices. This causes hospitals to implement tighter vendor selection and certification processes by reducing the number of vendors used, purchasing more products from fewer vendors and trading discounts on price for guaranteed higher volumes to vendors. Hospitals have also sought to control and reduce costs over the last decade by joining group purchasing organizations or purchasing alliances. We cannot predict what continuing or future impact these practices, the existing or proposed legislation, or such third party payer measures may have on our future business.

### **Health Insurance Portability and Accountability Act of 1996 ( HIPAA )**

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 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.

### **Employees**

As of March 31, 2005, we had 156 full-time employees, with 51 involved in research and development, 55 in sales and marketing, 25 in technical support functions and 25 in administrative functions. We are not a party to any collective bargaining agreement involving our employees. We believe our relationship with our employees is good.

### **Facilities**

Our principal office is located in Minnetonka, Minnesota, where we currently occupy approximately 41,000 square feet under a lease that expires on January 31, 2012. Under the lease, we may expand our facilities to approximately 61,000 square feet by July 31, 2007. We consider our current facilities adequate for our current needs and believe that suitable additional space will be available as and if needed.

### **Acquisition of HInnovation, Inc.**

On February 18, 2004, we completed our acquisition of HInnovation, Inc. ( HInnovation ) in accordance with the terms and conditions of an Acquisition Agreement and Plan of Reorganization (the Acquisition Agreement ) dated as of January 8, 2004 by and among Vital Images, HInnovation Acquisition, Inc., a wholly-owned subsidiary of Vital Images ( HInnovation Acquisition ), HInnovation and Mr. Hui Hu and JMS Co., Ltd., the principal stockholders of HInnovation. Pursuant to the Acquisition Agreement, HInnovation was merged with and into HInnovation Acquisition, and HInnovation became a wholly-owned subsidiary of Vital Images. We acquired the predecessor product to *ViTALConnect* when we acquired HInnovation. HInnovation's core product, *iConnection*, was refined and re-introduced to the market in the fall of 2004 as *ViTALConnect*.

The merger consideration included 376,262 newly-issued shares of common stock of Vital Images valued at \$6 million and \$5.8 million in cash at the time of the merger. The merger consideration for HInnovation includes contingent milestone payments of up to 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:

the achievement of certain revenue targets resulting from the sale of products containing HInnovation technology during the 12-month period following the closing date;

the porting of our product to HInnovation's product platform and the commercial launch thereof; and

licensing the HInnovation patented technology within 24 months after the closing date.

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 our 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 December 31, 2004, no contingent payments had been earned. The first milestone was not met before the February 2005 deadline.

## Edgar Filing: VITAL IMAGES INC - Form POS AM

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.

HIInnovation was a privately-held company founded in June 2000 and is a provider of innovative and cost-effective solutions to deliver medical imaging software applications and services online. HIInnovation's enabling technologies have been developed to help hospitals, clinics and industry reach a new dimension in optimizing workflow, improving productivity, enhancing service and increasing revenue. It obtained 510(k) marketing clearance for iConnection from the FDA in November 2001. HIInnovation was awarded U.S. Patent No. 6,621,918, which covers a server-based MPR/3D/4D software system and design.

### MANAGEMENT

#### Directors and Executive Officers

The following sets forth information regarding our current directors and executive officers:

Name	Age	Positions with Vital Images
Douglas M. Pihl	65	Chairman of the Board and Director
Jay D. Miller	45	President, Chief Executive Officer and Director
Vincent J. Argiro, Ph.D.	49	Chief Technology Officer, Founder and Director
James B. Hickey, Jr.	51	Director
Richard W. Perkins	74	Director
Michael W. Vannier, M.D.	56	Director
Jeremy A. Abbs	41	Vice President Quality and Customer Satisfaction
Stephen S. Andersen	35	Vice President Engineering
Steven P. Canakes	49	Vice President Sales
Philip I. Smith	37	Vice President Marketing and Corporate Development
Michael H. Carrel	34	Chief Operating Officer, Chief Financial Officer, Treasurer and Secretary

The following sets forth information regarding the business experience of our directors and executive officers.

*Douglas M. Pihl* has been a director since May 1997 and Chairman of the Board since December 1997. He was our Chief Executive Officer from February 1998 to December 1999. Mr. Pihl has served as Chairman, Chief Executive Officer and President of MathStar, Inc. since April 1997. From May 1992 to August 1996, Mr. Pihl was President, Chief Executive Officer and a director of NetStar, Inc. NetStar was acquired by Ascend Communications, Inc. in August 1996. In 1996, Mr. Pihl co-founded RocketCHIPS, Inc. and served as its Chairman and Chief Financial Officer until it was sold to Xilinx, Inc. in November 2000. Mr. Pihl has over 42 years of experience in the computer industry, with extensive responsibility in design, product planning and management. From February 1989 to December 1990, Mr. Pihl was Senior Vice President, Development for Apertus Technologies, Inc. (formerly Lee Data Corporation). Apertus changed its name to Carleton Corporation and now is part of Oracle Corporation. From December 1987 until February 1989, Mr. Pihl also was an independent consultant. Mr. Pihl was Senior Vice

Edgar Filing: VITAL IMAGES INC - Form POS AM

President-Development of Lee Data Corporation ( Lee Data ) from April 1979 until December 1987. Mr. Pihl co-founded Lee Data in 1979, which then developed, manufactured and marketed computer peripheral products. In addition to serving on our board and on MathStar's board, Mr. Pihl serves as a director of two privately-held companies.

*Jay D. Miller* was named President, Chief Executive Officer and a director in February 2002. He served as our General Manager and Vice President-Business Development from August 1998 until February 2002. Mr. Miller was our Vice President-Marketing and Business Development from February 1997 to August 1998. From 1989 until he became employed by us, Mr. Miller was employed by GE Medical Systems, Inc. in positions

of increasing responsibility in the marketing area, including serving as product manager of MRI imaging products and marketing manager for the cardiology market segment. Before 1989, Mr. Miller was employed by Siemens Medical Systems in technical marketing.

*Vincent J. Argiro, Ph.D.* has been a director since May 1997. Dr. Argiro, our Founder, was named as our Chief Technology Officer in October 1995. From May 1994 to May 1997, Dr. Argiro served as a Vice President of Synovis Life Technologies, Inc. (formerly named Bio-Vascular, Inc.), our former parent company. Dr. Argiro also served as a director of Bio-Vascular from May 1994 until March 1996. Following our acquisition by Bio-Vascular in May 1994, Dr. Argiro served as our President until October 1995. Dr. Argiro served as our Chairman of the Board from September 1988 until May 1994. From 1988 to 1990, and from September 1991 to June 1992, Dr. Argiro also served as our President.

*James B. Hickey, Jr.*, has been a director since May 1998. Mr. Hickey has served as President, Chief Executive Officer and a director of Pulmonetic Systems, Inc., a privately-held manufacturer of medical devices in the respiratory/pulmonary markets, since October 2001. Mr. Hickey served as President and Chief Executive Officer of Angeion Corporation, a publicly-held medical device manufacturer, from July 1998 until December 1999. He also was President and Chief Executive Officer of Aequitron Medical, Inc., a publicly-held manufacturer of portable respiratory devices, from 1993 to 1997. In his earlier career, Mr. Hickey spent 15 years with Baxter Healthcare/American Hospital Supply Corporation, where he was President of the Respiratory Anesthesia Systems Division from 1989 to 1993 and, before that, President of the Hospitex Division. Mr. Hickey also serves as a director of Allied Healthcare Products, Inc., a publicly-held company.

*Richard W. Perkins* has been a director since May 1997. Mr. Perkins has served as President, Chief Executive Officer and a director of Perkins Capital Management, Inc., an investment management firm, since 1984. He also serves on the board of directors of the following public companies: Synovis Life Technologies, Inc., LifeCore Biomedical, Inc., CNS, Inc., Nortech Systems, Inc., PW Eagle, Inc., Teledigital, Inc., and Two Way TV (US), Inc. In addition, Mr. Perkins serves as a director of several privately-held companies.

*Michael W. Vannier, M.D.* has been a director since December 1997. Dr. Vannier is currently a Professor of Radiology at the University of Chicago. He was the Head of the Department of Radiology at the University of Iowa from June 1996 to November 2000, and professor of radiology there from 1996 to 2004. Dr. Vannier was a special assistant to the Director of the National Cancer Institute from 2001 to 2003. From 1982 to 1997, Dr. Vannier was a staff radiologist at Barnes Jewish Hospital and St. Louis Children's Hospital in St. Louis, Missouri. Dr. Vannier was also the Georgia Eminent Scholar in Medical Imaging at the Emory University School of Medicine in Atlanta, Georgia from 1994 to 1996, and he served as Vice-Chairman for Research at the Mallinckrodt Institute of Radiology in St. Louis, Missouri from 1992 to 1994. Dr. Vannier served as a Professor of Radiology at the Mallinckrodt Institute of Radiology from 1989 to 1997, as an Assistant Professor of Radiology and Surgery at the Washington University School of Medicine in St. Louis, Missouri from 1983 to 1997, and as an Affiliate Professor of System Science and Mathematics at the Washington University College of Engineering in St. Louis, Missouri from 1984 to 1997.

## Edgar Filing: VITAL IMAGES INC - Form POS AM

*Sven A. Wehrwein* has been a director since May 1997. Mr. Wehrwein has been an independent financial consultant to emerging companies since 1999. Earlier in his 30-year financial career, he worked as an investment banker, chief financial officer and Certified Public Accountant. Mr. Wehrwein is also a director of Synovis Life Technologies, Inc., a publicly-held company.

*Jeremy A. Abbs* was named Vice President-Quality and Customer Satisfaction in January 2004. He served as our Vice President-Marketing from July 2002 until January 2004. From June 1998 to July 2002, Mr. Abbs served as a Product Manager and Group Marketing Manager for emerging technology and market development of Boston Scientific's Scimed division. From April 1996 to May 1998, Mr. Abbs served as the Global Product Manager for cardiac surgical products at Medtronic, Inc. Before 1996, Mr. Abbs held several sales and marketing

## Edgar Filing: VITAL IMAGES INC - Form POS AM

management positions at Johnson & Johnson's Ortho Diagnostics division. From 1986 to 1989, Mr. Abbs served as a Field Advertising Representative in the Food Products division at Proctor & Gamble Co.

*Stephen S. Andersen* was named Vice President-Engineering in January 2004. Mr. Andersen has been employed at Vital Images since May 1999 and has held roles of increasing responsibility, most recently serving as Senior Director of Quality and Customer Satisfaction from January 2002 until January 2004. From February 1997 to May 1999, Mr. Andersen served as Program Manager and Business Development Manager for Internet Technologies at LodgeNet Entertainment. Before 1997, Mr. Andersen held technical support positions in the banking and telecommunications industry at Precision Computer Systems and Martin & Associates.

*Steven P. Canakes* was named Vice President-Sales in March 2000. Mr. Canakes was our Vice President-U.S. Sales from August 1998 to March 2000 and our Director of U.S. Sales from March 1998 to August 1998. From July 1996 to March 1998, Mr. Canakes was Vice President of Business Development for MedManagement, LLC in Plymouth, Minnesota. From February 1994 to July 1996, he served as Vice President of Sales for Medintell Systems and Value Health Corporation, a Medintell Systems Division. Before February 1994, Mr. Canakes was a CT Product Sales Manager for Picker International, Inc.

*Philip I. Smith* was named Vice President-Marketing and Corporate Development in January 2004. He served as our Vice President-Corporate Development from February 2003 until January 2004. From April 2002 to November 2002, Mr. Smith served as President and Chief Executive Officer of Thermonix, a medical technology company. From April 2000 until April 2002, Mr. Smith was employed as Vice President, Marketing and Corporate Development of Image-Guided Neurologics, Inc., a medical technology company. From August 1997 to February 2000, Mr. Smith was employed as an investment banker with US Bancorp Piper Jaffray. Before August 1997, Mr. Smith held senior sales positions at GE Medical Systems.

*Michael H. Carrel* was named Chief Operating Officer and Chief Financial Officer on May 16, 2005. He was our part-time Interim Chief Financial Officer from January 17, 2005 until May 16, 2005. From January 1, 2005 until May 16, 2005, he was also employed as Senior Vice President of Strategy and Business Development of Technology Solutions Company ( TSC ), a publicly-held information technology consulting company. Mr. Carrel was President and Chief Executive Officer of Zamba Corporation ( Zamba ), a publicly-held customer relationship management company, from July 1, 2004 until December 31, 2004, when Zamba was acquired by TSC. Mr. Carrel served as Executive Vice President of Zamba from October 1998 until July 1, 2004 and as its Chief Financial Officer from October 1998 until December 31, 2004. He also served as Chief Financial Officer of NextNet Wireless, Inc., a privately-held provider of non-line-of-sight plug and play broadband wireless access systems, from October 1, 2003 through March 31, 2004. From 1997 until 1998, Mr. Carrel served as Director of Business Strategy at Zamba. Before 1998, Mr. Carrel held audit-related positions at PricewaterhouseCoopers LLP. Mr. Carrel is a Certified Public Accountant.

### *Director Compensation*

*Director Fees.* From January 1, 2004 until October 1, 2004, the directors' compensation plan provided that non-employee directors receive an \$8,000 annual retainer and, in addition, the Chairman of the Board receive a \$4,000 annual retainer. Also, Committee Chairmen received annual retainers of \$2,000 each. Our non-employee directors also received a fee of \$500 for each board meeting they attended and \$500 for each committee meeting attended.

Effective October 1, 2004, changes were made to the director compensation program. The annual retainer for independent board members was increased to \$12,000, and the annual retainer to the Chairman of the Board was increased to \$5,000. In addition, the non-employee board meeting fee was increased to \$750. The Committee Chairmen annual retainer remained at \$2,000 and Committee meeting fees remained at \$500,



but Audit Committee meeting fees increased to \$750. Also, Committee Chairmen were to be paid an additional \$500 for each committee meeting they attended and chaired.

*1997 Director Stock Option Plan.* The Vital Images, Inc. 1997 Director Stock Option Plan ( Director Plan ) was adopted by our board of directors on March 19, 1997 and approved by Bio-Vascular, Inc. (now known as Synovis Life Technologies, Inc.), then our parent and sole shareholder, on May 1, 1997. The Director Plan is intended to assist us in attracting, motivating and retaining well-qualified individuals to serve as directors. The Director Plan provides for both the automatic and discretionary grant of options. The only individuals eligible to receive options under the Director Plan are members of our board of directors, and the only individuals eligible to receive automatic grants of options under the Director Plan are our directors who are not our employees. The Director Plan currently provides that the total number of shares of common stock that may be purchased upon the exercise of options shall not exceed 300,000 shares, subject to adjustment as provided in the Director Plan. On March 10, 2005, our board of directors voted to increase the number of shares reserved for issuance under the Director Plan to 500,000 shares, subject to approval of our shareholders at their annual meeting to be held on May 11, 2005.

The Director Plan is administered by our board of directors. However, certain grants of stock options under the Director Plan and the amounts and terms of the options so granted are automatically determined under the Director Plan. As such, the board of directors has no authority to determine the grant or terms of such automatic options.

Under the Director Plan, our non-employee directors receive automatic grants of stock options to purchase 18,000 shares on their initial election or appointment to the board of directors and on each third anniversary thereafter so long as they are members of the board.

#### ***Compensation Committee Interlocks and Insider Participation in Compensation Decisions***

None of our executive officers serves as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our compensation committee. No interlocking relationship exists between the board of directors or the compensation committee of any other company.

#### ***Committees of the Board of Directors***

Our board of directors has four committees a Compensation Committee, an Audit Committee, a Governance and Nominating Committee, and a Strategy Committee.

*Compensation Committee.* The Compensation Committee reviews and makes recommendations to our board of directors regarding salaries, compensation and benefits of our executive officers and senior management and administers our Director Plan and 1997 Stock Option and Incentive Plan. The current members of the Compensation Committee are

James B. Hickey, Jr. (Chairman), Michael W. Vannier, M.D. and Sven A. Wehrwein. The board of directors has determined that all members of the Compensation Committee are independent, as that term is defined in Rule 4200(a)(15) of NASDAQ's Marketplace Rules.

*Audit Committee.* The Audit Committee oversees our accounting and financial reporting processes and audits of our financial statements. The Audit Committee assists the board in fulfilling its oversight responsibilities for the quality and integrity of the our financial reports, our compliance with legal and regulatory requirements and our independent registered public accounting firm's qualifications and independence, as well as accounting and reporting processes. The Audit Committee also reviews our internal and external financial reporting and reviews the scope of the independent audit. The current members of the Audit Committee are Sven A. Wehrwein (Chairman), James B. Hickey, Jr. and Richard W. Perkins. Our board of directors has determined that all members of the Audit Committee are independent under Rule 4200(a)(15) of NASDAQ's Marketplace Rules and

Rule 10A-3 under the Securities Exchange Act of 1934 ( Exchange Act ). The board has determined that Sven A. Wehrwein is qualified as an audit committee financial expert, as that term is defined in Item 401(h)(2)(i) of Regulation S-K.

*Governance and Nominating Committee.* On February 7, 2004, our board of directors formed a Governance and Nominating Committee, which currently consists of Richard W. Perkins (Chairman), James B. Hickey, Jr. and Douglas M. Pihl. The Governance and Nominating Committee is responsible for making recommendations to the full board of directors regarding candidates for election to the board and for overseeing our Code of Business Conduct and Ethics.

*Strategy Committee.* During 2004, our board of directors formed a Strategy Committee, which currently consists of Jay D. Miller (Chairman), Douglas M. Pihl and Michael W. Vannier, M.D. The Strategy Committee is responsible for evaluating our long-term strategy and ensuring consistent alignment with business objectives. The Strategy Committee also evaluates market conditions and researches potential competitive advantages and how those opportunities can be maximized as they relate to acquisitions, product development and other business activities. The Strategy Committee has no formal charter.

The charters for the Audit, Compensation and Governance and Nominating Committees are set forth on our website at <http://www.vitalimages.com>.

#### *Compensation of Executive Officers*

The following table sets forth information for the three years ended December 31, 2004 regarding compensation earned by or awarded to (i) our Chief Executive Officer and (ii) our four other most highly compensated executive officers whose annual compensation was \$100,000 or more for the year ended December 31, 2004 (collectively, the Named Executive Officers ).

## Summary Compensation Table

Name and Principal Position	Year	Annual Compensation		Long-Term Compensation Awards Securities Underlying Options (#)	All Other Compensation
		Salary	Bonus(1)		
Jay D. Miller President and Chief Executive Officer(2)	2004	\$ 206,667	\$ 136,971	30,000	\$ 55(5)
	2003	189,509	38,680	30,000	
	2002	176,792	100,193	200,000	
Vincent J. Argiro, Ph.D. Chief Technology Officer and Founder	2004	\$ 155,417	\$ 103,605	12,500	\$ 780(5)
	2003	152,316	25,550	20,000	
	2002	146,479	82,831	23,000	
Steven P. Canakes Vice President Sales	2004	\$ 157,500	\$ 100,425	12,500	\$ 66(5)
	2003	154,779	23,645	20,000	
	2002	148,292	84,227	25,000	
Gregory S. Furness Vice President Finance, Chief Financial Officer, Treasurer and Secretary(3)	2004	\$ 157,250	\$ 65,000	15,000	\$ 790(5)
	2003	153,276	27,241	20,000	
	2002	147,000	83,493	21,000	
Philip I. Smith Vice President Marketing and Corporate Development(4)	2004	\$ 156,667	\$ 104,603	20,000	\$ 138(5)
	2003	134,405	26,435	50,000	30,000(6)
	2002				

(1) Our executive officers are eligible to earn annual cash bonuses tied to the level of achievement of annual performance targets. Bonuses are generally paid following the end of the year in which they are earned.

(2) Mr. Miller became President and Chief Executive Officer on February 9, 2002.

(3) Mr. Furness resigned as an executive officer and employee effective February 8, 2005.

(4) Mr. Smith served as Vice President Business Development from February 2003 until January 2004 and was named Vice President Marketing and Corporate Development in January 2004.

(5) Represents matching contributions made by Vital Images under the Vital Images, Inc. Salary Savings Plan, which is intended to qualify under Section 401(k) of the Internal Revenue Code.

(6) Represents a signing bonus.

On February 15, 2005, the Board of Directors of the Company approved the following base salaries for the following Named Executive Officers for the year ending December 31, 2005: Mr. Miller (\$240,000), Mr. Smith (\$169,000), Mr. Canakes (\$161,000), Mr. Andersen (\$140,000), Mr. Abbs (\$144,000) and Mr. Argiro (\$128,000). The Board also approved incentive compensation whereby each Named Executive Officer can earn a bonus in an amount equal to up to 50% of his base salary (60% in the case of the President and Chief Executive Officer).

