MERGE HEALTHCARE INC
Form 424B3
November 25, 2009

PROSPECTUS

Filed Pursuant to 424(b)(3)
File Number 333-161689

MERGE HEALTHCARE INCORPORATED

5,422,104 Shares Common Stock

The selling stockholders identified in this prospectus or an supplement hereto in the section of this prospectus describing the "Selling Stockholders," may use this prospectus or any prospectus supplement to offer and resell from time to time up to 5,422,104 shares of our common stock. These shares represent shares of our common stock that we issued to such selling stockholders in connection with our acquisition of Confirma, Inc. on September 1, 2009.

We will not receive any of the proceeds from the sale of these shares of our common stock by the selling stockholders.

The selling stockholders named in this prospectus, or their donees, pledgees, transferees or other successors-in-interest, may offer or resell the shares from time to time through public or private transactions at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices.

The selling stockholders may resell the common stock to or through underwriters, broker-dealers or agents, who may receive compensation in the form of discounts, concessions or commissions. The selling stockholders will bear all commissions and discounts, if any, attributable to the sale of shares. We will bear all costs, expenses, and fees in connection with the registration of the shares. For additional information on the methods of sale that may be used by the selling stockholders, see "Plan of Distribution."

This prospectus describes the general manner in which the shares of our common stock may be offered and sold by the selling stockholders. If necessary, the specific manner in which shares of our common stock may be offered and sold will be described in a supplement to this prospectus.

You should read this prospectus, the information incorporated by reference in this prospectus and any prospectus supplement carefully before you invest.

Investing in our securities involves a high degree of risk. You should carefully consider the risk factors described in the applicable prospectus supplement and certain of our filings with the Securities and Exchange Commission, as described under "Risk Factors" on page 5.

This prospectus may not be used to offer or sell any securities unless accompanied by a prospectus supplement.

Our common stock is quoted and traded on the Nasdaq Global Market under the symbol "MRGE." On October 29, 2009, the last reported sale price of our common stock on the Nasdaq Global Market was $3.80. The applicable prospectus supplement will contain information, where applicable, as to any other listing on the Nasdaq Global Market or any securities market or exchange of the securities covered by the prospectus supplement.

The securities may be offered directly by us to investors, to or through underwriters or dealers or through agents. If any underwriters are involved in the sale of any securities offered by this prospectus and any prospectus supplement, their names, and any applicable purchase price, fee, commission or discount arrangement between or among them, and

any applicable over-allotment options, will be set forth, or will be calculable from the information set forth, in the applicable prospectus supplement. The price to the public of such securities and the net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is November 5, 2009

Table of Contents

Table of Contents

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we have filed with the SEC, using a “shelf” registration process. Under this shelf registration process, the selling stockholders referred to in this prospectus may offer and resell from time to time up to 5,422,104 shares of our common stock.

This prospectus does not cover the issuance of any shares of common stock by us to the selling stockholders, and we will not receive any of the proceeds from any sale of shares by the selling stockholders. Except for underwriting discounts and selling commissions, if any, which may be paid by the selling stockholders, we have agreed to pay the expenses incurred in connection with the registration of the shares of common stock covered by this prospectus.

Information about the selling stockholders may change over time. Any changed information given to us by the selling stockholders will be set forth in a prospectus supplement if and when necessary. Further, in some cases, the selling stockholders will also be required to provide a prospectus supplement containing specific information about the terms pursuant to which they are offering and selling our common stock. If a prospectus supplement is provided and the description of the offering in the prospectus supplement varies from the information in this prospectus, you should rely on the information in the prospectus supplement.

You should rely only on the information contained or incorporated by reference in this prospectus and any applicable prospectus supplement or amendment. We have not, and the selling stockholders have not, authorized any person to provide you with different information. This prospectus is not an offer to sell, nor is it an offer to buy these securities in any state where the offer or sale is not permitted. The information in this prospectus is complete and accurate as of the date on the front cover, but the information may have changed since that date.

The terms “Merge,” “Merge Healthcare,” the “Company,” “we,” “us,” and “our” refer to Merge Healthcare Incorporated.

We have filed or incorporated by reference exhibits to the registration statement of which this prospectus forms a part. You should read the exhibits carefully for provisions that may be important to you.

PROSPECTUS SUMMARY

This summary highlights material information found in greater detail elsewhere in this prospectus or the documents incorporated by reference herein. Before deciding to invest in our common stock, you should carefully read this entire prospectus, including the matters discussed in the section on "Risk Factors" in this prospectus, as well as in the section captioned "Risk Factors," which we describe in Item 1A in our most recent Annual Report on Form 10-K, which we filed with the SEC and in Item 1A in our quarterly reports on Form 10-Q which we file from time to time with the SEC, as well as in other documents that we subsequently file with the SEC.