The following table sets forth certain information regarding stock options granted to the Named Executive Officers during 2004:

### OPTION GRANTS IN LAST FISCAL YEAR

Name	Number of Securities Underlying Options Granted(#)(1)	Percent of Total Options Granted to Employees in Fiscal Year	Exercise Price (\$/Sh)	Expiration Date	Potential Realizable Value at Assumed Annual Rates of Stock Price Appreciation for Option Term(2)	
					5%(\$)	10%(\$)
Jay D. Miller	30,000	5.84%	\$ 12.60	2/5/2012	\$ 180,478	\$ 432,277
Vincent J. Argiro, Ph.D	12,500	2.43	12.60	2/5/2012	75,199	180,115
Steven P. Canakes	12,500	2.43	12.60	2/5/2012	75,199	180,115
Gregory S. Furness	15,000	2.92	12.60	2/5/2012	90,239	216,138
Philip I. Smith	20,000	3.89	12.60	2/5/2012	120,319	288,184

(1) All options granted to the Named Executive Officers in 2004 vest and become exercisable as to 28% of the shares one year after the date of grant and as to an additional 2% per month thereafter until fully vested and exercisable.

(2) Represents the potential realizable value of each grant of options assuming that the market price of the underlying common stock appreciates in value from its fair market value on the date of grant to the end of the option term at the indicated annual rates.

On February 15, 2005, the Company's Board of Directors approved the grant of 8-year options to purchase the following numbers of shares to the following Named Executive Officers: Mr. Miller (10,000), Mr. Smith (20,000), Mr. Canakes (3,000), Mr. Andersen (10,000), Mr. Abbs (5,000) and Mr. Argiro (2,000). The stock options vest as to 28% of the shares subject to the options on February 28, 2006 and as to 2% of such shares each month thereafter. Also on February 15, 2005, the Board approved the grant of restricted stock awards for the following numbers of shares to the following Named Executive Officers: Mr. Miller (1,000), Mr. Smith (1,500), Mr. Canakes (1,000), Mr. Andersen (1,500), Mr. Abbs (1,500) and Mr. Argiro (1,000). The restricted stock awards vest as to 25% of the shares subject to the awards on February 15, 2006 and on February 15 of each of the next three successive years. The option and restricted stock awards granted to each Named Executive Officer will vest only if the Named Executive Officer is our employee on the vesting dates.

The following table sets forth certain information regarding any exercises of stock options during 2004 by the Named Executive Officers and the number and value of unexercised stock options held by them as of December 31, 2004.

### AGGREGATED OPTION EXERCISES IN LAST FISCAL YEAR AND YEAR-END OPTION VALUES

Edgar Filing: VITAL IMAGES INC - Form POS AM

Name	Shares Acquired on Exercise(#)	Value Realized(\$)	Number of Unexercised Options at Year-End (#)		Value of Unexercised In-the-Money Options at Year-End \$(1)	
			Exercisable/Unexercisable	Exercisable/Unexercisable	Exercisable/Unexercisable	Exercisable/Unexercisable
Jay D. Miller	18,000	\$ 219,553	308,200	106,300	\$ 3,440,951	\$ 814,163
Vincent J. Argiro, Ph.D	64,500	832,750	115,100	30,400	1,284,957	198,735
Steven P. Canakes	20,000	288,260	133,900	31,100	1,523,974	205,591
Gregory S. Furness	82,500	1,065,112	111,100	32,400	1,227,218	204,568
Philip I. Smith			21,000	49,000	81,600	171,420

---

(1) Based on the difference between the December 31, 2004 closing price of \$16.75 per share as reported on The NASDAQ National Market and the exercise prices of the options.

## **Employee Benefit Plans**

### ***Retirement Savings Plan***

We maintain the Vital Images, Inc. Salary Savings Plan (the 401(k) Plan ), which is intended to qualify under Section 401(k) of the Internal Revenue Code, as amended. The 401(k) Plan covers substantially all employees. Each employee may elect to contribute to the 401(k) Plan through payroll deductions equal to up to 25% of his or her salary, subject to certain limitations. At the discretion of our board of directors, we may make matching contributions equal to a percentage of the salary reduction contributions or other discretionary amounts. We paid \$43,600 in matching contributions in 2004, and the contributions made by us to the 401(k) Plan on behalf of the Named Executive Officers are set forth in the Summary Compensation Table. We made no matching contributions to the 401(k) Plan in 2003 or 2002.

### ***1997 Stock Option and Incentive Plan***

The Vital Images, Inc. 1997 Stock Option and Incentive Plan (the 1997 Plan ) was adopted by our board of directors on March 19, 1997 and approved by Bio-Vascular, Inc. (now known as Synovis Life Technologies, Inc.), then our sole shareholder, on May 1, 1997. The 1997 Plan is intended to assist us in hiring and retaining well-qualified employees, consultants and other service providers by allowing them to participate in our ownership and growth through the grant of incentive and non-statutory stock options, awards of restricted stock, performance units, stock bonuses or any combination thereof. Management believes that granting options and other awards will serve as partial consideration for and give well-qualified employees, consultants and other service providers an additional inducement to remain in our service and provide them with an increased incentive to work for our success.

On March 31, 2005, options for an aggregate of 1,781,339 shares were outstanding under the 1997 Plan, there were 36,180 shares subject to restricted stock awards granted under the 1997 Plan, no other awards were outstanding under the 1997 Plan, and 1,097,836 shares were available for the grant of awards under the 1997 Plan. Awards may be granted under the 1997 Plan through March 19, 2007, although the 1997 Plan may be terminated earlier by the board of directors in its sole discretion.

*Administration.* The 1997 Plan is administered by the Compensation Committee of the board of directors, which determines when and which employees, consultants and other service providers will be granted options and awards under the 1997 Plan. Subject to the provisions of the 1997 Plan, the Compensation Committee also determines the type, amount and terms of awards (including restrictions) and makes all other determinations necessary or advisable for the administration of the 1997 Plan. The determinations by the Compensation Committee are not required to be made on a uniform basis and are final and conclusive.

Employees of Vital Images and any of its Affiliates (as such term is defined in the 1997 Plan) are eligible for selection to receive options qualified as incentive stock options ( ISOs ) under Section 422 of the Internal Revenue Code of 1986 (the Code ). Employees, consultants and other service providers of Vital Images or its Affiliates may be granted non-qualified options ( NQOs ), restricted stock awards, performance units or stock bonuses.



## Edgar Filing: VITAL IMAGES INC - Form POS AM

The 1997 Plan will terminate on the earlier of the date on which the 1997 Plan is terminated by our board of directors or March 19, 2007. Options or restricted stock awards outstanding at the termination of the 1997 Plan may continue to be exercised in accordance with their terms after such termination. The 1997 Plan may be amended at any time by our board of directors. However, without the approval of a majority of our shareholders voting at a meeting at which a quorum is present, no such amendment may

materially increase the benefits accruing to participants under the 1997 Plan;

increase the number of shares available for issuance or sale under the 1997 Plan (other than as permitted in certain circumstances provided by the 1997 Plan); or

materially modify the requirements as to eligibility for participation in the 1997 Plan.

*Shares Subject to 1997 Plan.* The 1997 Plan currently provides that the total number of shares of our common stock that may be purchased pursuant to the exercise of options and issued in connection with other awards shall not exceed 3,500,000 shares, subject to adjustment as provided in the 1997 Plan. The shares to be issued upon the exercise of options and awards granted under the 1997 Plan will be currently authorized but unissued shares of our common stock. The number of shares of common stock available under the 1997 Plan, the exercise price of an option or the value of an award may be adjusted by the Compensation Committee in its sole discretion upon any stock dividend or split, recapitalization, reclassification, combination, exchange of shares or other similar corporate change if the Compensation Committee determines that such change necessarily or equitably requires such an adjustment. On March 10, 2005, the board of directors voted to increase the number of shares reserved for issuance under the 1997 Plan to 4,100,000 shares, subject to approval of our shareholders at their annual meeting to be held on May 11, 2005.

*Stock Options.* Upon the grant of an option, the Compensation Committee fixes the number of shares of common stock that the optionee may purchase upon exercise of the option and the price at which the shares may be purchased. With regard to ISOs, the exercise price cannot be less than the fair market value of the common stock at the time the ISO is granted or 110% of such fair market value in certain cases. Further, the aggregate fair market value of common stock (determined at the time the ISO is granted) subject to ISOs granted to an employee under all of our plans that become exercisable for the first time by such employee during any calendar year may not exceed \$100,000. The exercise price of NQOs may be less than the fair market value of our common stock, but not less than 85% of fair market value. Each option will be exercisable by the optionee only during the term fixed by the Compensation Committee, with such term ending not later than 10 years after the date of grant (in the case of ISOs). Payment for shares upon exercise of any option may be made in cash, in shares of our common stock that have been owned for more than six months having an aggregate fair market value on the date of exercise which is not less than the exercise price of the option, or by a combination of cash and such shares, as the Compensation Committee may determine.

Options granted under the 1997 Plan are non-transferable except to the extent permitted by the agreement evidencing such option. However, no ISO will be transferable by any optionee other than by will or the laws of descent and distribution. If, pursuant to the agreement evidencing any option, such option remains exercisable after the optionee's death, it may be exercised to the extent permitted by such agreement by the personal representative of the optionee's estate or by any person who acquired the right to exercise such option by bequest, inheritance or otherwise by reason of the optionee's death.

*Restricted Stock Awards.* Restricted stock awards granted pursuant to the 1997 Plan entitle the holder to receive shares of our common stock, which are subject to forfeiture to Vital Images if specified conditions are not satisfied. The Compensation Committee may establish a period (the Restricted Period ) when a restricted stock award is granted during which the holder will not be permitted to sell, transfer, pledge, encumber or assign the shares common stock subject to the award. During the Restricted Period, the holder of shares subject to the restricted stock award shall have all of the rights of a shareholder of Vital Images with respect to such shares, including the right to vote the shares and to receive any dividends and other distributions with respect to the shares. Except to the extent otherwise provided in the restricted stock agreement governing each restricted stock award, all shares of common stock then subject to any restriction will be forfeited to Vital Images without further obligation of Vital Images to the holder of the restricted stock award, and all rights of the holder with respect to

such shares will terminate, if the holder ceases to provide services to Vital Images or its Affiliates as an employee, consultant or other service provider.

*Performance Units.* Performance units may entitle the recipient to receive a payment from us in the form of stock, cash or a combination of both upon the achievement of established performance or other goals. A recipient may be granted one or more performance units under the 1997 Plan, and such performance units will be subject to such terms and conditions, consistent with the other provisions of the 1997 Plan, as may be determined by the Compensation Committee in its sole discretion.

*Stock Bonuses.* A stock bonus entitles a recipient to receive an award of common stock. Stock bonuses will be subject to such terms and conditions, consistent with the other provisions of the 1997 Plan, as may be determined by the Compensation Committee. The Compensation Committee may impose such restrictions on the assignment or transfer of a stock bonus as it deems appropriate.

*Immediate Acceleration of Awards.* The 1997 Plan provides that the restrictions on all shares of restricted stock shall lapse immediately, and all outstanding options will become exercisable immediately, if any of the following events occur:

the sale, lease, exchange or other transfer of substantially all of our assets;

the liquidation or dissolution of Vital Images;

certain mergers or consolidations involving Vital Images which result in a reduction in the voting power of our current shareholders;

any person becomes the beneficial owner of more than 20% of our common stock without the advance approval of the incumbent directors or more than 50% of the voting power of our outstanding stock without regard to consent by the incumbent directors;

the incumbent directors cease for any reason to constitute at least a majority of the board; or

any other change in control of Vital Images of a nature that would be required to be reported pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934.

*Employee Stock Purchase Plan*

The Vital Images, Inc. 1997 Employee Stock Purchase Plan (the *Stock Purchase Plan* ) was adopted by the board of directors on March 19, 1997 and by Bio-Vascular, Inc. (now known as Synovis Life Technologies, Inc.) as our then sole shareholder on May 1, 1997. The *Stock Purchase Plan* permits eligible employees to make voluntary contributions through payroll deductions to be used to purchase common stock from us. The *Stock Purchase Plan* consists of periodic offerings, and the first such offering began on July 1, 1997. Each offering under the *Stock Purchase Plan* is for a period of three months (an *Offering Period* ). An employee may elect to have up to a maximum of 10% deducted from his or her regular salary for purposes of purchasing up to 500 shares under the *Stock Purchase Plan* during each *Offering Period*. The price at which the employee shares are purchased will be the lower of (i) 85% of the closing price of our common stock on the day that an *Offering Period* commences under the *Stock Purchase Plan* or (ii) 85% of the closing price of our common stock on the day that such *Offering Period* terminates. With certain exceptions, all of our employees who work at least 20 hours per week, including officers and directors who are employees, are eligible to participate in the *Stock Purchase Plan*. The *Stock Purchase Plan* provides for the issuance of up to 250,000 shares of common stock, and it is administered by the board of directors or by the Compensation Committee. Through March 31, 2005, 76,263

shares had been issued under the Stock Purchase Plan, and 79,051 shares were available for purchase under the Stock Purchase Plan.

#### ***Other Stock Option Plans***

On May 12, 1997, Bio-Vascular, Inc. (now known as Synovis Life Technologies, Inc.), the former parent company of Vital Images, distributed all of the shares of our common stock of Vital Images to Bio-Vascular's shareholders of record on May 5, 1997 in a distribution transaction (the Distribution). Pursuant to an Employee Benefits Agreement between Vital Images and Bio-Vascular, Vital Images and Bio-Vascular agreed to adjust each unexercised option to purchase Bio-Vascular common stock outstanding as of the record date for the Distribution (Bio-Vascular Options) to reflect the Distribution (an Adjusted Bio-Vascular Option), and each holder of a Bio-Vascular Option was granted an option to purchase common stock of Vital Images in connection with the Distribution (a Vital Images Option). The exercise price and number of shares covered by each Adjusted Bio-Vascular Option, as well as the exercise price and number of shares covered by each Vital Images Option, was determined according to a formula provided in the Employee Benefits Agreement that was based on the relative fair market trading values of Bio-Vascular common stock and our common stock during the first five trading days following the date of the Distribution.

In connection with the issuance of Vital Images Options with respect to Bio-Vascular Options in existence on the date of the Distribution, Vital Images adopted the 1995 Stock Incentive Adjustment Plan, the Incentive Stock Option Adjustment Plan and the 1992 Director Stock Option Adjustment Plan. Each of these plans is intended to mirror the provisions of a corresponding Bio-Vascular option plan. Because each Bio-Vascular option plan generally provides for the termination of options following termination of employment, each of such mirror plans was approved and adopted to provide that the Distribution will not cause a termination of any of our employees for the purposes of such plans and that options held by our employees following the Distribution will remain exercisable following the Distribution, so long as such employees remain employed by us or any subsidiary of Vital Images. Similar modifications to the existing 1990 Management Incentive Stock Option Plan and the 1992 Stock Option Plan were also adopted by Vital Images with respect to Bio-Vascular employees. Awards of options under these plans, as well as pursuant to certain non-plan award agreements, were made in connection with the Distribution. It is intended that the 1995 Stock Incentive Adjustment Plan, the Incentive Stock Option Adjustment Plan and the 1992 Director Stock Option Adjustment Plan, as well as the 1992 Stock Option Plan and the 1990 Management Incentive Stock Option Plan, will not be used to grant options to purchase common stock of Vital Images other than in connection with the Distribution. In connection with the Distribution, Vital Images granted Vital Images Options to purchase 608,534 shares of its common stock. As of March 31, 2005, Vital Images Options to purchase 22,002 shares were outstanding.

#### ***Employment Agreements***

We entered into an employment agreement with Jay D. Miller effective February 9, 2002, which sets forth the terms of his employment as our President and Chief Executive Officer. The agreement provides for an annual base salary of \$180,000 and allows for a review and possible increase. In addition, Mr. Miller is eligible to receive bonuses as established by our board of directors under our management incentive plan. The agreement also provides for Mr. Miller's participation in our benefit plans and programs in which other senior executive officers participate. If we terminate Mr. Miller's employment without cause during the term of his employment agreement, we are required to pay him a severance payment equal to 12 months' base salary at the time of termination.

We entered into an employment agreement with Michael H. Carrel effective May 16, 2005, which sets forth the terms of his employment as our Chief Operating Officer and Chief Financial Officer. The agreement provides for an annual base salary of \$225,000, plus a \$75,000 signing bonus. If Mr. Carrel leaves Vital Images voluntarily within six months after May 16, 2005, he must repay the signing bonus to us. In addition, the



agreement provides that Mr. Carrel is eligible to receive incentive compensation under our management incentive plan as established by our Board of Directors and that under that plan, his incentive target for calendar year 2005 is fifty percent (50%) of his base salary for calendar year 2005. The agreement also provides for Mr. Carrel's participation in our benefit plans and programs in which other senior executive officers participate. If we terminate Mr. Carrel's employment without cause during the term of his employment agreement, we are required to pay him a severance payment equal to nine months' base salary at the time of termination.

In connection with retaining Mr. Carrel as Chief Operating Officer and Chief Financial Officer, on May 13, 2005, we granted him an option to purchase a total of 175,000 shares of our common stock at an exercise price of \$16.57 per share and a restricted stock award for 30,000 shares. The option vests as to 28% of the shares subject to the option on January 17, 2006 and as to 2% of such shares each month thereafter. The option expires on January 17, 2013. The restricted stock award vests as to 25% of the shares subject to the award on January 17, 2006 and on January 17 of each of the next three successive years. The option and restricted stock award will vest only if Mr. Carrel is our employee on the vesting dates.

***Change in Control Agreements, Severance Arrangements and Separation Agreement***

*Change in Control Agreements.* We have entered into agreements with Jay D. Miller, Vincent J. Argiro, Steven P. Canakes and Michael H. Carrel that provide for certain benefits for them upon a change in control of Vital Images, as defined in such agreements. If each such officer's employment with Vital Images is terminated for any reason other than death, cause, disability or retirement, or if he terminates his employment for good reason, or in the case of Mr. Miller and Mr. Carrel, for any reason, and the termination occurs within 12 months following a change in control, or before a change in control if his termination was a condition of the change in control, such officer would be entitled to a lump sum cash payment equal to his annual base salary in effect on the date of the change in control multiplied by two, as well as employee welfare benefits then in effect for a period of 24 months. The agreements also incorporate standard confidentiality restrictions.

*Severance Arrangements.* We have a severance arrangement with Mr. Argiro which provides that, except in the case of dismissal for cause, Mr. Argiro is entitled to receive a severance payment equal to six months of his monthly base salary at the time of termination. In addition, Mr. Argiro is entitled to one additional month of severance pay for each additional year of employment, starting with the sixth year of employment. The maximum amount of severance payable to Mr. Argiro under such arrangement is capped at an amount equal to his base salary for one year. We have also entered into a severance arrangement with Mr. Steven Canakes which provides that, except in the case of termination for cause, we will pay Mr. Canakes a severance payment equal to three months of his monthly base salary at the time of termination.

*Separation Agreements.* Mr. Furness had a severance arrangement with Vital Images which had the same terms as Mr. Argiro's severance arrangement. As provided in Mr. Furness's arrangement, on February 14, 2005, Vital Images and Mr. Furness entered into a Separation Agreement effective February 14, 2005. Under the terms of the agreement, we agreed to pay to Mr. Furness a separation payment of \$105,333.28, which was paid on March 15, 2005. The amount of the separation payment was determined under the terms of a severance arrangement with Mr. Furness as contained in a January 30, 1997 offer letter from Vital Images to Mr. Furness. We also agreed to pay the Mr. Furness any earned payments for calendar year 2004 under his 2004 Incentive Compensation Plan, which totaled \$65,000.



The payment was made on March 15, 2005. The Separation Agreement also provides that we will pay the entire portion of Mr. Furness' premiums for group medical and dental insurance for coverage maintained by Mr. Furness during his employment with Vital Images until the earlier of December 31, 2005 or the date on which Mr. Furness becomes covered under any other group health plan. Mr. Furness had a change in control agreement with Vital Images with terms identical to Mr. Miller's change of control agreement that Mr. Miller. Mr. Furness's change in control agreement was terminated as provided in the Separation Agreement.

Pursuant to a severance agreement effective January 12, 2004, Vital Images and Mr. David M. Frazee agreed to terms regarding the resignation of Mr. Frazee as Vice President of Engineering. Mr. Frazee's employment terminated in January 2004. In exchange for certain representations, promises and releases, we agreed to pay Mr. Frazee an amount equal to six months of his base salary at the time of termination, which equals \$71,750, plus a lump sum of \$25,000. In addition, we agreed to pay Mr. Frazee a bonus for 2003 in the amount of \$21,879 and outplacement expenses in the amount of \$7,000.

### BENEFICIAL OWNERSHIP OF COMMON STOCK

The following table sets forth, as of March 31, 2005, certain information regarding the beneficial ownership of shares of our common stock by:

each person or entity who is known by us to own more than 5% of our common stock;

each director and Named Executive Officer; and

all of our directors and executive officers as a group.

Unless otherwise stated, each of the persons named in the table has sole voting power and investment power with respect to the securities beneficially owned by him, her or it as set forth opposite their name. Beneficial ownership of the common stock listed in the table has been determined in accordance with the applicable rules and regulations under the Securities Exchange Act of 1934. For more information regarding the terms of the common stock, see Description of Our Common Stock.

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned(1)	Percent of Outstanding Shares(2)
Kopp Investment Advisors, LLC 7701 France Avenue South Edina, MN 55435	1,631,660(3)	13.36%
Perkins Capital Management, Inc. 730 East Lake Street Wayzata, MN 55391	811,490(4)	6.64%
Kairos Partners II Limited Partnership and Kairos Partners III Limited Partnership 600 Longwater Drive, Suite 204 Norwell, MA 02061	783,200(5)	6.41%
State of Wisconsin Investment Board P.O. Box 7842 Madison, WI 53707	625,200(6)	5.12%

Edgar Filing: VITAL IMAGES INC - Form POS AM

**Directors and Named Executive Officers**

Douglas M. Pihl	93,569(7)	*
Jay D. Miller	329,500(8)	2.70%
Vincent J. Argiro, Ph.D.	432,743(9)	3.54%
James B. Hickey, Jr.	51,500(10)	*
Richard W. Perkins	111,500(11)	*
Michael W. Vannier, M.D.	51,000(12)	*

Edgar Filing: VITAL IMAGES INC - Form POS AM

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned(1)	Percent of Outstanding Shares(2)
Sven A. Wehrwein	35,500(13)	*
Steven P. Canakes	143,350(14)	1.17%
Michael H. Carrel	0(15)	0%
Philip I. Smith	31,600(16)	*
Gregory S. Furness	74,600(17)	*
All directors and executive officers as a group (12 persons, including those named above)	1,431,862(18)	11.72%

\* Less than one percent.

(1) Each person has sole voting and sole dispositive power with respect to all outstanding shares, except as noted.

(2) Based on 12,216,419 shares outstanding as of March 31, 2005. Such number does not include 2,178,341 shares of common stock issuable upon exercise of stock options outstanding as of March 31, 2005. Each figure showing the percentage of outstanding shares owned beneficially has been calculated by treating as outstanding and owned the shares which could be purchased by the indicated person(s) within 60 days of March 31, 2005 upon the exercise of stock options.

(3) Reflects information as of December 31, 2004 derived from Amendment No. 2 to Schedule 13G filed by Kopp Investment Advisors, LLC with the Securities Exchange Commission ( SEC ) on January 27, 2005. As set forth in the Schedule 13G, Kopp Investment Advisors, LLC has sole voting power as to 1,320,610 shares, sole dispositive power as to 500,000 shares, and shared dispositive power as to 1,071,660 shares. According to the Schedule 13G, although Kopp Investment Advisors, LLC exercises dispositive power over these 1,071,660 shares, it is not the owner of them. The Schedule 13G states that it is filed by Kopp Investments Advisors, LLC on behalf of itself and Kopp Holding Company, LLC, Kopp Holding Company and LeRoy C. Kopp.

(4) Reflects information as of December 31, 2004 derived from Amendment No. 11 to Schedule 13G filed by Perkins Capital Management, Inc. ( PCM ) with the SEC on February 9, 2005. Excludes shares beneficially owned by Mr. Richard W. Perkins, a director of Vital Images and the controlling shareholder of PCM, a registered investment adviser. Of the 811,490 shares held for the account of clients of PCM, for which beneficial ownership is disclaimed by PCM, PCM has sole dispositive power with regard to all such shares and sole voting power over 160,300 of such shares.

(5) Reflects information as of February 17, 2005 derived from a Schedule 13G filed on February 28, 2005 and Amendment No. 1 to Schedule 13G filed on March 7, 2005 by Kairos Partners II Limited Partnership, Kairos Partners III Limited Partnership, John F. White, James F. Rice, Kenneth L. Wolfe and Foster L. Aborn. As set forth in the Schedule 13G, as amended, of these 783,200 shares, Kairos Partners II Limited Partnership has shared voting power

and shared dispositive power as to 459,200 shares, Kairos Partners III Limited Partnership has shared voting power and shared dispositive power as to 324,000 shares, John F. White has shared voting power and shared dispositive power as to 783,200 shares, James F. Rice has shared voting power and shared dispositive power as to 783,200 shares, Kenneth L. Wolfe has shared voting power and shared dispositive power as to 783,200 shares, and Foster L. Aborn has shared voting power and shared dispositive power as to 783,200 shares. Shares reported in the Schedule 13G, as amended, represent shares held by Kairos Partners II Limited Partnership and Kairos Partners III Limited Partnership (collectively, the Partnerships ). Each of the individual Reporting Persons is a member of the investment committee of each of the Partnerships. Such committee has voting and investment power over the shares reported herein.

(6) Reflects information derived from a Schedule 13G filed by the State of Wisconsin Investment Board on February 15, 2005.

(7) Includes 30,000 shares that Mr. Pihl has the right to acquire upon the exercise of stock options. Excludes 27,994 shares held by Mr. Pihl's spouse, as to which Mr. Pihl disclaims beneficial ownership.

- (8) Includes 321,100 shares that Mr. Miller has the right to acquire upon the exercise of stock options.
- (9) Includes 99,250 shares that Dr. Argiro has the right to purchase upon the exercise of stock options. Excludes 109,550 shares held by Dr. Argiro's spouse, as to which Dr. Argiro disclaims beneficial ownership.
- (10) Includes 41,500 shares that Mr. Hickey has the right to acquire upon the exercise of stock options.
- (11) Includes 5,000 shares held by the Perkins Foundation and 88,500 shares held by various trusts of which Mr. Perkins is the sole trustee. Also includes 18,000 shares Mr. Perkins has the right to purchase upon the exercise of stock options. Excludes 811,490 shares of stock beneficially owned by PCM, as to which Mr. Perkins disclaims beneficial ownership.
- (12) Includes 45,000 shares that Dr. Vannier has the right to acquire upon the exercise of stock options.
- (13) Includes 32,500 shares that Mr. Wehrwein has the right to acquire upon the exercise of stock options.
- (14) Consists of 143,350 shares that Mr. Canakes has the right to acquire upon the exercise of stock options.
- (15) Mr. Carrel was serving as interim Chief Financial Officer and did not hold any stock options as of March 31, 2005.
- (16) Consists of 31,600 shares that Mr. Smith has the right to acquire upon the exercise of stock options.
- (17) Includes 34,600 shares that Mr. Furness has the right to acquire upon the exercise of stock options. Mr. Furness is our former Chief Financial Officer and Vice President-Finance. He resigned from these positions and as an employee of Vital Images effective February 8, 2005.
- (18) Includes 872,900 shares that all directors and executive officers as a group have the right to acquire upon the exercise of stock options.

**SELLING SHAREHOLDERS**

This prospectus covers offers and sales of shares of our common stock by the selling shareholders identified below. Of the shares identified in the table as to be sold, 21,972 shares were originally purchased by the selling shareholders in our December 1999 private placement for \$3.25 per unit, each unit consisting of one share and one warrant to purchase one share at an exercise price of \$3.75 per share. An additional 21,972 shares to be sold were acquired upon exercise of the warrants. In addition, 14,391 of the outstanding shares were acquired upon the exercise of warrants with an exercise price of \$3.25 per share that were issued as compensation to registered representatives and employees of the broker who acted as agent for the December 1999 private placement. An additional 1,500,000 of the outstanding shares were issued in our private placement completed in June 2003. We issued the remaining 376,262 shares in our acquisition of HInnovation, Inc. completed in February 2004. The shares issued in the acquisition transaction were valued at \$15.946 per share. We must issue to the former shareholders of HInnovation, Inc. up to an additional 300,000 shares upon the achievement of a performance milestone as provided in our Acquisition Agreement and Plan of Reorganization with HInnovation, Inc. dated January 8, 2004. Each selling shareholder purchased or will acquire the shares in the ordinary course of the shareholder's business and for the shareholder's own account for investment only, has no arrangement or understanding with any other persons regarding the distribution of the shares, and has no present intent of distributing the shares.

The table below identifies the selling shareholders and shows, to our knowledge, the numbers of shares of common stock beneficially owned by each of the selling shareholders as of March 31, 2005 and the number of shares offered for resale by each of the selling shareholders. Our registration of these shares does not necessarily mean that any selling shareholder will sell all or any of their shares of common stock. However, the Shares Beneficially Owned After Offering columns in the table assume that all shares covered by this

Edgar Filing: VITAL IMAGES INC - Form POS AM

prospectus will be sold by the selling shareholders and that no additional shares of common stock will be bought or sold by any selling shareholder. Except as indicated in the table, no selling shareholder has had, within the past three years, any position, office or other material relationships with us other than as a result of ownership of shares or other securities. No estimate can be given as to the number of shares that will be held by the selling shareholders after completion of this offering because the selling shareholders may offer some or all of the shares and, to our knowledge, because there are currently no agreements, arrangements or understandings with respect to the sale of any of the shares.

The information provided in the table below is from the selling shareholders, reports furnished to us under rules of the United States Securities and Exchange Commission, and our stock ownership records.

Beneficial Owner	Shares Beneficially Owned Before Offering(1)		Shares To be Sold	Shares Beneficially Owned After Offering(1)	
	Number	Percent(2)		Number	Percent(2)
William Bradley, Jr.(3)(4)	4,376	*	4,376	0	
Larry Christenson(5)	525	*	525	0	
TongZhe Cui(3)(6)	72,585	*	72,585	0	
David F. Dalvey(5)	5,338	*	5,338	0	
MingLei Duan(3)(7)	1,822	*	1,822	0	
W. Dennis Foley(3)(8)	2,552	*	2,552	0	
Gregory S. and Colette I. Furness(9)	74,600	*	2,000	72,600	*
Mark Golub(3)(10)	1,458	*	1,458	0	
Kong Her(5)	1,600	*	1,600	0	
Brian Hessing(5)	310	*	310	0	
James B. Hickey, Jr.(11)	51,500	*	10,000	41,500	*
Richard A. Hoel(12)	10,000	*	10,000	0	*
Hui Hu(3)(13)	346,657	2.84%	346,657	0	
JMS Co., Ltd.(3)(14)	145,899	1.19%	145,899	0	*
JMS North America(3)(15)	29,179	*	29,179	0	*
Zhang Jun(3)(16)	7,294	*	7,294	0	*
William Kelly(3)(17)	19,330	*	19,330	0	
Jay D. Miller(18)	329,500	2.70%	2,000	327,500	2.68%
Perkins Capital Management, Inc., Profit Sharing Plan & Trust(19)	10,000	*	10,000	0	*
Douglas M. Pihl(20)	93,569	*	944	92,625	
John V. Ryden(5)	2,265	*	2,265	0	
Wendy Sanders(5)	1,800	*	1,800	0	
Larry Schroeder(3)(21)	3,647	*	3,647	0	
Barbara Steinkamp(5)	457	*	457	0	
Donald Steinkamp(5)	2,096	*	2,096	0	
Yi Sun(3)(22)	34,169	*	34,169	0	
Yasushi Takigawa(3)(23)	7,294	*	7,294	0	
Michael W. and Ellen I. Vannier(24)	51,000	*	6,000	45,000	*
Sven A. Wehrwein(25)	35,500	*	3,000	32,500	*
Capital Ventures International (26)	225,000	1.84%	225,000	0	
Deephaven Small Cap Growth Fund (27)	272,500	2.23%	272,500	0	
Elliott Associates, L.P. (28)	185,000	1.51%	72,000	113,000	*
Elliott International, L.P. (28)	215,000	1.76%	88,000	127,000	1.04%
Jess S. Morgan & Co., Inc.(29)	424,225	*	57,500	366,725	3.00%
	400,000	3.27%	310,000	90,000	*



Edgar Filing: VITAL IMAGES INC - Form POS AM

Kopp Emerging Growth Fund (30)				
Langley Partners, L.P.(31)	50,000	*	50,000	0
MRT, L.P.(32)	15,000	*	15,000	0
Oppenheimer Discovery Fund(33)	300,000	2.46%	300,000	0

Beneficial Owner	Shares Beneficially Owned Before Offering(1)		Shares To be Sold	Shares Beneficially Owned After Offering(1)	
	Number	Percent(2)		Number	Percent(2)
Andrew Smukler	15,000	*	15,000	0	
Truk Opportunity Fund, LLC(34)	10,000	*	10,000	0	
UBS O Connor LLC f/b/o O Connor Global Convertible Arbitrage Master Limited(35)	37,500		37,500	0	
UBS O Connor LLC f/b/o PIPES Corporate Strategies Ltd.(35)	37,500	*	37,500	0	
Wolverine Trading Fund A, LLC (36)	10,000	*	10,000	0	
<b>Totals</b>	<b>3,543,047</b>		<b>2,234,597</b>	<b>1,308,450</b>	

\* Less than one percent.

(1) Each person has sole voting and sole dispositive power with respect to all outstanding shares unless otherwise noted.

(2) Based on 12,216,419 shares outstanding at March 31, 2005, which does not include up to 300,000 shares we must issue to the former HInnovation, Inc. shareholders upon the achievement of a performance milestone as described in our Acquisition Agreement and Plan of Reorganization with HInnovation, Inc. dated January 8, 2004. Each figure showing the percentage of outstanding shares owned beneficially has been calculated by treating as outstanding and owned the shares which could be purchased by the indicated person within 60 days upon the exercise of stock options and warrants.

(3) These individuals and entities, who are former shareholders of HInnovation, Inc., received their shares in our acquisition of HInnovation, Inc. completed in February 2004.

(4) Includes up to 1,941 shares that we must issue to William Bradley, Jr. upon the achievement of a performance milestone under our Acquisition Agreement and Plan of Reorganization with HInnovation, Inc. dated January 8, 2004.

(5) With the exception of Wendy Saunders, these individuals were registered representatives or employees of the broker who acted as agent for our December 1999 private placement, and they received warrants to purchase shares of our common stock as compensation for acting in that capacity. Ms. Saunders is the surviving spouse of Mr. Gordon J. Saunders, who received the warrants from one of these registered representatives or employees.

- (6) Includes up to 32,200 shares that we must issue to TongZhe Cui upon the achievement of a performance milestone under our Acquisition Agreement and Plan of Reorganization with HInnovation, Inc. dated January 8, 2004.
- (7) Includes up to 808 shares that we must issue to MingLei Duan upon the achievement of a performance milestone under our Acquisition Agreement and Plan of Reorganization with HInnovation, Inc. dated January 8, 2004.
- (8) Includes up to 1,132 shares that we must issue to W. Dennis Foley upon the achievement of a performance milestone under our Acquisition Agreement and Plan of Reorganization with HInnovation, Inc. dated January 8, 2004.
- (9) Includes 34,600 shares that Mr. Furness has the right to acquire within 60 days upon exercise of stock options. Mr. Furness is our former Chief Financial Officer and Vice President Finance. He resigned from these positions and as an employee of Vital Images effective February 8, 2005.
- (10) Includes up to 647 shares that we must issue to Mark Golub upon the achievement of a performance milestone under our Acquisition Agreement and Plan of Reorganization with HInnovation, Inc. dated January 8, 2004.
- (11) Mr. Hickey is a director of our company. Includes 41,500 shares that Mr. Hickey has the right to acquire within 60 days upon exercise of stock options.
- (12) Mr. Hoel is a shareholder of Winthrop & Weinstine, P.A., a law firm which provides us with legal services.

- (13) Includes up to 153,782 shares that we must issue to Hui Hu upon the achievement of a performance milestone under our Acquisition Agreement and Plan of Reorganization with HInnovation, Inc. dated January 8, 2004.
- (14) Includes up to 64,723 shares that we must issue to JMS Co., Ltd upon the achievement of a performance milestone under our Acquisition Agreement and Plan of Reorganization with HInnovation, Inc. dated January 8, 2004. The shares of JMS Co., Ltd. are listed on the Tokyo Stock Exchange.
- (15) Includes up to 12,944 shares that we must issue to JMS North America Corporation upon the achievement of a performance milestone under our Acquisition Agreement and Plan of Reorganization with HInnovation, Inc. dated January 8, 2004. JMS North America Corporation is a wholly-owned subsidiary of JMS Co., Ltd., the shares of which are listed on the Tokyo Stock Exchange.
- (16) Includes up to 3,236 shares that we must issue to Zhang Jun upon the achievement of a performance milestone under our Acquisition Agreement and Plan of Reorganization with HInnovation, Inc. dated January 8, 2004.
- (17) Includes up to 8,575 shares that we must issue to William Kelly upon the achievement of a performance milestone under our Acquisition Agreement and Plan of Reorganization with HInnovation, Inc. dated January 8, 2004.
- (18) Mr. Miller is our President and Chief Executive Officer. Includes 296,500 shares that Mr. Miller has the right to acquire within 60 days upon exercise of stock options.
- (19) Does not include shares beneficially owned by Mr. Richard W. Perkins, one of our directors and the controlling shareholder of Perkins Capital Management, Inc. ( PCM ), a registered investment advisor. Specifically, the ownership does not include 5,000 shares held by the Perkins Foundation, 88,500 shares held by various other trusts of which Mr. Perkins is the sole trustee, and 18,000 shares Mr. Perkins has the right to purchase within 60 days upon the exercise of stock options. Does not include 811,490 shares held for the account of clients of PCM, for which beneficial ownership is disclaimed by PCM. PCM has sole dispositive power with regard to all such shares and sole voting power over 105,167 of such shares. Also excludes 10,000 shares that a client of PCM has the right to acquire upon exercise of stock options.
- (20) Mr. Pihl is a director and our Chairman of the Board. Includes 30,000 shares that Mr. Pihl has the right to acquire within 60 days upon the exercise of stock options. Does not include 27,994 shares held by Mr. Pihl's spouse.

- (21) Includes up to 1,618 shares that we must issue to Larry Schroeder upon the achievement of a performance milestone under our Acquisition Agreement and Plan of Reorganization with HInnovation, Inc. dated January 8, 2004.
- (22) Includes up to 15,158 shares that we must issue to Yi Sun upon the achievement of a performance milestone under our Acquisition Agreement and Plan of Reorganization with HInnovation, Inc. dated January 8, 2004.
- (23) Includes up to 3,236 shares that we must issue to Yasushi Takigawa upon the achievement of a performance milestone under our Acquisition Agreement and Plan of Reorganization with HInnovation, Inc. dated January 8, 2004.
- (24) Dr. Vannier is a director of our company. Includes 45,000 shares that Dr. Vannier has the right to acquire within 60 days upon the exercise of stock options.
- (25) Mr. Wehrwein is a director of our company. Includes 32,500 shares that Mr. Wehrwein has the right to acquire within 60 days upon the exercise of stock options.
- (26) Heights Capital Management, Inc., as the authorized agent of Capital Ventures International ( CVI ), has discretionary authority to vote and dispose of the shares held by CVI and may be deemed to be the beneficial owner of these shares. Mr. Martin Kobinger, in the capacity as Investment Manager for Heights Capital Management, Inc., may also be deemed to have investment discretion and voting power with respect to the securities of the issuer held by CVI.
- (27) Deephaven Small Cap Growth Fund LLC is a private investment fund that is owned by all of its investors and managed by Deephaven Capital Management LLC. Deephaven Capital Management LLC, of which Mr. Colin Smith is the Chief Executive Officer, has voting and investment control over the shares that are owned by Deephaven Small Cap Growth Fund LLC. Deephaven Small Cap Growth Fund LLC is not a broker-dealer, but it is an indirect subsidiary of Knight Trading Group, Inc.,

which is affiliated with one or more broker-dealers. Mr. Colin Smith may be deemed to have investment discretion and voting power over these shares.

(28) The voting power for these shares is shared between Elliott International Capital Advisors and Elliott International, L.P. Mr. Paul Singer, as general partner of Elliott Associates, L.P., may be deemed to have investment discretion over the shares of Vital Images held by Elliott Associates, L.P. and Elliott International, L.P.

(29) Based upon information set forth in the Schedule 13G/A filed by Jess Morgan & Company, Inc. with the Securities and Exchange Commission on July 3, 2003. Mr. Gary N. Levenstein, as Executive Vice President of Jess Morgan & Company, Inc., may be deemed to have investment discretion and voting power over these shares.

(30) Kopp Investment Advisers, Inc. has voting and dispositive power over the shares registered in the name of Kopp Emerging Growth Fund. Centennial Lakes Capital, Inc., which is a member of the National Association of Securities Dealers, Inc., is the principal distributor of Kopp Emerging Growth Fund. Mr. LeRoy C. Kopp may also be deemed to have investment and voting power over the shares of Vital Images held by Kopp Emerging Growth Fund.

(31) Langley Capital, LLC is a general partner of Langley Partners, L.P., and Jeffrey Thorp is the sole managing member of Langley Capital, LLC. Each of Langley Capital, LLC and Mr. Jeffrey Thorp may be deemed to beneficially own these shares of common stock.

(32) Mr. Gregory Porges, as President of the general partner of MRT, L.P., may be deemed to have investment discretion and voting power over these shares.

(33) OppenheimerFunds Distributor, Inc., the general distributor of shares of Oppenheimer Discovery Fund, is a registered broker-dealer and member of the National Association of Securities Dealers, Inc. and is an affiliate of Oppenheimer Discovery Fund. Ms. Laura Granger, as Vice President and Portfolio Manager of Oppenheimer Discovery Fund, may be deemed to have investment discretion and voting power over these shares.

(34) Michael E. Fein and Stephen E. Saltzstein, as principals of Atoll Asset Management, LLC, the managing member of Truk Opportunity Fund, LLC, also may be deemed to exercise investment and voting control over the shares.

(35) UBS O Connor LLC is an indirect wholly-owned subsidiary of UBS AG, which is a reporting company listed on the New York Stock Exchange.

(36) Wolverine Trading Fund A, LLC is affiliated with Wolverine Execution Services, which is a member of the National Association of Securities Dealers, Inc. Mr. Robert Bellick may be deemed to have investment discretion and voting power over these shares.

#### PLAN OF DISTRIBUTION

We are registering the common stock covered by this prospectus for the selling shareholders pursuant to registration rights granted to the selling shareholders. The selling shareholders have indicated that they are acting independently from us in determining the manner and extent of sales of the shares of our common stock after the date of this prospectus. As used in this prospectus, the term selling shareholders includes the selling shareholders named in the table above and their donees, pledgees and transferees and other successors-in-interest selling shares received from a named selling shareholder as a gift, partnership distribution or other non-sale related transfer after the date of this prospectus. After the date of this prospectus, such sales may be made in one or more types of transactions (which may include block transactions) on The NASDAQ National Market, in negotiated transactions, through put or call options transactions relating to the shares, through short sales of shares, hedging transactions, or a combination of such methods of sale, at market prices prevailing at the time of sale, or at negotiated prices. Such transactions may or may not involve brokers or dealers. After the date of this prospectus, sales of shares in The NASDAQ National Market involving brokers or dealers may be by means of one or more of the following transactions:

in a block trade in which a broker or dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;

in transactions in which brokers, dealers or underwriters purchase the shares as principal and resell the shares for their own accounts under this prospectus;

in ordinary brokers transactions and transactions in which the broker solicits purchasers;

in connection with the loan or pledge of the shares of common stock registered to a broker or dealer, and the sale of the common stock so loaned or the sale of the shares so pledged upon a default;

in connection with the writing of non-traded and exchange-traded call options, in hedge transactions and in settlement of other transactions and standardized or over-the-counter options; or

in a combination of any of the above methods.

The selling shareholders have advised us that they have made no arrangements or agreements with any underwriters, brokers or dealers regarding the resale of the common stock prior to the effective date of this prospectus. The selling shareholders may pay compensation to brokers, dealers or agents in the form of commissions, discounts or concessions, which compensation may be less than or in excess of the customary rates of such brokers or dealers for similar transactions.

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 of registering the shares of common stock, up to and including \$50,000, including the reasonable fees and disbursements of persons retained by us. We have agreed to pay all fees and expenses in excess of \$50,000. These expenses include legal and accounting fees incurred in preparing the registration statement of which this prospectus is a part, legal and other fees in connection with the qualification of the sale of the shares under the laws of states, registration and filing fees and other expenses. The selling shareholders will pay all other expenses incident to the offering and sale of the shares to the public, including any commissions, discounts or concessions of underwriters, brokers, dealers or agents.

The selling shareholders also may sell these shares in accordance with Rule 144 under the Securities Act of 1933, if Rule 144 is then available.

The participating selling shareholders and any underwriters, brokers or dealers engaged by them may be deemed to be statutory underwriters under the Securities Act of 1933. In addition, to the extent that selling shareholders who are affiliates of broker-dealers did not acquire their shares of Vital Images in the ordinary course of business or had an agreement or understanding to dispose of the shares, such affiliates would be designated as underwriters under the Securities Act of 1933. Any profits on sales of the common stock by them and any discounts, commissions



## Edgar Filing: VITAL IMAGES INC - Form POS AM

or concessions received by any selling stockholder or underwriter, broker or dealer may be deemed to be underwriting discounts or commissions under the Securities Act of 1933.

If a selling shareholder notifies us that a material arrangement has been entered into with an underwriter, broker or dealer for the sale of the common stock through a secondary distribution or a purchase by an underwriter, broker or dealer, we will file a supplement to this prospectus, if required, disclosing such of the following information as we believe is appropriate:

the name of each such selling shareholder and of the participating underwriter, broker or dealer;

the number of shares of common stock involved;

the price at which such common stock was sold;

the commissions paid or discounts or concessions allowed to such underwriter, broker or dealer; and

other facts material to the transaction.

We have agreed to indemnify the selling shareholders against certain liabilities relating to resale of the common stock under the Securities Act of 1933. Each of the selling shareholders has agreed to indemnify us (and our officers who sign the Registration Statement of which this prospectus is a part, our directors and any person that controls us) against such liabilities to the extent resulting from untrue statements or omissions in the prospectus or registration statement based on written information furnished by the selling shareholder specifically for use in preparing this prospectus or the registration statement. The selling shareholders may agree to indemnify any agent, dealer or broker-dealer that participates in transactions involving sales of the shares against certain liabilities, including liabilities arising under the Securities Act of 1933. Insofar as indemnification for liabilities under the Securities Act of 1933 may be permitted to our directors or officers, or persons that control us, we have been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is therefore unenforceable.

Although all of the shares are being registered for public sale, the sale of any or all of such shares by the selling shareholders may depend on the sale price of such shares and market conditions generally prevailing at the time. We are unable to predict the effect that sales of the common stock offered and sold under this prospectus may have upon our ability to raise further capital.

Because selling shareholders may be deemed to be underwriters within the meaning of the Securities Act of 1933, the selling shareholders will be subject to the prospectus delivery requirements of the Securities Act of 1933 and the rules promulgated thereunder. We have informed the selling shareholders that the anti-manipulative provisions of Regulation M under the Securities Exchange Act of 1934 may apply to their sales of our shares in the market.

In order to comply with some states' securities laws, the common stock will be sold in these states only through registered or licensed brokers or dealers. In addition, in some states, the shares of common stock may not be sold unless they have been registered or qualified for sale in such states or an exemption from registration or qualification is available and complied with.

## **DESCRIPTION OF OUR COMMON STOCK**

### **General**

Under our articles of incorporation, we have 5,000,000 shares of authorized preferred stock and 20,000,000 shares of authorized common stock. As of March 31, 2005, no shares of preferred stock and 12,216,419 shares of common stock were outstanding. As of March 31, 2005, there were approximately 5,700 beneficial owners and 800 holders of record of our common stock.

**Common Stock**

The holders of our common stock are entitled to receive dividends when, as and if declared by our board of directors and paid by us out of funds legally available therefore and to share ratably in our assets available for distribution after the payment of all prior claims if we liquidate, dissolve or wind up our business, and after payment to the holders of any shares of our preferred stock. Holders of our common stock are entitled to one vote per share on all matters requiring a vote of shareholders. Our common stock does not have cumulative

voting rights. The rights of the holders of our common stock will be subject to any preferential rights of any classes or series of our outstanding preferred stock. Holders of our common stock have no preemptive or other subscription rights, and there are no conversion, redemption or sinking fund provisions applicable thereto. All of our outstanding shares of common stock are fully-paid and non-assessable. Holders of our common stock are not liable for further calls or assessments.

### **Undesignated Preferred Stock**

Our articles of incorporation authorize our board of directors to establish more than one class or series of shares of preferred stock. In establishing a class or series, the board is authorized to set the voting rights, liquidation preferences, dividend rights, repurchase rights, conversion rights, redemption rights, and other rights and preferences. Although there is no current intention to do so, the board of directors may issue shares of a class or series of preferred stock with rights which could adversely affect the voting power of the holders of common stock. In addition, our board of directors could authorize the issuance of shares of preferred stock with terms and conditions that could have the effect of delaying, deferring or preventing a transaction or a change in control that might involve a premium price for holders of our common stock or otherwise be in their best interest.

### **Shareholder Rights Plan**

We have adopted a shareholder rights plan designed to protect us against unsolicited attempts to acquire our company. The plan is described in Note 6 of the Notes to Consolidated Financial Statements included in this prospectus. The plan may deter or discourage takeover attempts and other changes in control that are not approved by our board of directors, and it may have a depressive effect on any market for our common stock. In addition, the rights plan 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.

### **Anti-Takeover Provisions**

Certain provision of Minnesota law described below could have an anti-takeover effect. These provisions are intended to provide management with flexibility and to enhance the likelihood of continuity and stability in the composition of our board of directors and in the policies formulated by our board and to discourage an unsolicited takeover of the company, if the board determines that such a takeover is not in our best interests or in the best interests of our shareholders. However, these provisions could have the effect of discouraging attempts to acquire us, which could deprive our shareholders of opportunities to sell their shares of common stock at prices higher than prevailing market prices.

Section 302A.671 of the Minnesota Business Corporation Act applies, with certain exceptions, to any acquisition of our voting stock from a person other than the company and other than in connection with certain mergers and exchanges to which the company is a party resulting in the acquiring person owning 20% or more of our voting stock then outstanding. Section 302A.671 requires approval of any such acquisitions by a majority vote of our shareholders before its consummation. In general, shares acquired in the absence of such approval are denied voting rights and are redeemable by us at their then fair market value within 30 days after the acquiring person has failed to give a timely information statement to us or the date the shareholders voted not to grant voting rights to the acquiring person's shares.

## Edgar Filing: VITAL IMAGES INC - Form POS AM

Section 302A.673 of the Minnesota Business Corporation Act generally prohibits us or any of our subsidiaries from entering into any transaction with a shareholder under which the shareholder purchases 10% or more of our voting shares (an interested shareholder ) within four years following the date the person

became an interested shareholder, unless the transaction is approved by a committee of all of the disinterested members of our board of directors serving as such before the interested shareholder acquires the shares.

#### **Transfer Agent and Registrar**

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company. Its address is 59 Maiden Lane, Plaza Level, New York, New York 10038.

#### **Listing**

Our common stock is quoted on the NASDAQ National Market under the symbol VTAL.

#### **Limitations on Liability and Indemnification of Officers and Directors**

Our articles of incorporation limit the liability of our directors to the fullest extent permitted by Minnesota law. In addition, our articles provide that we must indemnify our directors and officers to the fullest extent permitted by Minnesota law. To the extent that our directors, officers and controlling persons are indemnified under the provisions contained in our articles of incorporation, Minnesota law or otherwise against liabilities arising under the Securities Act of 1933, we have been advised that in the opinion of the Securities Exchange Commission, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

### **LEGAL MATTERS**

Winthrop & Weinstine, P.A., Minneapolis, Minnesota, is giving an opinion on validity of the shares of common stock being offered by this prospectus. Mr. Richard A. Hoel is a shareholder of Winthrop & Weinstine, P.A. and is also a shareholder of Vital Images.

### **EXPERTS**

The financial statements as of December 31, 2004 and 2003 and for each of the three years in the period ended December 31, 2004 included in this prospectus have been so included in reliance on the reports of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

### **WHERE YOU CAN FIND MORE INFORMATION**

## Edgar Filing: VITAL IMAGES INC - Form POS AM

We are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended (the Exchange Act ), and we file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission (the Commission ). You may read and copy the reports, proxy statements and other information that we file at the Commission s public reference facilities at Station Place, 100 F St. N.E., Washington, D.C. 20549 at prescribed rates. Our filings are also available free of charge at the Commission s website at <http://www.sec.gov>. You may also obtain copies of such materials by calling the Commission at 1-800-SEC-0330, or by mail from the Public Reference Room at Station Place, 100 F St. N.E., Washington, D.C. 20549.

This prospectus is part of a Post-Effective Amendment No. 1 on Form S-1 to Form S-3 Registration Statement (the Registration Statement ) we filed with the Commission under the Securities Act of 1933. This prospectus does not contain all of the information set forth in the Registration Statement. For more information about us and our common stock, you should read the Registration Statement and its exhibits and schedules. Copies of the Registration Statement, including its exhibits, may be inspected without charge at the offices of the Commission or obtained at prescribed rates from the Public Reference Section of the Commission at Station

Place, 100 F St. N.E., Washington, D.C. 20549. Copies of the Registration Statement may be obtained without charge via the SEC's website (<http://www.sec.gov>).



**INDEX TO FINANCIAL STATEMENTS**

Consolidated Balance Sheet as of March 31, 2005 (Unaudited)

Consolidated Statements of Operations for the Three Months Ended March 31, 2005 and 2004 (Unaudited)

Consolidated Statements of Cash Flows for the Three Months Ended March 31, 2005 and 2004 (Unaudited)

Notes to Consolidated Financial Statements (Unaudited)

Report of Independent Registered Public Accounting Firm

Consolidated Balance Sheets as of December 31, 2004 and 2003

Consolidated Statements of Operations for the years ended December 31, 2004, 2003 and 2002

Consolidated Statements of Stockholders' Equity and Comprehensive Income for the years ended December 31, 2004, 2003 and 2002

Consolidated Statements of Cash Flows for the years ended December 31, 2004, 2003 and 2002

Notes to Consolidated Financial Statements

**Vital Images, Inc.**  
**Consolidated Balance Sheet**

	<b>March 31, 2005 (Unaudited)</b>
<b>Assets</b>	
Current assets:	
Cash and cash equivalents	\$ 21,405,126
Marketable securities	11,461,370
Accounts receivable, net	14,001,102
Deferred income taxes	600,000
Prepaid expenses and other current assets	1,624,915
Total current assets	49,092,513
Property and equipment, net	5,321,411
Deferred income taxes	8,702,000
Licensed technology, net	300,000
Other intangible assets, net	5,456,000
Goodwill	6,052,744
Total assets	\$ 74,924,668
<b>Liabilities and Stockholders' Equity</b>	
Current liabilities:	
Accounts payable	\$ 2,954,237
Accrued compensation	1,731,634
Accrued royalties	696,088
Other current liabilities	723,192
Deferred revenue	9,661,457
Total current liabilities	15,766,608
Deferred revenue	390,567
Deferred rent	1,344,849
Total liabilities	17,502,024
Commitments and contingencies (Note 10)	
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 and 12,007,160 shares issued and outstanding, respectively	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
Total liabilities and stockholders' equity	\$ 74,924,668

(The accompanying notes are an integral part of the consolidated financial statements.)

**Vital Images, Inc.**  
**Consolidated Statements of Operations**  
**(Unaudited)**

	<b>For the Three Months Ended</b>	
	<b>March 31,</b>	
	<b>2005</b>	<b>2004</b>
<b>Revenue:</b>		
License fees	\$ 7,330,998	\$ 5,540,612
Maintenance and services	3,350,855	1,988,528
Hardware	643,075	286,828
<b>Total revenue</b>	<b>11,324,928</b>	<b>7,815,968</b>
<b>Cost of revenue:</b>		
License fees	1,080,700	1,003,627
Maintenance and services	1,226,036	1,090,203
Hardware	365,575	243,240
<b>Total cost of revenue</b>	<b>2,672,311</b>	<b>2,337,070</b>
<b>Gross profit</b>	<b>8,652,617</b>	<b>5,478,898</b>
<b>Operating expenses:</b>		
Sales and marketing	3,420,044	2,701,577
Research and development	1,778,161	1,682,323
General and administrative	1,590,387	1,736,776
Loss on operating lease	493,000	
Acquired in-process research and development		1,000,000
<b>Total operating expenses</b>	<b>7,281,592</b>	<b>7,120,676</b>
<b>Operating income (loss)</b>	<b>1,371,025</b>	<b>(1,641,778)</b>
Interest income	163,244	65,212
Income (loss) before income taxes	1,534,269	(1,576,566)
Provision (benefit) for income taxes, net	511,000	(224,308)
<b>Net income (loss)</b>	<b>\$ 1,023,269</b>	<b>\$ (1,352,258)</b>
Net income (loss) per share basic	\$ 0.08	\$ (0.12)
Net income (loss) per share diluted	\$ 0.08	\$ (0.12)
Weighted average common shares outstanding - basic	12,070,838	11,338,829
Weighted average common shares outstanding - diluted	12,953,393	11,338,829

(The accompanying notes are an integral part of the consolidated financial statements.)

**Vital Images, Inc.**  
**Consolidated Statements of Cash Flows**  
**(Unaudited)**

	For the Three Months Ended March 31,	
	2005	2004
Cash flows from operating activities:		
Net income (loss)	\$ 1,023,269	\$ (1,352,258)
Adjustments to reconcile net income to net cash provided by (used in) operating activities:		
Depreciation and amortization	477,595	371,998
Amortization of identified intangibles	351,000	193,000
Provision for doubtful accounts	(184,395)	499,000
Amortization of discount and accretion of premium on marketable securities	107,314	59,293
Stock-based compensation - employee	16,569	
Stock-based compensation - non-employee	1,418	(9,463)
Loss on operating lease	493,000	
Amortization of deferred rent	(29,658)	
Deferred income taxes	(248,000)	(385,308)
Tax benefit from stock option transactions	759,000	146,000
Acquired in-process research and development		1,000,000
Changes in operating assets and liabilities, net of effect from acquisition:		
Accounts receivable	(5,726,348)	(1,190,277)
Prepaid expenses and other assets	(532,420)	155,660
Accounts payable	610,543	(332,820)
Accrued and other liabilities	(1,570,403)	569,253
Deferred revenue	1,637,612	829,404
Deferred rent	1,180,354	
Net cash provided by (used in) operating activities	(1,633,550)	553,482
Cash flows from investing activities:		
Purchases of property and equipment	(2,125,602)	(146,728)
Purchases of marketable securities	(3,065,359)	(6,892,367)
Sales of marketable securities	3,034,830	1,468,500
Acquisition of HIInnovation, Inc., net of cash acquired		(6,498,096)
Net cash used in investing activities	(2,156,131)	(12,068,691)
Cash flows from financing activities:		
Proceeds from sale of common stock under stock plans	1,075,650	525,542
Net cash provided by financing activities	1,075,650	525,542
Net decrease in cash and cash equivalents	(2,714,031)	(10,989,667)
Cash and cash equivalents, beginning of period	24,119,157	30,111,613
Cash and cash equivalents, end of period	\$ 21,405,126	\$ 19,121,946
Supplemental cash flow information:		
Purchases of property and equipment with accounts payable	\$ 751,792	\$

(The accompanying notes are an integral part of the consolidated financial statements.)

Vital Images, Inc.

Notes to Consolidated Financial Statements (Unaudited)

**1. Basis of presentation**

The accompanying unaudited consolidated financial statements of Vital Images, Inc. ( Vital Images or the Company ) have been prepared in accordance with generally accepted accounting principles for interim financial information and with the instructions to Form 10-Q and Rule 10-01 of Regulation S-X. Accordingly, they do not include all of the information and notes required by accounting principles generally accepted in the United States of America. In the opinion of management, all adjustments, consisting only of normal recurring adjustments, for a fair presentation, have been included. Operating results for the three months ended March 31, 2005 are not necessarily indicative of the results that may be expected for any subsequent quarter or for the year ending December 31, 2005. These financial statements should be read in conjunction with the financial statements and notes thereto included in the Company s Annual Report on Form 10-K for the year ended December 31, 2004.

The accompanying unaudited consolidated financial statements include the accounts of the Company and its wholly owned subsidiary, HInnovation, Inc.. All significant intercompany accounts and transactions have been eliminated. The Company operates as a single business segment. The Company markets its products to healthcare providers and to manufacturers of diagnostic imaging systems and picture archive and communication systems ( PACS ) through a direct sales force in the United States and independent distributors in international markets.

Certain reclassifications have been made to conform prior period data to current period presentation. These reclassifications had no effect on results of operations or cash flows from operations.

**2. Major customer and geographic data**

The following customer accounted for more than 10% of the Company s total revenue for the periods indicated:

	For the Three Months Ended	
	2005	2004
Toshiba Medical Systems Corporation	\$ 6,240,000	\$ 5,351,000
Percentage of total revenue	55%	68%

The Company s accounts receivable are generally concentrated with a small base of customers. As of March 31, 2005 and December 31, 2004, Toshiba Medical Systems Corporation accounted for 42% and 23% of accounts receivable, respectively.



Edgar Filing: VITAL IMAGES INC - Form POS AM

Export revenue amounted to 14% and 15% of total revenue for the three months ended March 31, 2005 and 2004, respectively. Substantially all of the Company's export revenue is negotiated, invoiced and paid in U.S. dollars. Gross export revenue by geographic area based on end user location is summarized as follows:

	For the Three Months Ended	
	2005	2004
	March 31,	
Europe	\$ 860,000	\$ 798,000
Asia and Pacific Region	596,000	280,000
Canada	72,000	46,000
Mexico and other foreign countries	36,000	16,000
Totals	\$ 1,564,000	\$ 1,140,000

### 3. Stock-based compensation

The Company accounts for stock-based employee compensation arrangements in accordance with the provisions of Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees", and complies with the disclosure provisions of SFAS No. 123, "Accounting for Stock-Based Compensation" and SFAS No. 148, "Accounting for Stock-Based Compensation-Transition and Disclosure-an amendment of Financial Accounting Standards Board (FASB) Statement No. 123". See Note 12 to the consolidated financial statements for discussion on SFAS No. 123 (revised 2004), "Share-Based Payment".

The Company has adopted the disclosure-only provisions of SFAS No. 123. For purposes of the pro forma disclosures below, the estimated fair value of the options and restricted stock is amortized to expense over the vesting period. Had compensation cost for the Company's stock options and restricted stock awards been recognized based on the fair value at the grant date consistent with the provisions of SFAS No. 123, the Company's net income would have been adjusted to the pro forma amounts indicated below:

	For the Three Months Ended	
	2005	2004
	March 31,	
Net income (loss), as reported	\$ 1,023,269	\$ (1,352,258)
Add: Stock-based employee compensation expense included in reported net income (loss), net of taxes	16,569	
Deduct: Total stock-based employee compensation expense determined under fair value method for all awards, net of related tax effects	(429,831)	(575,748)
Pro forma net income (loss)	\$ 610,007	\$ (1,928,006)
Net income (loss) per share - basic:		
As reported	\$ 0.08	\$ (0.12)
Pro forma	\$ 0.05	\$ (0.17)
Net income (loss) per share - diluted:		
As reported	\$ 0.08	\$ (0.12)
Pro forma	\$ 0.05	\$ (0.17)

Edgar Filing: VITAL IMAGES INC - Form POS AM

The pro forma effects on the net income (loss) for the three months ended March 31, 2005 and 2004 may not be indicative of the future results for the full fiscal year due to continuing option activity and other factors.

F-6

---



#### 4. Per share data

Basic earnings (loss) per share is computed using net income and the weighted average number of common shares outstanding. Diluted earnings (loss) per share reflect the weighted average number of common shares outstanding plus any potentially dilutive shares outstanding during the period. Potentially dilutive shares consist of shares issuable upon the exercise of stock options and warrants. As discussed in Note 10 to the consolidated financial statements, the contingent stock consideration related to the acquisition of HInnovation, Inc. has not been earned; accordingly, there was no impact on the Company's diluted earnings (loss) per share.

The computations for basic and diluted net income (loss) per share for each period are as follows:

	For the Three Months Ended	
	2005	2004
Numerator:		
Net income (loss)	\$ 1,023,269	\$ (1,352,258)
Denominator:		
Denominator for weighted average common shares outstanding - basic	12,070,838	11,338,829
Dilution associated with common stock warrants		
Dilution associated with the Company's stock-based compensation plans	882,555	
Denominator for weighted average common shares outstanding - diluted	12,953,393	11,338,829
Net income (loss) per share - basic	\$ 0.08	\$ (0.12)
Net income (loss) per share - diluted	\$ 0.08	\$ (0.12)

For the three months ended March 31, 2005, options and restricted stock to purchase 335,495 shares of common stock, respectively, were excluded from the diluted earnings per share computation because they were anti-dilutive. For the three months ended March 31, 2004, options and warrants to purchase 2,712,000 shares of common stock were excluded from the diluted earnings per share computation because they were anti-dilutive.

#### 5. Comprehensive income (loss)

Comprehensive income (loss) as defined by SFAS No. 130, *Reporting Comprehensive Income*, includes net income (loss) and items defined as other comprehensive income (loss). SFAS No. 130 requires that items defined as other comprehensive income (loss), such as foreign currency translation adjustments and unrealized gains and losses on certain marketable securities, be separately classified in the financial statements. Such items are reported in the consolidated statements of stockholders' equity as comprehensive income (loss).

The components of comprehensive income (loss) were as follows:

Edgar Filing: VITAL IMAGES INC - Form POS AM

	For the Three Months Ended	
	March 31,	
	2005	2004
Net income (loss)	\$ 1,023,269	\$ (1,352,258)
Other comprehensive loss:		
Net change in unrealized loss on available-for-sale investments	(7,985)	(8,221)
Comprehensive income (loss)	\$ 1,015,284	\$ (1,360,479)

Accumulated other comprehensive loss at March 31, 2005 and December 31, 2004 was \$55,850 and \$47,865, respectively.

F-7

---

## 6. Pro forma information

The following unaudited pro forma condensed consolidated results of operations have been prepared as if the acquisition of HInnovation, Inc. in February of 2004 had occurred as of the beginning of the period presented. Pro forma adjustments relate to amortization of identified intangible assets, acquired in-process research and development and income taxes. The unaudited pro forma condensed consolidated results of operations are for comparative purposes only and are not necessarily indicative of results that would have occurred had the acquisition occurred as of the beginning of the period presented, nor are they necessarily indicative of future results.

	<b>For the Three Months Ended March 31, 2004</b>
Revenue	\$ 7,843,968
Net loss	\$ (475,251)
Net loss per share diluted	\$ (0.04)

## 7. Other intangible assets and goodwill

Acquired intangible assets subject to amortization were as follows:

	<b>March 31, 2005</b>			<b>December 31, 2004</b>		
	<b>Gross Carrying Value</b>	<b>Accumulated Amortization</b>	<b>Net Carrying Value</b>	<b>Gross Carrying Value</b>	<b>Accumulated Amortization</b>	<b>Net Carrying Value</b>
Existing software technology	\$ 3,400,000	\$ (769,000)	\$ 2,631,000	\$ 3,400,000	\$ (598,000)	\$ 2,802,000
Patents and patent applications	3,000,000	(486,000)	2,514,000	3,000,000	(378,000)	2,622,000
Non-compete/employment agreements	500,000	(189,000)	311,000	500,000	(147,000)	353,000
Total intangible assets subject to amortization	\$ 6,900,000	\$ (1,444,000)	\$ 5,456,000	\$ 6,900,000	\$ (1,123,000)	\$ 5,777,000

Intangible assets subject to amortization are amortized on a straight-line basis over the estimated period of benefit. Amortization expense related to other intangible assets was \$321,000 and \$163,000 for the three months ended March 31, 2005 and 2004, respectively. The estimated future amortization expense for identified intangible assets is as follows:

Remainder of 2005	\$ 963,000
2006	1,284,000
2007	1,133,000
2008	1,116,000
2009 through 2011	960,000
	\$ 5,456,000



**Goodwill**

The changes in the carrying amount of goodwill for the three months ended March 31, 2005 was as follows:

Balance as of December 31, 2004	\$	6,052,744
Goodwill acquired during the period		
Balance as of March 31, 2005	\$	6,052,744

**8. Deferred revenue**

	March 31, 2005	December 31, 2004
Maintenance and support	\$ 5,483,941	\$ 4,734,764
Training	2,816,537	2,697,892
Installation	263,417	309,200
Software	991,287	454,108
Hardware and other	496,842	218,448
Total deferred revenue	10,052,024	8,414,412
Less current portion	(9,661,457)	(8,136,844)
Long-term portion of deferred revenue	\$ 390,567	\$ 277,568

**9. Income taxes**

The Company's quarterly consolidated effective income tax rate is 33.3% for the three months ended March 31, 2005, which is based on the Company's 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 the Company's 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 IPR&D charge, which was not tax deductible.

The provision for income taxes consists of provisions for federal and state income taxes. Losses incurred by the Company's 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.

The Company reviews its annual effective income tax rate on a quarterly basis and makes 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, the Company identifies items which are not normal and recurring in nature and treats these as discrete events. The tax effect of discrete items is booked entirely in the quarter in which the discrete event occurs.

**10. Commitments and contingencies**

**Contingent consideration related to acquisition**

The Company has 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

F-9

---

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 the Company's 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, Vital Images will pay the shortfall in cash. Any contingent payments made by the Company 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.

### **Marketing agreement**

In April 2005, the Company entered into a new agreement with R2 Technology, Inc. (R2) to market R2's lung nodule CAD software product to the Company's customers. The new agreement replaces the Company's 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, the Company has committed to R2 certain minimum revenues from the sale of R2 products over a 12-quarter period. The Company will receive a commission from R2 as consideration for the Company's marketing efforts and access to the Company's customers. This commission will be the only revenue the Company will recognize under the new agreement. The new agreement states that to the extent the quarterly minimum revenue commitments are not met, the Company 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 the Company. If R2 generates no revenue under this agreement, the estimated maximum shortfall payments would total approximately \$2.5 million.

## **11. Other items**

**Loss on operating lease** In March 2004, the Company 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. The Company moved into the Minnetonka location and moved out of its Plymouth, Minnesota location in February 2005. The Company's 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 the Company's former office facility in Plymouth beginning in February 2005. In the first quarter of 2005, the Company 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.

**12. New accounting pronouncement**

In December 2004, the 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. In April 2005, the Securities and Exchange Commission adopted a new rule that amends the compliance dates for SFAS No. 123R. The Company is required to adopt the provisions of SFAS No. 123R effective January 1, 2006, at which time the Company 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. The Company has not yet finalized its decision concerning the transition option it will utilize to adopt SFAS No. 123R. The Company is currently assessing its stock-based compensation strategy and related tax implications. Future stock-based compensation may differ from pro forma amounts. The Company expects the impact of the adoption of SFAS No. 123R to be material to its consolidated financial statements.



### Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with established policies or procedures may deteriorate.

We have completed our evaluation of the internal control over financial reporting as of December 31, 2004. In making our assessment of internal control over financial reporting, we used the criteria described in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

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 assessment identified the following material weaknesses in the our internal control over financial reporting as of December 31, 2004:

(i) As of December 31, 2004, we did not maintain effective control over the accuracy and completeness of maintenance and services revenues and deferred revenues. Specifically, effective controls were not in place to recognize maintenance and services revenue in the appropriate period. This control deficiency resulted in the restatement of the our consolidated financial statements for the year ended December 31, 2003, for the first and second quarters of 2004 and for the first, second and third quarters of 2003. Additionally, this control deficiency could result in a misstatement of maintenance and services revenue and deferred revenue that would result in a material misstatement to annual or interim financial statements that would not be prevented or detected. Accordingly, our management determined that this control deficiency constitutes a material weakness.

(ii) As of December 31, 2004, we did not maintain effective control over property and equipment. Specifically, effective controls were not in place to verify the existence of certain property and equipment. This control deficiency did not result in an adjustment to our consolidated financial statements; however, it could result in a misstatement of property and equipment that would result in a material misstatement to annual or interim financial statements that would not be prevented or detected. Accordingly, our management determined that this control deficiency constitutes a material weakness.

(iii) As of December 31, 2004, we did not maintain effective control over the period-end financial reporting process. Specifically, review and approval controls over quarterly financial results and related disclosures did not operate as designed for a sufficient period of time to demonstrate that they operate effectively. This control deficiency did not result in an adjustment to our consolidated financial statements; however, it could result in a misstatement of accounts and disclosures that would result in a material misstatement to annual or interim financial statements that would not be prevented or detected. Accordingly, our management determined that this control deficiency constitutes a material weakness.

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*.

Our management's assessment of the effectiveness of the Company's internal control over financial reporting as

F-12

---

of December 31, 2004 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report included herein.

**Remediation of material weaknesses**

During the first quarter of 2005, we have implemented, or are in the process of implementing, 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 its 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, 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.

**Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Stockholders of Vital Images, Inc.:

We have audited management's assessment, included in Management's Report on Internal Control Over Financial Reporting appearing above, that Vital Images, Inc. did not maintain effective internal control over financial reporting as of December 31, 2004, because the Company 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 (COSO). The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express opinions on management's assessment and on the effectiveness of the Company's internal control over financial reporting based on our audit.

## Edgar Filing: VITAL IMAGES INC - Form POS AM

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. An audit includes obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we consider necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes

## Edgar Filing: VITAL IMAGES INC - Form POS AM

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

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

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. The following material weaknesses have been identified and included in management's assessment as of December 31, 2004:

(i) As of December 31, 2004, the Company did not maintain effective control over the accuracy and completeness of maintenance and services revenues and deferred revenues. Specifically, effective controls were not in place to recognize maintenance and services revenue in the appropriate period. This control deficiency resulted in the restatement of the Company's consolidated financial statements for the year ended December 31, 2003, for the first and second quarters of 2004 and for the first, second and third quarters of 2003. Additionally, this control deficiency could result in a misstatement of maintenance and services revenue and deferred revenue that would result in a material misstatement to annual or interim financial statements that would not be prevented or detected. Accordingly, management determined that this control deficiency constitutes a material weakness.

(ii) As of December 31, 2004, the Company did not maintain effective control over property and equipment. Specifically, effective controls were not in place to verify the existence of certain property and equipment. This control deficiency did not result in an adjustment to the Company's consolidated financial statements; however, it could result in a misstatement of property and equipment that would result in a material misstatement to annual or interim financial statements that would not be prevented or detected. Accordingly, management determined that this control deficiency constitutes a material weakness.

(iii) As of December 31, 2004, the Company did not maintain effective control over the period-end financial reporting process. Specifically, review and approval controls over quarterly financial results and related disclosure did not operate as designed for a sufficient period of time to demonstrate that they operate effectively. This control deficiency did not result in an adjustment to the Company's consolidated financial statements; however, it could result in a misstatement of accounts and disclosures that would result in a material misstatement to annual or interim financial statements that would not be prevented or detected. Accordingly, management determined that this control deficiency constitutes a material weakness.

These material weaknesses were considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2004 consolidated financial statements, and this report does not affect our report dated March 2, 2005 on those consolidated financial statements.

Edgar Filing: VITAL IMAGES INC - Form POS AM

In our opinion, management's assessment that Vital Images, Inc. did not maintain effective internal control over financial reporting as of December 31, 2004, is fairly stated, in all material respects, based on criteria

F-14

---

established in Internal Control - Integrated Framework issued by the COSO. Also, in our opinion, because of the effect of the material weaknesses described above on the achievement of the objectives of the control criteria, Vital Images, Inc. has not maintained effective internal control over financial reporting as of December 31, 2004, based on criteria established in *Internal Control - Integrated Framework* issued by the COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements of Vital Images, Inc. at December 31, 2004 and 2003 and for each of the three years in the period ended December 31, 2004 and in our report dated March 2, 2005 we expressed an unqualified opinion thereon.

/s/ PricewaterhouseCoopers LLP  
Minneapolis, Minnesota  
April 29, 2005

**Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Stockholders of Vital Images, Inc.:

In our opinion, the consolidated financial statements listed in the index appearing under Item 15(a)(1) present fairly, in all material respects, the financial position of Vital Images, Inc. and its subsidiary (the Company) at December 31, 2004 and 2003, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2004 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

PricewaterhouseCoopers LLP

Minneapolis, Minnesota

March 2, 2005

## Vital Images, Inc.

## Consolidated Balance Sheets

	December 31,	
	2004	2003
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 24,119,157	\$ 30,111,613
Marketable securities	11,546,140	4,078,587
Accounts receivable, net	8,090,359	4,877,876
Deferred income taxes	600,000	275,000
Prepaid expenses and other current assets	1,092,495	776,558
Total current assets	45,448,151	40,119,634
Property and equipment, net	3,222,367	3,043,239
Deferred income taxes	8,454,000	9,306,000
Licensed technology, net	330,000	450,000
Other intangible assets, net	5,777,000	
Goodwill	6,052,744	
Other assets		144,346
Total assets	\$ 69,284,262	\$ 53,063,219
<b>Liabilities and Stockholders Equity</b>		
Current liabilities:		
Accounts payable	\$ 1,892,657	\$ 1,485,451
Accrued compensation	3,175,354	1,347,464
Accrued royalties	573,985	556,494
Other current liabilities	673,131	285,121
Deferred revenue	8,136,844	4,530,333
Total current liabilities	14,451,971	8,204,863
Deferred revenue	277,568	264,691
Total liabilities	14,729,539	8,469,554
Commitments and contingencies (Note 3 and 5)		
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; 12,007,160 and 11,140,380 shares issued and outstanding, respectively	120,072	111,404
Additional paid-in capital	65,813,282	56,108,590
Accumulated other comprehensive loss	(47,865)	
Accumulated deficit	(11,330,766)	(11,626,329)
Total stockholders equity	54,554,723	44,593,665
Total liabilities and stockholders equity	\$ 69,284,262	\$ 53,063,219

The accompanying notes are an integral part of the consolidated financial statements.



**Vital Images, Inc.**  
**Consolidated Statements of Operations**

	For the Year Ended December 31,		
	2004	2003	2002
<b>Revenue:</b>			
License fees	\$ 24,054,251	\$ 18,388,794	\$ 14,211,640
Maintenance and services	9,524,791	6,844,470	4,019,639
Hardware	2,543,005	2,066,454	2,884,795
Total revenue	36,122,047	27,299,718	21,116,074
<b>Cost of revenue:</b>			
License fees	3,993,982	1,818,353	1,250,426
Maintenance and services	4,660,433	3,773,794	2,862,459
Hardware	1,792,666	1,478,914	2,195,182
Total cost of revenue	10,447,081	7,071,061	6,308,067
Gross profit	25,674,966	20,228,657	14,808,007
<b>Operating expenses:</b>			
Sales and marketing	12,204,574	9,317,766	6,795,377
Research and development	6,329,190	5,168,695	4,143,257
General and administrative	5,626,719	3,806,914	3,192,735
Acquired in-process research and development	1,000,000		
Total operating expenses	25,160,483	18,293,375	14,131,369
Operating income	514,483	1,935,282	676,638
Interest income	368,080	213,859	134,870
Income before income taxes	882,563	2,149,141	811,508
Provision (benefit) for income taxes, net	587,000	(6,313,000)	22,000
Net income	\$ 295,563	\$ 8,462,141	\$ 789,508
Net income per share basic	\$ 0.03	\$ 0.83	\$ 0.09
Weighted average common shares outstanding basic	11,632,351	10,189,114	8,861,132
Net income per share diluted	\$ 0.02	\$ 0.71	\$ 0.08
Weighted average common shares outstanding diluted	12,535,670	11,848,268	9,821,798

The accompanying notes are an integral part of the consolidated financial statements.

**Vital Images, Inc.**  
**Consolidated Statements of Stockholders Equity and Comprehensive Income**

	Common Stock Shares	Common Stock Amount	Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders Equity	Comprehensive Income
Balances as of December 31, 2001	8,186,092	\$ 81,861	\$ 28,846,906	\$ (20,877,978)		\$ 8,050,789	
Stock-based compensation			18,279			18,279	
Issuance of common stock upon exercise of stock options	288,008	2,880	1,003,321			1,006,201	
Issuance of common stock under employee stock purchase plan	24,539	245	130,363			130,608	
Issuance of common stock upon exercise of stock warrants	488,370	4,884	1,720,502			1,725,386	
Net income				789,508		789,508	\$ 789,508
Balances as of December 31, 2002	8,987,009	89,870	31,719,371	(20,088,470)		11,720,771	\$ 789,508
Stock-based compensation			137,485			137,485	
Issuance of common stock upon exercise of stock options	559,006	5,590	1,690,005			1,695,595	
Tax benefit related to exercise of stock options			3,189,000			3,189,000	
Issuance of common stock under employee stock purchase plan	12,995	130	150,437			150,567	
Issuance of common stock upon exercise of stock warrants	81,370	814	246,777			247,591	
Issuance of common stock in connection with private placement, net of offering costs	1,500,000	15,000	18,975,515			18,990,515	
Net income				8,462,141		8,462,141	\$ 8,462,141
Balances as of December 31, 2003	11,140,380	111,404	56,108,590	(11,626,329)		44,593,665	\$ 8,462,141
Stock-based compensation			11,507			11,507	
Issuance of common stock upon exercise of stock options	456,380	4,564	1,967,064			1,971,628	
Tax benefit related to exercise of stock options			1,430,000			1,430,000	
Issuance of common stock under employee stock purchase plan	18,344	183	171,648			171,831	
Issuance of common stock upon exercise of stock warrants	15,794	158	18,682			18,840	
Acquisition of HInnovation	376,262	3,763	6,105,791			6,109,554	
Unrealized loss on investments					(47,865)	(47,865)	\$ (47,865)
Net income				295,563		295,563	295,563
Balances as of December 31, 2004	12,007,160	\$ 120,072	\$ 65,813,282	\$ (11,330,766)	\$ (47,865)	\$ 54,554,723	\$ 247,698

The accompanying notes are an integral part of the consolidated financial statements.

## Vital Images, Inc.

## Consolidated Statements of Cash Flows

	For the Year Ended December 31,		
	2004	2003	2002
Cash flows from operating activities:			
Net income	\$ 295,563	\$ 8,462,141	\$ 789,508
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	1,569,390	1,220,468	894,814
Amortization of identified intangibles	1,243,000	120,000	120,000
Acquired in-process research and development	1,000,000		
Provision for doubtful accounts	626,800	46,000	64,000
Deferred income taxes	(878,000)	(9,581,000)	
Tax benefit from stock option transactions	1,430,000	3,189,000	
Amortization of discount and accretion of premium on marketable securities	463,192		
Non-employee stock-based compensation	11,507	137,485	18,279
Changes in operating assets and liabilities, net of effect from acquisition:			
Accounts receivable	(3,839,283)	47,203	(1,397,125)
Prepaid expenses and other assets	(168,864)	(422,212)	59,141
Accounts payable	301,200	499,981	(106,670)
Accrued and other liabilities	1,892,334	(63,204)	383,822
Deferred revenue	3,611,889	698,527	1,611,323
Net cash provided by operating activities	7,558,728	4,354,389	2,437,092
Cash flows from investing activities:			
Purchases of property and equipment	(1,626,777)	(1,879,117)	(1,499,533)
Purchases of marketable securities	(30,433,525)	(6,775,592)	(8,047,536)
Sales of marketable securities	22,454,915	5,205,118	5,539,423
Acquisition of HInnovation, Inc., net of cash acquired	(6,108,096)		
Net cash used in investing activities	(15,713,483)	(3,449,591)	(4,007,646)
Cash flows from financing activities:			
Proceeds from sale of common stock under stock plans	2,143,459	1,846,162	1,136,809
Proceeds from sale of common stock under stock warrants	18,840	247,591	1,725,386
Proceeds from sale of common stock, net of offering costs		18,990,515	
Net cash provided by financing activities	2,162,299	21,084,268	2,862,195
Net increase (decrease) in cash and cash equivalents	(5,992,456)	21,989,066	1,291,641
Cash and cash equivalents, beginning of year	30,111,613	8,122,547	6,830,906
Cash and cash equivalents, end of year	\$ 24,119,157	\$ 30,111,613	\$ 8,122,547
Supplemental cash flow information:			
Purchases of property and equipment with accounts payable	\$ 301,200	\$ 227,755	\$

The accompanying notes are an integral part of the consolidated financial statements.



**Vital Images, Inc.**

**Notes to Consolidated Financial Statements**

**1. Business description**

Vital Images, Inc. (the Company) develops, markets and supports enterprise-wide advanced visualization software for use primarily in clinical diagnosis, disease screening and therapy planning. The Company's software applies proprietary computer graphics and image processing technologies to a wide variety of data supplied by computed tomography (CT), magnetic resonance (MR) and positron emission tomography (PET) scanners. The Company's 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. The Company believes that its high-speed visualization technology and customized protocols cost-effectively bring 3D visualization and analysis into the routine, day-to-day practice of medicine. The Company, which operates in a single business segment, markets its products to healthcare providers and to manufacturers of diagnostic imaging systems and picture archive and communication systems (PACS) through a direct sales force in the United States and independent distributors in international markets.

The Company is subject to risks and uncertainties, including dependence on information technology spending by customers, well-established competitors, concentration of clients in a limited number of industries, fluctuations of quarterly results, a lengthy and variable sales cycle, dependence on principal products and third-party technology, rapid technological change, development of products that gain market acceptance and international expansion.

**2. Summary of significant accounting policies**

**Basis of presentation**

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary, HInnovation, Inc. All significant intercompany accounts and transactions have been eliminated.

**Use of estimates**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

**Fair value of financial instruments**

The Company's financial instruments consist primarily of cash, cash and cash equivalents, marketable securities, trade accounts receivable and accounts payable for which the current carrying amounts approximate fair market value.

**Cash and cash equivalents**

Cash and cash equivalents consist of cash and temporary investments with maturities of ninety days or less when purchased. The carrying amount of cash equivalents approximates fair value due to the short maturity of these instruments.

**Marketable securities**

Management determines the appropriate classification of marketable securities at the time of purchase and reevaluates such designation as of each balance sheet date. Currently, all marketable securities held by the Company are classified as available-for-sale. Available-for-sale securities are carried at fair value as determined by quoted market prices, with unrealized gains and losses, net of tax, reported as a separate component of stockholders' equity. If an unrealized loss for any investment is considered to be other-than-temporary, the loss will be recognized in the consolidated statements of operations in the period the determination is made. The cost basis of securities sold is determined using the specific identification method. The cost of marketable securities is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization and accretion is included in interest income. Interest and dividends on securities classified as available-for-sale are included in interest income. As of December 31, 2004, all investments mature within one year.

As of December 31, 2004 and 2003, the Company's marketable securities were as follows:

	December 31, 2004			December 31, 2003		
	Cost Basis	Aggregate Fair Value	Net Unrealized Gains (Losses)	Cost Basis	Aggregate Fair Value	Net Unrealized Gains (Losses)
Corporate debt	\$ 10,596,591	\$ 10,553,290	\$ (43,301)	\$	\$	\$
Certificates of deposit	997,414	992,850	(4,564)	2,060,000	2,060,000	
Mutual funds				2,018,587	2,018,587	
	\$ 11,594,005	\$ 11,546,140	\$ (47,865)	\$ 4,078,587	\$ 4,078,587	\$

**Accounts receivable and allowance for doubtful accounts**

Accounts receivable are initially recorded at a selling price, which approximates fair value upon the sale of goods or services to customers. The Company maintains an allowance for doubtful accounts at an amount estimated to be sufficient to provide adequate protection against losses resulting from extending credit to the Company's customers. In judging the adequacy of the allowance for doubtful accounts, the Company considers multiple factors, including historical bad debt experience, the general economic environment, the need for specific client reserves and the aging of the Company's 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.

**Concentration of credit risk**

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents and trade accounts receivable. Deposits with the Company's bank may exceed the amount of insurance provided on such deposits. Generally, these deposits may be redeemed upon demand and, therefore, bear minimal risk. Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of marketable securities. Marketable securities consist of corporate debt and certificates of deposit. The Company's investment policy, approved by the Board of Directors, limits the amount the Company may invest in any one type of investment, thereby reducing credit risk concentrations. The Company's customer base is generally concentrated with a small number of customers. The Company reviews the creditworthiness of its customers prior to product shipment and generally does not require collateral.





### **Property and equipment**

Property and equipment are recorded at cost. Depreciation is computed using the straight-line method over the related asset's estimated useful life, generally three to seven years. Leasehold improvements are amortized over the shorter of their estimated useful lives or the remaining terms of the related leases. The asset cost and related accumulated depreciation or amortization are adjusted for asset retirement or disposal with the resulting gain or loss, if any, credited or charged to results of operations.

### **Long-lived assets**

The Company reviews 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.

### **Goodwill and other intangible assets with indefinite lives**

The Company accounts 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. The Company 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 the Company's 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. The Company completed the annual goodwill impairment assessment as of December 31, 2004, upon which no impairment was recorded.

### **Revenue recognition**

The Company licenses its software and sells products and services to end-users and also indirectly through original equipment manufacturers (OEMs) and independent distributors (collectively Resellers). Terms offered by the Company do not generally differ based on whether the customer is an end-user, or a Reseller. The Company offers terms that require payment within 30 to 90 days after product delivery. The Company does not offer rights of return, acceptance clauses or price protection to its customers.



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. The Company's 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. The Company generally sells hardware as part of a system sale, but it occasionally sells hardware as part of a system upgrade or additional product sale.

The Company recognizes 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 Staff Accounting Bulletin No. 104. The Company recognizes revenue when it is realized or realizable and earned. The Company considers revenue realized or realizable and earned when it has 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. The Company recognizes 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.

The Company evaluates the credit worthiness of all customers. In circumstances where the Company does not have experience selling to a customer and lacks 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, provided no significant Company obligations remain and the Company's 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 the Company is performing significant customization or modification of software, is recognized using contract accounting on a percentage-of-completion basis. The Company records revenue by reference to actual hours incurred to date and the estimated hours remaining to complete the services.

**Multiple-Element Arrangements** The Company enters 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, the Company recognizes revenue using the residual value method. The Company allocates 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 the Company does 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 the Company does not have vendor-specific objective evidence of fair value, have been delivered.

### Stock-based compensation

The Company has stock-based employee and director compensation plans, which are described more fully in Note 6. The Company accounts for stock-based employee compensation arrangements in accordance with the provisions of Accounting Principles Board Opinion No. 25,

Accounting for Stock Issued to Employees, and complies with the disclosure provisions of SFAS No. 123, Accounting for Stock-Based Compensation and SFAS No. 148, Accounting for Stock-Based Compensation-Transition and Disclosure-an amendment of Financial Accounting Standards Board ( FASB ) Statement No. 123.

The Company has adopted the disclosure-only provisions of SFAS No. 123. For purposes of the pro forma disclosures below, the estimated fair value of the options is amortized to expense over the options' vesting period. Had compensation cost for the Company's stock options been recognized based on the fair value at the grant date consistent with the provisions of SFAS No. 123, the Company's net income would have been adjusted to the pro forma amounts indicated below:

	For the Year Ended December 31,		
	2004	2003	2002
Net income, as reported	\$ 295,563	\$ 8,462,141	\$ 789,508
Deduct: Total stock-based employee compensation expense determined under fair value method for all awards, net of related tax effects	(2,155,282)	(1,387,174)	(1,560,508)
Pro forma net income (loss)	\$ (1,859,719)	\$ 7,074,967	\$ (771,000)
Net income (loss) per share - basic			
As reported	\$ 0.03	\$ 0.83	\$ 0.09
Pro forma	\$ (0.16)	\$ 0.69	\$ (0.09)
Net income (loss) per share - diluted			
As reported	\$ 0.02	\$ 0.71	\$ 0.08
Pro forma	\$ (0.16)	\$ 0.62	\$ (0.09)

The pro forma effects on the net income (loss) for 2004, 2003 and 2002 are not necessarily representative of the pro forma effect that may occur on the net income (loss) in future periods.

### Research and development costs

Costs related to research, design and development of products are charged to research and development expense as incurred. Software development costs are capitalized beginning when a product's technological feasibility has been established and ending when a product is available for general release to customers. The Company uses the working model approach to determine technological feasibility. Generally,

## Edgar Filing: VITAL IMAGES INC - Form POS AM

the Company's products are released soon after technological feasibility has been established. As a result, the Company has not capitalized any software development costs, since such costs have not been significant.

### **Income taxes**

The Company provides for income taxes using the liability method under SFAS No. 109, *Accounting for Income Taxes*, which requires recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this statement, deferred tax

assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities, using enacted tax rates in effect for the year in which the differences are expected to reverse. Deferred tax assets are reduced by a valuation allowance when it is more likely than not that some component or all of the deferred tax assets will not be realized. Tax rate changes are reflected in income during the period such changes are enacted.

#### Computation of net income per share

Basic earnings per share is computed using net income and the weighted average number of common shares outstanding. Diluted earnings per share reflect the weighted average number of common shares outstanding plus any potentially dilutive shares outstanding during the period. Potentially dilutive shares consist of shares issuable upon the exercise of stock options and warrants.

The computations for basic and diluted net income per share are as follows:

	For the Year Ended December 31,		
	2004	2003	2002
<b>Numerator:</b>			
Net income	\$ 295,563	\$ 8,462,141	\$ 789,508
<b>Denominator:</b>			
Denominator for weighted average common shares outstanding basic	11,632,351	10,189,114	8,861,132
Dilution associated with common stock warrants	5,402	59,389	59,984
Dilution associated with the company's stock based compensation plans	897,917	1,599,765	900,682
<b>Denominator:</b>			
Denominator for weighted average common shares outstanding diluted	12,535,670	11,848,268	9,821,798
Net income per share basic	\$ 0.03	\$ 0.83	\$ 0.09
Net income per share diluted	\$ 0.02	\$ 0.71	\$ 0.08

Potential dilutive shares of common stock excluded from the diluted net income per share computations were 545,000, 172,000 and 94,000 for the years ended December 31, 2004, 2003 and 2002, respectively. Certain potential dilutive shares of common stock were excluded from the diluted earnings per share computation because their exercise prices were greater than the average market price of the common shares during the period and were therefore not dilutive.

#### Comprehensive income (loss)



Comprehensive income (loss) as defined by SFAS No. 130, Reporting Comprehensive Income, includes net income and items defined as other comprehensive income (loss). SFAS No. 130 requires that items defined as other comprehensive income (loss), such as foreign currency translation adjustments and unrealized gains and losses on certain marketable securities, be separately classified in the financial statements. Such items are reported in the consolidated statements of stockholders' equity as comprehensive income (loss).

### **New accounting pronouncement**

In December 2004, the 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. The Company is required to adopt the provisions of SFAS No. 123R effective January 1, 2006, at which time the Company 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, January 1, 2006 for the Company, or for all periods presented. The Company has not yet finalized its decision concerning the transition option it will utilize to adopt SFAS No. 123R. The Company is currently assessing its stock-based compensation strategy and related tax implications. Future stock-based compensation may differ from pro forma amounts. The Company expects the impact of the adoption of SFAS No. 123R to be material to its consolidated financial statements.

### **3. Acquisition**

The following acquisition was accounted for under the purchase method of accounting under SFAS No. 141, Business Combinations, and accordingly, the assets and liabilities acquired were recorded at their estimated fair values at the effective date of the acquisition, and the results of operations have been included in the consolidated statements of operations since the acquisition date. In accordance with SFAS No. 142,

Goodwill and Other Intangible Assets, goodwill recorded as a result of the acquisition is subject to an annual impairment test and will not be amortized.

#### **HInnovation, Inc.**

On February 18, 2004, the Company completed the acquisition of HInnovation, Inc. ( HInnovation ) in accordance with the terms and conditions of an Acquisition Agreement and Plan of Reorganization (the Acquisition Agreement ) dated as of January 8, 2004. HInnovation is a 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. The acquisition of HInnovation was made to acquire products and technology that will enable the Company to more effectively compete in the distributed computing market for 2D/3D/4D visualization and analysis software.

The total purchase price of the HInnovation acquisition was approximately \$12.6 million. The Company 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. Vital Images stock was valued at \$16.2375 per share, which was equal to the average of the closing sale prices of one share of Vital Images stock as reported on the NASDAQ National Market for the two consecutive trading days occurring before the first public announcement of the signing of the Acquisition Agreement and the two consecutive trading days occurring immediately after such public announcement date. The Company incurred approximately \$400,000 in direct costs of the acquisition and assumed \$400,000 of liabilities. During the fourth quarter of 2004, the Company finalized the valuation of certain contingent liabilities and settled certain tax matters with the former stockholders of HInnovation, which resulted in a reduction in goodwill previously reported in interim periods. The Company did not assume any stock options or warrants.



In addition, the transaction includes 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 12 month period following the closing date; 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. The number of shares issued under the contingent milestone payments will be determined based on the average closing price of the Company's 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, Vital Images will pay the shortfall in cash. Any contingent payments made by the Company will result in an increase in goodwill. 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 the Company 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.

The appraisal firm applied the income valuation approach to assist the Company in determining the estimated fair value of the purchased IPR&D. These estimates were based on the following assumptions:

The estimated revenue was based upon HInnovation's estimate of revenue growth over the next seven years from the revenue growth of primarily the Collaboration Module.

The estimated gross margin of 65% to 78% was based upon gross margin for comparable products.

The estimated selling, general and administrative expenses were based on consideration of historical operating expenses as a percentage of revenue and HInnovation's projected operating expenses.

The cost to complete each project was based on estimated remaining labor hours and a fully-burdened labor cost and other direct expenses.

The discount rate used in the alternative income valuation approach was based on the weighted average cost of capital ( WACC ). The WACC calculation produces the average required rate of

return of an investment in an operating enterprise based on various required rates of return from investments in various areas of that enterprise. The discount rate used in the alternative valuation approach was 35%. Premiums were added to the WACC to account for the inherent risks in the development of the products, the risks of the products being completed on schedule, and the risk of the eventual sales of the product meeting the expectations of HInnovation.

The first phase of the Collaboration Module was released in the third quarter of 2004. The first phase provides basic collaboration between users allowing one user to present to another user. The second, and more sophisticated, phase of the Collaboration Module will provide two-way collaboration between users allowing both users to interact with the data and is expected to be available for general market release in mid-2005. Through December 31, 2004, the Company has incurred approximately \$267,000 in costs to develop the Collaboration Module. The Company estimates that it will incur another \$33,000 to complete the development of the second phase of the Collaboration Module. Given the uncertainties of the development process, these estimates are subject to change, and deviations from these estimates may occur.

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/employment 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

The following factors contributed to a purchase price that resulted in the recognition of goodwill:

HInnovation had the first Web-based product in the Company's market.

HInnovation had a patent and patent applications that cover certain important aspects of the underlying technology.

HInnovation also had unique technology under development that was included as part of the acquired IPR&D.

F-28

---

Edgar Filing: VITAL IMAGES INC - Form POS AM

The following unaudited pro forma condensed consolidated results of operations have been prepared as if the acquisition of HInnovation had occurred as of the beginning of the periods presented. Pro forma adjustments relate to amortization of identified intangible assets, acquired IPR&D and income taxes. The unaudited pro forma condensed consolidated results of operations are for comparative purposes only and are not necessarily indicative of results that would have occurred had the acquisition occurred as of the beginning of the periods presented, nor are they necessarily indicative of future results.

	For the Year Ended December 31,		
	2004	2003	2002
Revenue	\$ 36,150,047	\$ 27,322,218	\$ 21,116,074
Net income (loss)	\$ 1,172,570	\$ 6,517,277	\$ (1,770,648)
Net income (loss) per share - diluted	\$ 0.09	\$ 0.53	\$ (0.19)

#### 4. Financial statement components

##### Allowance for doubtful accounts

	For the Years Ended December 31,		
	2004	2003	2002
Beginning balance	\$ 235,000	\$ 240,000	\$ 185,000
Provision	626,800	46,000	64,000
Write-offs	(94,800)	(51,000)	(9,000)
Recoveries			
Ending balance	\$ 767,000	\$ 235,000	\$ 240,000

##### Property and equipment, net

	December 31,	
	2004	2003
Equipment	\$ 5,247,471	\$ 3,725,849
Furniture and fixtures	1,516,497	1,474,485
Computer software	765,870	580,986
Leasehold improvements	273,924	273,924
Total property and equipment	7,803,762	6,055,244
Less accumulated depreciation and amortization	(4,581,395)	(3,012,005)
Property and equipment, net	\$ 3,222,367	\$ 3,043,239

Depreciation expense was \$1,569,390 and \$1,220,468 and \$894,814 for the years ended December 31, 2004 and 2003, respectively.





**Licensed technology, net**

In July 2001, the Company entered into an agreement to license technology from a third party. The Company paid an aggregate of \$750,000 to the licensor in 2001. The Company recorded this \$750,000 purchase as licensed technology and is amortizing it over the estimated useful life of the technology of 75 months. This amortization expense is reported as cost of revenue for license fees. As part of this agreement, the Company is also obligated to pay the licensor royalties on the sales of certain products as defined in the agreement. During 2004, 2003 and 2002, \$1.0 million, \$772,000 and \$608,000, respectively, of such royalties were incurred and were reported as cost of revenue for license fees.

	December 31,	
	2004	2003
Licensed technology	\$ 750,000	\$ 750,000
Less accumulated amortization	(420,000)	(300,000)
Licensed technology, net	\$ 330,000	\$ 450,000

Amortization expense was \$120,000 for each of the years ended December 31, 2004, 2003 and 2002, respectively.

**Other intangible assets, net**

Acquired intangible assets subject to amortization were as follows:

	December 31, 2004			December 31, 2003		Net Carrying Value
	Gross Carrying Value	Accumulated Amortization	Net Carrying Value	Gross Carrying Value	Accumulated Amortization	
Existing software technology	\$ 3,400,000	\$ (598,000)	\$ 2,802,000	\$	\$	\$
Patents and patent applications	3,000,000	(378,000)	2,622,000			
Non-compete/employment agreements	500,000	(147,000)	353,000			
Total intangible assets subject to amortization	\$ 6,900,000	\$ (1,123,000)	\$ 5,777,000	\$	\$	\$

Intangible assets subject to amortization are amortized on a straight-line basis over the estimated period of benefit. Amortization expense was \$1.1 million for the year ended December 31, 2004. The estimated future annual amortization expense for identified intangible assets is as follows:

2005	\$ 1,284,000
2006	1,284,000
2007	1,133,000
2008	1,116,000
2009 through 2011	960,000

\$ 5,777,000

F-30

---

**Goodwill**

The changes in the carrying amount of goodwill for the year ended December 31, 2004 are as follows:

Beginning balance	\$	
Goodwill acquired during the year		6,052,744
Ending balance	\$	6,052,744

**Deferred revenue**

	December 31,	
	2004	2003
Maintenance and support	\$ 4,734,764	\$ 3,003,543
Training	2,697,892	1,591,854
Installation	309,200	104,301
Software	454,108	
Hardware and other	218,448	95,326
Total deferred revenue	8,414,412	4,795,024
Less current portion	(8,136,844)	(4,530,333)
Long-term portion of deferred revenue	\$ 277,568	\$ 264,691

**5. Commitments and contingencies****Operating lease commitments**

The Company rents office space and certain office equipment under operating leases. In addition to minimum lease payments, the office leases require payment of a proportionate share of real estate taxes and building operating expenses. Total rent expense, including an allocation of the lessor's operating costs, was \$715,000, \$678,000 and \$596,000 for the years ended December 31, 2004, 2003 and 2002, respectively.

In March 2004, the Company signed a non-cancelable operating lease for a new office facility in Minnetonka, Minnesota. The new lease term starts in February 2005 and expires in January 2012. The Company moved into the Minnetonka location and moved out of its Plymouth, Minnesota location in February 2005. The Company's 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 the Company's former office facility in Plymouth beginning February 2005.

In the first quarter of 2005, the Company estimates that it will record deferred rent of \$1.7 million relating to estimated payments by the Minnetonka lessor for the benefit of the Company. Such payments are considered lease incentives under FASB Technical Bulletin (FTB) 88-1, Issues Relating to Accounting for Leases, and will be amortized as a reduction of rent expense over the term of the Minnetonka lease. Payments

Edgar Filing: VITAL IMAGES INC - Form POS AM

by the Minnetonka lessor for the benefit of the Company consist of the following:

\$440,000 relating to lease payments to be made by the Minnetonka lessor to the Plymouth lessor; under FTB 88-1, such payments must be recorded as a lease loss by the Company in the first quarter of 2005.

\$206,000 relating to moving costs reimbursed to the Company by the Minnetonka lessor; moving costs were expensed as incurred during the first quarter of 2005.

F-31

---

\$1.0 million relating to leasehold improvements paid for by the Minnetonka lessor; under FTB 88-1, such leasehold improvements must be recorded as an asset by the Company and amortized over the shorter of their estimated useful lives or the remaining terms of the related leases.

The minimum lease payments, excluding estimated taxes and operating cost rent obligations, are approximately:

2005	\$	673,000
2006		471,000
2007		618,000
2008		711,000
2009		727,000
Thereafter		1,562,000
Total	\$	4,762,000

#### Purchase commitments

In April 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 in the third quarter of 2005, for which we will receive a royalty from R2. The total commitment will be a maximum of \$5.0 million over a three-year commitment period. The commitment will be reduced if revenue from the sale of R2 products exceeds the minimum revenue commitments.

#### Other items

Under general contract terms, the Company includes an indemnification clause in its software licensing agreement that indemnifies the licensee against liability and damages arising from any claims of patent, copyright, trademark or trade secret infringement by the Company s software. The Company has incurred insignificant costs as a result of this type of indemnification clause, and the Company does not maintain a product warranty liability related to such indemnification clauses.

The Company has entered into various employment agreements with certain executives of the Company, which provide for severance payments subject to certain conditions and events.

## 6. Stockholders equity

### Background

## Edgar Filing: VITAL IMAGES INC - Form POS AM

On October 28, 1996, the Board of Directors of Bio-Vascular, Inc. ( Bio-Vascular ), now known as Synovis Life Technologies, Inc., the former parent of the Company, approved a plan to spin off and establish the Company as an independent, publicly-owned company. On May 12, 1997 (the Distribution Date ), Bio-Vascular distributed all of the shares of the Company to the stockholders of Bio-Vascular (the Distribution ), and on that date the Company began operating as an independent public company. All Bio-Vascular stockholders of record as of May 5, 1997 received one share of the Company s common stock for each two shares of Bio-Vascular stock held on that date and cash in lieu of fractional shares.

### **Private placement**

In June 2003, the Company completed a private placement of 1.5 million shares of common stock at \$13.50 per share for total gross proceeds of \$20.3 million. After deducting offering costs of \$1.3 million, the

Company received net proceeds of \$19.0 million. A registration statement covering the resale of these shares was declared effective on September 29, 2003 by the Securities and Exchange Commission.

### **Stock option plans**

In May 1997, Bio-Vascular, as the sole shareholder of the Company, approved and adopted the Vital Images, Inc. 1997 Stock Option and Incentive Plan (the "Stock Option Plan"), which became effective on the Distribution Date. Under the terms of the plan, the Board of Directors may grant options and other stock-based awards to key employees to purchase shares of the Company's common stock at an option exercise price equal to or greater than 85% of the fair market value on the date of grant. The options are exercisable at such times, in installments or otherwise, as the Board of Directors may determine. Generally, these options are incentive stock options with a term of eight years and are exercisable as to 28% of the total grant one year after the date of grant and 2% per month thereafter. The total number of shares of common stock that may be issued or awarded under the Stock Option Plan is 3.5 million. As of December 31, 2004, there were 594,841 shares available for the grant of awards under the Stock Option Plan.

Also in May 1997, Bio-Vascular, as the sole shareholder of the Company, approved and adopted the Vital Images, Inc. 1997 Director Stock Option Plan (the "Director Plan") (together with the Stock Option Plan, the "1997 Plans"), which became effective on the Distribution Date. The Director Plan provides non-employee directors with automatic grants of stock options and allows the Board of Directors to make additional discretionary option grants to any or all directors. Options that are granted under the Director Plan are granted with an option price equal to the fair market value on the date of grant, with a term of eight years, are non-qualified options and become exercisable in three equal annual installments beginning on the first occurring December 31 after the date of grant. The total number of shares of common stock that may be issued or awarded under the Director Plan is 300,000. As of December 31, 2004, there were 25,000 shares available for the grant of awards under the Director Plan.

Certain non-plan options were granted to certain officers of the Company in 1998, 1999 and 2002. In February 1998, the Company reserved and granted non-qualified, non-plan options to purchase 300,000 shares to an officer of the Company. These non-plan options had a term of eight years, vested over a two-year period and were granted at exercise prices at least equal to fair market value of the Company's common stock on the date of grant. Of these non-plan options, the Company cancelled options to purchase 100,000 shares in December 1999, and the officer exercised the remaining options to purchase 200,000 shares in August 2003. In December 1999, the Company granted non-qualified, non-plan options to purchase 175,000 shares to another officer of the Company. These non-plan options had a term of eight years, were exercisable as to 28% of the total grant one year after the date of grant and 2% per month thereafter and were granted at exercise prices at least equal to fair market value of the Company's common stock on the date of grant. Of these non-plan options, the Company cancelled options to purchase 80,500 shares in February 2002, and the officer exercised the remaining options to purchase 94,500 shares in 2002. In March 2002, the Company granted non-qualified, non-plan options to purchase 165,000 shares to another officer of the Company. These non-plan options have a term of eight years, are exercisable as to 28% of the total grant one year after the date of grant and 2% per month thereafter and were granted at exercise prices at least equal to fair market value of the Company's common stock on the date of grant. As of December 31, 2004, these options were still outstanding.

### **Non-employee options**

In December 2000, the Company granted options to purchase 10,000 shares to a non-employee consultant. Options to purchase 5,000 shares vest over a four-year period, and the remaining options vested immediately when a specified milestone was achieved, which occurred in May 2003. The options to purchase 5,000 shares that vested in May 2003 were exercised in June 2003. In December 2001, the Company granted options to purchase a total of 4,000 shares to two non-employee consultants and, in December 2002, the





Edgar Filing: VITAL IMAGES INC - Form POS AM

Company granted options to purchase an additional 4,000 shares to two non-employee consultants. These options vest over a four-year period. All of the non-plan options have a term of eight years and were granted at exercise prices at least equal to fair market value of the Company's common stock on the date of grant. The Company records compensation expense related to these arrangements based upon the fair values of the options during the periods the consultants provide services. Such fair values are measured using the Black-Scholes option-pricing model. The Company recorded \$12,000, \$137,000 and \$18,000 of compensation expense related to these options for each of the years ended December 31, 2004, 2003 and 2002, respectively.

The following table summarizes stock option activity for 2004, 2003 and 2002:

	Shares Underlying Options	Weighted-Average Exercise Price Per Share
Total outstanding as of December 31, 2001	2,288,456	\$ 4.08
Options granted	677,750	\$ 7.21
Options exercised	(288,008)	\$ 3.49
Options canceled	(216,354)	\$ 4.44
Total outstanding as of December 31, 2002	2,461,844	\$ 4.98
Options granted	618,750	\$ 12.04
Options exercised	(574,381)	\$ 3.55
Options canceled	(65,241)	\$ 7.31
Total outstanding as of December 31, 2003	2,440,972	\$ 7.05
Options granted	514,100	\$ 12.29
Options exercised	(456,380)	\$ 4.32
Options canceled	(172,017)	\$ 9.80
Total outstanding as of December 31, 2004	2,326,675	\$ 8.54
Options exercisable as of:		
December 31, 2002	1,505,069	\$ 3.83
December 31, 2003	1,407,347	\$ 5.09
December 31, 2004	1,409,650	\$ 6.74

Various price ranges and weighted average information for options outstanding and exercisable as of December 31, 2004 are as follows:

Range of Exercise Prices	Number Outstanding as of Dec 31, 2004	Options Outstanding		Options Exercisable	
		Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number Exercisable as of Dec 31, 2004	Weighted Average Exercise Price
\$1.13 - \$2.75	208,151	1.15 years	\$ 2.17	208,151	\$ 2.17
\$3.51 - \$5.70	408,996	3.21 years	\$ 4.90	401,486	\$ 4.90
\$5.75 - \$7.25	485,410	5.19 years	\$ 7.15	324,535	\$ 7.16
\$7.34 - \$9.24	259,250	3.77 years	\$ 7.60	239,100	\$ 7.54

Edgar Filing: VITAL IMAGES INC - Form POS AM

\$9.60 - \$19.13	964,868	6.73 years	\$	12.40	236,378	\$	12.53
	2,326,675	4.96 years	\$	8.54	1,409,650	\$	6.74

F-34

---

**Employee stock purchase plan**

The 1997 Employee Stock Purchase Plan (the ESPP) was approved and adopted by Bio-Vascular, as the sole shareholder of the Company, in May 1997. The ESPP, which became effective on July 1, 1997, enables eligible employees to purchase the Company's common stock at 85% of the fair market value of the stock on the date an offering period commences or on the date an offering period terminates, whichever is lower. The ESPP covers an aggregate of up to 250,000 shares of common stock that can be issued and sold to participating employees of the Company through a series of three-month offering periods, beginning July 1, 1997. The ESPP covers substantially all employees, subject to certain limitations. Each employee may elect to have up to 10% of his or her base pay withheld and applied toward the purchase of shares in each such offering period. Purchases under the ESPP for 2004 were 18,344 shares, generating proceeds to the Company of \$172,000 at an average purchase price of \$9.37; for 2003 were 12,995 shares, generating proceeds to the Company of \$151,000 at an average purchase price of \$11.59; and purchases for 2002 were 24,539 shares, generating proceeds to the Company of \$131,000 at an average purchase price of \$5.32. As of December 31, 2004, there are 83,109 shares of common stock reserved for purchases under the ESPP.

**Stock-based compensation**

For purposes of calculating the fair value of options under FASB Statement No. 123, the weighted average fair values of options granted were:

	For the Years Ended December 31,					
	2004		2003		2002	
Options under the 1997 Plans	\$	8.30	\$	8.20	\$	5.03
Non-plan options	\$		\$		\$	5.13
Options under ESPP	\$	1.65	\$	2.04	\$	0.94

The weighted average fair values for the 1997 Plans and the non-plan options were based on the fair values on the dates of grant. The fair values for the 1997 Plans and the non-plan employee options were calculated using the Black-Scholes option-pricing model with the following weighted-average assumptions:

	For the Years Ended December 31,		
	2004	2003	2002
Expected option life	5.0 years	5.0 years	5.0 years
Expected volatility factor	83.0%	84.7%	85.9%
Expected dividend yield	0%	0%	0%
Risk-free interest rate	3.41%	3.07%	4.69%

The fair values for the non-employee options were calculated using the Black-Scholes option-pricing model with the following weighted-average assumptions:

	For the Years Ended December 31,		
	2004	2003	2002
Expected option life	5.38 years	5.9 years	8.0 years
Expected volatility factor	78.6%	84.5%	85.9%
Expected dividend yield	0%	0%	0%

Edgar Filing: VITAL IMAGES INC - Form POS AM

Risk-free interest rate	3.50%	2.66%	2.81%
-------------------------	-------	-------	-------

The weighted-average fair values of shares under the ESPP were based on the 15% purchase discount.

F-35

---

## Warrants

In December 1999, the Company completed a private placement of 1.65 million units at \$3.25 per unit. Each unit consisted of one share of the Company's common stock and a redeemable, five-year warrant to purchase an additional share of common stock at \$3.75 per share. The warrants were immediately exercisable with an expiration date in December 2004. The warrants could be redeemed by the Company at any time before December 2004 at a redemption price of \$.01 per warrant, upon notice of such redemption, provided that (i) the closing bid price of the Company's common stock exceeded \$5.75 per share for any thirty consecutive trading days prior to such notice and (ii) a registration statement covering the resale of the warrant shares had been filed by the Company with the Securities and Exchange Commission and was effective as of the date of such notice. The Company satisfied the conditions for redemption of the warrants on December 7, 2000. In December 2001, the Company called for redemption of all outstanding warrants. As of December 31, 2003, all 1.65 million warrants had been exercised, generating proceeds of \$1.7 million and \$4.5 million during 2002 and 2001, respectively.

The Company also issued warrants to the selling agent for the December 1999 private placement to purchase 163,651 shares of the Company's common stock at \$3.25 per share. The warrants were immediately exercisable and expired in December 2004. During 2004, 2003 and 2002, warrants to purchase 19,156, 83,063 and 42,492 shares, respectively, were exercised. These warrant exercises generated proceeds of \$18,800, \$248,000, and \$6,000 for the years ended December 31, 2004, 2003 and 2002, respectively. In conjunction with these exercises, during 2004, 2003 and 2002, 3,362, 1,693 and 12,559 shares, respectively, were forfeited as part of cashless exercises. As of December 31, 2004, none of these warrants remained outstanding.

## Rights plan

In April 1997, the Company declared a dividend distribution of one Preferred Stock Purchase Right for each outstanding share of the Company's common stock (the "Rights"). With certain exceptions, the Rights become exercisable only if one of the following events occurs: (i) an acquiring party accumulates 15% or more of the Company's common stock, (ii) a party announces an offer to acquire 15% or more of the Company's common stock, or (iii) the acquisition of a substantial amount of the Company's common stock by a person whom the Board of Directors has determined is an "Adverse Person" as defined in the underlying Rights Agreement. Each Right entitles the holder to purchase one-thousandth of a share of the Company's Series A Junior Preferred Stock at a price of \$20.00 (the "Exercise Price"). If a person or group becomes the beneficial owner of 15% or more of the Company's common stock or the Board of Directors determines that a person is an Adverse Person, each holder of a Right shall thereafter have the right to receive preferred stock having a fair market value equal to two times the Exercise Price. Upon the occurrence of certain mergers, combinations or acquisitions of the Company's assets, each holder of a Right shall thereafter have the right to receive that number of shares of common stock of the acquiring company which equals the Exercise Price of the Right divided by one-half of the current market price of such common stock as of the date of the occurrence of the event. The Company is generally entitled to redeem the Right at \$.001 per Right at any time until ten days following the acquisition of 15% or more of the Company's common stock or ten days after the point at which the Company's Board of Directors determines that a person is an Adverse Person, as defined by the Rights Agreement. The Rights expire on April 30, 2007, if not previously redeemed or exercised.

## 7. Income taxes

The income tax provision (benefit) for the years ended December 31, 2004, 2003 and 2002 include the following components:

	For the Year Ended December 31,		
	2004	2003	2002
<b>Current income taxes:</b>			
Federal	\$ 25,000	\$	\$
State	5,000	79,000	22,000
	30,000	79,000	22,000
<b>Deferred income taxes:</b>			
Federal	513,000	(7,657,000)	
State	44,000	1,265,000	
	557,000	(6,392,000)	
Provision (benefit) for income taxes	\$ 587,000	\$ (6,313,000)	\$ 22,000

A reconciliation of the Company's income tax provision (benefit) computed using the federal statutory rate to the tax provision reported in the Company's statements of operations is as follows:

	For the Year Ended December 31,		
	2004	2003	2002
Tax provision computed at the federal statutory rate	\$ 300,000	\$ 726,000	\$ 276,000
State taxes, net of federal benefit	94,000	116,000	24,000
<b>Increase (decrease) in tax from:</b>			
Research and development tax credits	(319,000)	(85,000)	(186,000)
Business meals and entertainment	46,000	34,000	26,000
Acquired in-process research and development	340,000		
Change in state tax rate	(54,000)		
Change in valuation allowance	226,000	(7,171,000)	(111,000)
Other, net	(46,000)	67,000	(7,000)
Provision (benefit) for income taxes	\$ 587,000	\$ (6,313,000)	\$ 22,000

The significant components of the Company's tax-effected net deferred tax assets, based on an assumed effective tax rate of 37.96% and 37.30% as of December 31, 2004 and 2003, respectively, are as follows:

	December 31,	
	2004	2003
<b>Current:</b>		
Accrued expenses and allowances	\$ 600,000	\$ 275,000
Total current	\$ 600,000	\$ 275,000
<b>Noncurrent:</b>		
Net operating loss carryforwards	\$ 8,880,000	\$ 8,101,000
Research and development tax credit carryforwards	1,570,000	1,063,000
Depreciation and amortization	434,000	287,000
Deferred revenue	105,000	
Identified intangible assets	(2,193,000)	

Edgar Filing: VITAL IMAGES INC - Form POS AM

Other, net	31,000	2,000
Net deferred tax assets before valuation allowance	8,827,000	9,453,000
Less valuation allowance	(373,000)	(147,000)
Total noncurrent	\$ 8,454,000	\$ 9,306,000

F-37

---



**Net operating loss carryforwards and other tax credit carryforwards as of December 31, 2004**

The Company had federal tax loss carryforwards of approximately \$24.5 million, representing an \$8.3 million deferred tax asset as of December 31, 2004. Of the total federal tax loss carryforward, \$8.5 million was generated through the exercise of stock options. The federal tax loss carryforwards will expire in 2005 through 2023 if not utilized. The Company recorded a \$79,000 valuation allowance related to this deferred tax asset as of December 31, 2004 due to the uncertainty in realization prior to expiration.

The Company had state tax loss carryforwards of approximately \$9.7 million, representing a \$506,000 deferred tax asset as of December 31, 2004. The state tax loss carryforwards will expire in 2005 through 2024 if not utilized. The Company recorded a \$9,000 valuation allowance related to this deferred tax asset as of December 31, 2004 due to the uncertainty in realization prior to expiration.

The Company had foreign tax loss carryforwards of approximately \$144,000, representing a \$43,000 deferred tax asset as of December 31, 2004. The Company provided a full valuation allowance related these deferred tax assets as of December 31, 2004 due to the uncertainty in realization.

The Company had other federal and state tax credits and carryforwards of approximately \$1.6 million, representing a \$1.6 million deferred tax asset as of December 31, 2004. The federal and state credits and carryforwards will expire in 2005 through 2024 if not utilized. The Company had a \$242,000 valuation allowance related to this deferred tax asset as of December 31, 2004 due to the uncertainty in realization prior to expiration of which \$95,000 were recorded in 2004.

**Activity during the year ended December 31, 2004**

The Company's methodology for determining the realizability of its deferred tax assets involves estimates of future taxable income from its 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 the Company had cumulative pre-tax income for financial reporting purposes for the three years ended December 31, 2004, the Company did not pay any significant income taxes over that period due to tax deductions from the exercise of stock options as well as its utilization of net operating losses. In assessing the realizability of its deferred tax assets as of December 31, 2004, the Company considered evidence regarding its ability to generate sufficient future taxable income to realize its 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, the Company 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, the Company recorded a valuation allowance of \$183,000 for the year ended December 31, 2004. The Company also recorded a valuation allowance of \$43,000 relating to 2004 foreign net operating losses that are subject

Edgar Filing: VITAL IMAGES INC - Form POS AM

to uncertainty regarding utilization and, therefore, a full valuation allowance was recorded.

The Company 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, the

Company would require approximately \$42 million in cumulative future taxable income to be generated at various times over the next twenty 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.

In the event that the Company adjusts its estimates of future taxable income or tax deductions from the exercise of stock options; or the Company's stock price increases significantly without a corresponding increase in taxable income, the Company may need to establish additional valuation allowances, which could materially impact its financial position and results of operations.

### **Activity during the year ended December 31, 2003**

During 2003, the Company concluded that it is more likely than not that substantially all of its net deferred tax assets would be realized, and the Company reversed substantially all of its 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 was based upon the Company's historical operating performance and management's expectation that the Company will generate taxable income of at least \$25 million in future periods to allow it to realize its deferred tax assets resulting from the tax benefits associated with its net operating loss carryforwards and a significant portion of its 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 \$7,171,000. This reversal, net of other current year state and federal income taxes, resulted in a net tax benefit of \$6,507,000 in 2003.

### **Net operating loss carryforward limitations**

Under Section 382 of the Internal Revenue Code ( Code ) of 1986, certain stock transactions which significantly change ownership, including the sale of stock and the granting of options to purchase stock, could limit the amount of net operating loss carryforwards that may be utilized on an annual basis to offset taxable income in future periods. Future changes in ownership, as defined by Section 382, could result in additional limitations in the amount of net operating loss carryforwards that may be utilized on an annual basis.

As a result of Bio-Vascular's acquisition of the Company in May 1994, the Company experienced an ownership change as defined by Section 382 of the Code. Under the Code, the amount of pre-acquisition net operating loss carryforwards and research and development credits that can be used to offset future taxable income and income taxes will be limited. As of the date of the Company's acquisition by Bio-Vascular, the Company had approximately \$1,800,000 of net operating loss carryforwards and \$137,000 of research and experimentation credits, both of which will be subject to limitation under the Code.

## **8. Employee benefit plan**

The Company maintains the Vital Images, Inc. Salary Savings Plan (the Plan ), which is intended to qualify under Section 401(k) of the Internal Revenue Code, as amended. The Plan covers substantially all employees. Each employee may elect to contribute to the Plan through payroll deductions of up to 25% of his or her salary, subject to certain limitations. At the discretion of the Board of Directors, the Company may make matching contributions equal to a percentage of the salary reduction contributions or other discretionary amounts. The Company paid \$43,600 in matching contributions in 2004. There were no contributions to the Plan by the Company in 2003 or 2002.



## 9. Major customers and geographic data

Customers accounting for more than 10 percent of the Company's total revenue are as follows:

	For the Year Ended December 31,		
	2004	2003	2002
Toshiba Medical Systems Corporation	\$ 18,130,000	\$ 11,554,000	\$ 7,246,000
Percentage of total revenue	50%	42%	34%

The Company's accounts receivable are generally concentrated with a small base of customers. As of December 31, 2004, Toshiba accounted for 23% of the accounts receivable balance. As of December 31, 2003, no single customer accounted for more than 10% of the accounts receivable balance.

All significant long-lived assets of the Company are located in the United States.

Export revenue accounted for 17%, 13% and 10% of total revenue for the years ended December 31, 2004, 2003 and 2002, respectively. Substantially all of the Company's export sales are negotiated, invoiced and paid in U.S. dollars.

Export sales by geographic area are summarized as follows:

	For the Year Ended December 31,		
	2004	2003	2002
Europe	\$ 3,692,000	\$ 2,421,000	\$ 1,094,000
Asia-Pacific	1,320,000	846,000	709,000
Canada	912,000	75,000	161,000
Other	166,000	312,000	49,000
	\$ 6,090,000	\$ 3,654,000	\$ 2,013,000

## 10. Quarterly financial data (unaudited)

The following summarized unaudited quarterly financial data has been prepared using the financial statements of Vital Images, Inc.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
<b>2004</b>				

Edgar Filing: VITAL IMAGES INC - Form POS AM

Total revenue	\$	7,816,000	\$	7,960,000	\$	9,248,000	\$	11,098,000
Gross profit	\$	5,479,000	\$	5,399,000	\$	6,643,000	\$	8,154,000
Net income (loss)	\$	(1,352,000)	\$	78,000	\$	670,000	\$	900,000
Earnings per share basic	\$	(0.12)	\$	0.01	\$	0.06	\$	0.08
Earnings per share diluted	\$	(0.12)	\$	0.01	\$	0.05	\$	0.07

**2003**

Total revenue	\$	6,945,000	\$	7,660,000	\$	7,404,000	\$	5,291,000
Gross profit	\$	5,330,000	\$	5,627,000	\$	5,627,000	\$	3,645,000
Net income (loss)	\$	801,000	\$	790,000	\$	6,814,000	\$	57,000
Earnings (loss) per share basic	\$	0.09	\$	0.08	\$	0.62	\$	0.01
Earnings (loss) per share diluted	\$	0.08	\$	0.07	\$	0.53	\$	0.00

F-40

**2,234,597 Shares**

**VITAL IMAGES, INC.**

**Common Stock**

---

**PROSPECTUS**

---

**, 2005**

**PART II****INFORMATION NOT REQUIRED IN PROSPECTUS****Item 13. Other Expenses of Issuance and Distribution**

The following table sets forth the estimated costs and expenses payable by us in connection with the sale and distribution of the shares of common stock being registered under this Post-Effective Amendment. Selling commissions, brokerage fees and any applicable transfer taxes and fees and disbursements of counsel for the selling shareholders who are former shareholders of HInnovation, Inc. are payable by such selling shareholders.

Legal fees and expenses	\$	5,000
Accounting fees and expenses		10,000
Registrar's and transfer agent's fees		1,500
Printing expenses		750
Miscellaneous		250
TOTAL	\$	17,500

**Item 14. Indemnification of Directors and Officers**

Section 302A.521 of the Minnesota Statutes provides that unless prohibited or limited by a corporation's articles of incorporation or bylaws, Vital Images must indemnify its current and former officers, directors, employees and agents against expenses (including attorneys' fees), judgments, penalties, fines and amounts paid in settlement and which were incurred in connection with actions, suits, or proceedings in which such persons are parties by reason of the fact that they are or were an officer, director, employee or agent of the corporation, if they (i) have not been indemnified by another organization, (ii) acted in good faith, (iii) received no improper personal benefit, (iv) in the case of a criminal proceeding, had no reasonable cause to believe the conduct was unlawful, and (v) reasonably believed that the conduct was in the best interests of the corporation. Section 302A.521 also permits a corporation to purchase and maintain insurance on behalf of its officers, directors, employees and agents against any liability which may be asserted against, or incurred by, such persons in their capacities as officers, directors, employees and agents of the corporation, whether or not the corporation would have been required to indemnify the person against the liability under the provisions of such section.

Article VI of our Bylaws provides that the directors, officers and committee members of Vital Images and other persons shall have the rights to indemnification to the fullest extent permissible under the provisions of Chapter 302A of the Minnesota Statutes.

**Item 15. Recent Sales of Unregistered Securities.**



## Edgar Filing: VITAL IMAGES INC - Form POS AM

In June 2003, Vital Images, Inc. sold a total of 1,500,000 shares of its common stock for \$13.50 per share in cash consideration to 15 institutional investors, all of which represented that they were accredited investors, as that term is defined in Rule 501(a) of Regulation D under the Securities Act of 1933 (the Securities Act). The aggregate offering price was \$20,250,000, and the Company paid an aggregate sales commission of \$1,215,000 (equal to 6% of the aggregate offering price) to the selling agent for such shares. The sale was exempt as a private placement pursuant to Section 4(2) of and Rules 144A and 506 under the Securities Act based in part on the written representations made by each of the buyers that, among other things,

II-1

---

they were accredited investors and they were acquiring the Company's shares for investment account and not for distribution.

In February 2004, and pursuant to an Acquisition Agreement and Plan of Reorganization dated as of January 8, 2004 by and among Vital Images, HInnovation Acquisition, Inc. (a wholly-owned subsidiary of Vital Images), HInnovation, Inc. ( HInnovation ) and Mr. Hui Hu and JMS Co., Ltd., the Company issued to the 13 stockholders of HInnovation a total of 376,262 shares of Vital Images' common stock with an aggregate value of \$6 million, plus \$5.8 million of cash, in exchange for all of the equity securities of HInnovation. The sale was exempt as a private placement pursuant to Section 4(2) of and Rule 506 under the Securities Act based in part on the written representations made by each of the former HInnovation stockholders that, among other things, they were acquiring Vital Images' shares for investment purposes and not for distribution.

#### **Item 16. Exhibits and Financial Statement Schedules**

The exhibits are described on the Exhibit Index to this Post-Effective Amendment No. 1 on Form S-1 to Form S-3 Registration Statement.

#### **Item 17. Undertakings**

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Edgar Filing: VITAL IMAGES INC - Form POS AM

*Provided, however,* that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the registration statement is on Form S-3, Form S-8 or Form F-3, and the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement;

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) Not applicable.

(c) Not applicable.

(d) Not applicable.

(e) Not applicable.

(f) Not applicable.

(g) Not applicable.

(h) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

(i) The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at the time shall be deemed to be the initial *bona fide* offering thereof.

(j) Not applicable.

**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Minnetonka, State of Minnesota, on June 17, 2005.

VITAL IMAGES, INC

/s/ JAY D. MILLER

Jay D. Miller

*President and Chief Executive Officer (Principal Executive Officer)*

II-3

---

Edgar Filing: VITAL IMAGES INC - Form POS AM

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<b>Signature</b>	<b>Title</b>	<b>Date</b>
/s/ JAY D. MILLER Jay D. Miller	President, Chief Executive Officer and Director (Principal Executive Officer)	June 17, 2005
/s/ MICHAEL H. CARREL Michael H. Carrel	Chief Operating Officer and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	June 17, 2005
/s/ DOUGLAS M. PIHL* Douglas M. Pihl	Director and Chairman of the Board	June 17, 2005
/s/ VINCENT J. ARGIRO* Vincent J. Argiro, Ph.D.	Chief Technology Officer, Founder and Director	June 17, 2005
/s/ JAMES B. HICKEY, JR.* James B. Hickey, Jr.	Director	June 17, 2005
/s/ RICHARD W. PERKINS* Richard W. Perkins	Director	June 17, 2005
/s/ SVEN A. WEHRWEIN* Sven A. Wehrwein	Director	June 17, 2005
/s/ MICHAEL W. VANNIER* Michael W. Vannier	Director	June 17, 2005
*/s/ JAY D. MILLER By Jay D. Miller, as attorney-in-fact		June 17, 2005

**EXHIBIT INDEX**

<b>Exhibit No.</b>	<b>Description of Exhibit</b>
2.1	Acquisition Agreement and Plan of Reorganization by and among Vital Images, Inc., HInnovation Acquisition, Inc., HInnovation, Inc. and Hui Hu and JMS Co. Ltd. dated as of January 8, 2004 (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on February 26, 2004 (File No. 0-22229)).
3.1	Articles of Incorporation of the Company (incorporated by reference to Exhibit 3.1 to the Company's registration statement on Form 10 (File No. 0-22229)).
3.2	By-laws of the Company (incorporated by reference to Exhibit 3.2 to the Company's registration statement on Form 10 (File No. 0-22229)).
4.1	Form of common stock certificate of the Company (incorporated by reference to Exhibit 4.3 to the Company's registration statement on Form 10 (File No. 0-22229)).
4.2	Rights Agreement, dated effective as of May 1, 1997, between the Company and American Stock Transfer and Trust Company, which includes as Exhibit B the form of Rights Certificate (incorporated by reference to Exhibit 4.4 to the Company's registration statement on Form 10 (File No. 0-22229)).
4.3	Certificate of Designation, Preferences and Rights of Series A Junior Preferred Stock of the Company (incorporated by reference to Exhibit 4.5 to the Company's registration statement on Form 10 (File No. 0-22229)).
5.1	Opinion of Winthrop & Weinstine, P.A.
10.1	Form of Distribution Agreement, effective as of May 2, 1997, between Bio-Vascular, Inc. (now known as Synovis Life Technologies, Inc.) ( Bio-Vascular ) and the Company (incorporated by reference to Exhibit 10.1 to the Company's registration statement on Form 10 (File No. 0-22229)).
10.2	Form of Employee Benefits Agreement, effective as of May 2, 1997, between Bio-Vascular and the Company* (incorporated by reference to Exhibit 10.2 to the Company's registration statement on Form 10 (File No. 0-22229)).
10.3	Form of Tax Sharing Agreement, effective as of May 2, 1997, between Bio-Vascular and the Company (incorporated by reference to Exhibit 10.3 to the Company's registration statement on Form 10 (File No. 0-22229)).

## Edgar Filing: VITAL IMAGES INC - Form POS AM

<b>Exhibit No.</b>	<b>Description of Exhibit</b>
10.4	Form of Transition Services Agreement, effective as of May 2, 1997, between Bio-Vascular and the Company (incorporated by reference to Exhibit 10.4 to the Company's registration statement on Form 10 (File No. 0-22229)).
10.5	Incentive Stock Option Adjustment Plan* (incorporated by reference to Exhibit 10.5 to the Company's registration statement on Form 10 (File No. 0-22229)).
10.6	1995 Stock Incentive Adjustment Plan* (incorporated by reference to Exhibit 10.9 to the Company's registration statement on Form 10 (File No. 0-22229)).
10.7	Employee Stock Purchase Plan* (incorporated by reference to Exhibit 10.10 to the Company's registration statement on Form 10 (File No. 0-22229)).
10.8	1997 Stock Option and Incentive Plan* (incorporated by reference to Exhibit 10.11 to the Company's registration statement on Form 10 (File No. 0-22229)).
10.9	1997 Director Stock Option Plan* (incorporated by reference to Exhibit 10.12 to the Company's registration statement on Form 10 (File No. 0-22229)).
10.10	Lease Agreement dated October 19, 1999 between St. Paul Properties, Inc. and the Company (incorporated by reference to Exhibit 10.27 to the Company's Form 10-Q for the quarter ended September 30, 1999 (File No. 0-22229)).
10.11	Vital Images, Inc. and Toshiba America Medical Systems, Inc. Reseller Agreement** (incorporated by reference to Exhibit 10.27 to the Company's Form 10-Q for the quarter ended September 30, 2000 (File No. 0-22229)).
10.12	Form of Change in Control Agreement between the Company and Vincent J. Argiro, Ph.D., Steven P. Canakes and Jay D. Miller* (incorporated by reference to Exhibit 10.31 to the Company's Annual Report on Form 10-K for the year ended December 31, 2000 (File No. 0-22229)).
10.13	Technology License Agreement between PointDX, Inc. and Vital Images, Inc.** (incorporated by reference to Exhibit 10.32 to the Company's Form 10-Q for the quarter ended September 30, 2001 (File No. 0-22229)).
10.14	Development and License Agreement between Vital Images, Inc. and Surgical Navigation Technologies, Inc. (incorporated by reference to Exhibit 10.34 to the Company's Annual Report on Form 10-K for the year ended December 31, 2001 (File No. 0-22229)).
10.15	Marketing and Distribution Agreement effective as of September 1, 2001 between Vital Images, Inc. and Toshiba Corporation, Medical Systems Company** (incorporated by reference to Exhibit 10.35 to the Company's Form 10-Q for the quarter ended March 31, 2002 (File No. 0-22229)).



## Edgar Filing: VITAL IMAGES INC - Form POS AM

<b>Exhibit No.</b>	<b>Description of Exhibit</b>
10.16	Amendment No. 1 to Marketing and Distribution Agreement effective as of October 1, 2002 between Vital Images, Inc. and Toshiba Corporation, Medical Systems Company** (incorporated by reference to Exhibit 10.37 to the Company's Annual Report on Form 10-K for the year ended December 31, 2002) (confidential treatment has been requested for portions of this exhibit).
10.17	Product Distribution Agreement between Vital Images, Inc. and R2 Technology, Inc.** (incorporated by reference to Exhibit 10.38 to the Company's Annual Report on Form 10-K for the year ended December 31, 2002 (File No. 0-22229)).
10.18	Employment Agreement dated February 9, 2002 between the Company and Jay D. Miller* (incorporated by reference to Exhibit 10.39 to the Company's Annual Report on Form 10-K for the year ended December 31, 2002 (File No. 0-22229)).
10.19	Form of Change in Control Agreement between the Company and Jay D. Miller* (incorporated by reference to Exhibit 10.40 to the Company's Annual Report on Form 10-K for the year ended December 31, 2002 (File No. 0-22229)).
10.20	Non-qualified Stock Option Agreement dated December 28, 2002 between the Company and Jay D. Miller* (incorporated by reference to Exhibit 10.41 to the Company's Annual Report on Form 10-K for the year ended December 31, 2002 (File No. 0-22229)).
10.21	Value Added Reseller Agreement between Vital Images, Inc. and McKesson Information Solutions LLC** (incorporated by reference to Exhibit 10.43 to the Company's Annual Report on Form 10-K for the year ended December 31, 2003 (File No. 0-22229)).
10.22	Amendment No. 2 to Marketing and Distribution Agreement effective as of October 1, 2003 between Vital Images, Inc. and Toshiba Corporation, Medical Systems Company** (incorporated by reference to Exhibit 10.44 to the Company's Annual Report on Form 10-K for the year ended December 31, 2003 (File No. 0-22229)).
10.23	Lease Agreement dated March 26, 2004 between Pondview Plaza Corporation and Vital Images, Inc. (incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q for the quarter ended March 31, 2004 (File No. 0-22229)).
10.24	Amended and Restated Development, Supply, Marketing and Distribution Agreement dated as of June 1, 2003 by and between Vital Images, Inc. and E-Z EM, Inc.** (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on August 3, 2004 (File No. 0-22229)).

## Edgar Filing: VITAL IMAGES INC - Form POS AM

Exhibit No.	Description of Exhibit
10.25	Agreement dated January 11, 2005 by and between Michael H. Carrel and Vital Images, Inc.* (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on January 18, 2005 (File No. 0-22229)).
10.26	Separation Agreement by and between Gregory S. Furness and Vital Images, Inc.* (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on February 25, 2005 (File No. 0-22229)).
10.27	Amendment No. 3 to Marketing and Distribution Agreement effective as of January 1, 2005 between Vital Images, Inc. and Toshiba Medical Systems Corporation (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 10, 2005 (File No. 0-22229)).**
10.28	Marketing Agreement dated as of April 21, 2005 between Vital Images, Inc. and R2 Technology, Inc. (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 10, 2005 (File No. 0-22229)).**
10.29	Offer letter dated May 15, 2005 by and between Vital Images, Inc. and Michael H. Carrel (incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 19, 2005 (File No. 0-22229)).*
10.30	Employment Agreement dated May 16, 2005 by and between Vital Images, Inc. and Michael H. Carrel (incorporated by reference to Exhibit 99.2 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 19, 2005 (File No. 0-22229)).*
10.31	Summary of Final Terms for Carrel Compensation (incorporated by reference to Exhibit 99.3 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 19, 2005 (File No. 0-22229)).*
10.32	Change in Control Agreement dated May 16, 2005 by and between Vital Images, Inc. and Michael H. Carrel (incorporated by reference to Exhibit 99.4 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 19, 2005 (File No. 0-22229)).*
23.1	Consent of PricewaterhouseCoopers LLP.
23.2	Consent of Winthrop & Weinstine, P.A. (contained in the opinion filed as Exhibit 5.1).

---

\* Indicates a management contract or compensatory plan or arrangement.

\*\* Portions of such exhibit are treated as confidential pursuant to a request for that confidential treatment filed with the Commission by Vital Images.