Our company develops solutions that automate healthcare data and diagnostic workflow to enable a better electronic record of the patient experience, and to enhance product development for health IT, device and pharmaceutical companies and delivers related services. Merge products, ranging from standards-based development toolkits to sophisticated clinical applications, have been used by healthcare providers, vendors and researchers worldwide for over 20 years. Merge Healthcare’s principal executive offices are located at 6737 West Washington Street, Suite 2250, Milwaukee, Wisconsin 53214–5650, and the telephone number there is (414) 977–4000.

Merge Healthcare was founded in 1987 and specialized in the transformation of legacy radiology (film–based) images into filmless digitized images for distribution and diagnostic interpretation. Merge Healthcare acquired eFilm Medical Inc. in June 2002 for its diagnostic medical image workstation software capabilities; RIS Logic, Inc. in July 2003 for its RIS software, which manages business and clinical workflow for imaging centers; AccuImage Diagnostics Corp. in

January 2005 for its advanced visualization technologies for clinical specialty medical imaging; and Cedara Software Corp. in June 2005, which significantly enhanced Merge Healthcare's medical imaging software offerings. In 2009, Merge Healthcare has acquired:

Table of Contents

- Certain assets of eko systems, inc. in July for its Surgical Management System capabilities;

- etrials Worldwide, Inc in July in order to provide clinical trial sponsors and contract research organizations ("CROs") comprehensive and configurable solutions that include both critical imaging technologies and proven eClinical capabilities; and

- Confirma, Inc. in September in order to combine forces in an effort to expand computer aided detection ("CAD") technology.

Merge Healthcare's business is health IT software, which can involve any aspect of moving medical images and/or information into electronic media. Its major product categories consist of:

- Software development toolkits and platforms, which give software developers resources to accelerate new product development;

- Diagnostic workstation software applications, which bring specialized reading and review tools to the clinician's desktop;

- RIS and related applications, which manage the business workflow of an imaging enterprise or radiology department;

- PACS and related applications, which manage the medical image workflow of a healthcare enterprise;

- Surgical Management Systems, which automate the monitoring and recording of anesthesia and perfusion before, during and after a surgery;

- CAD products, which automate the analysis and interventional guidance of studies provided by radiology practices;

- Software-as-a-service ("SaaS"), which includes electronic data capture ("EDC"), interactive voice and Web response ("IVR"/"IWR") and electronic patient diaries ("eDiary") for clinical trial sponsors and CRO's.

- Consultative engineering, which provides customer development teams with added expertise and technology; and

- Managed Services, which extends additional image and remote information management capabilities to Merge Healthcare's customers.

Merge Healthcare generates revenue through licensing software and/or intellectual property, upgrading and/or renewing those licenses, ongoing service and support of the solutions, SaaS delivery of solutions, project or hourly professional services, consultative engineering fees and pay-per-study managed services.

Merge Healthcare's technologies and expertise span all the major digital imaging modalities, including computed tomography ("CT"), magnetic resonance imaging ("MRI"), digital x–ray, mammography, ultrasound, echo-cardiology, angiography, nuclear medicine, positron emission tomography ("PET") and fluoroscopy. Merge Healthcare's offerings are used in all aspects of clinical imaging workflow, including: the display of a patient's digital image; the archiving communication and manipulation of digital images; clinical applications to analyze digital images; and the use of imaging in minimally-invasive surgery. Merge Healthcare has continued to innovate with its product lines and has extended its business into new areas of medical imaging.

Table of Contents

Merge Healthcare has its software deployed in hospitals and clinics worldwide through its partner, direct end-user and eCommerce channels and used by clinical trial sponsors and CRO's worldwide. Its software is licensed by many of the world's largest medical device and healthcare information technology companies. With global brand recognition for products such as eFilm Workstation™, a downloadable diagnostic imaging application, and MergeCOM-3 DICOM toolkits, Merge Healthcare is able to generate a foothold in new international markets upon which it can expand into additional product lines.

The Offering

Issuer	Merge Healthcare Incorporated
Seller	One or more selling stockholders; for more information, see "Selling Stockholders." We are not selling any of the shares of common stock offered under this prospectus or any prospectus supplement.
Common Stock Offered	5,422,104 shares
Use of Proceeds	We will not receive any proceeds from the sale by any selling stockholder of the shares of common stock offered under this prospectus or any prospectus supplement. See "Use of Proceeds."
Our Common Stock	Our common stock is quoted on The Nasdaq Global Market under the symbol "MRGE."
Risk Factors	Investing in our common stock involves significant risk. See "Risk Factors" for a discussion of the risks associated with an investment in our common stock.

Table of Contents

RISK FACTORS

Before you invest in our securities, in addition to the other information, documents or reports incorporated by reference in this prospectus and in any prospectus supplement, you should carefully consider the risk factors set forth in the section entitled "Risk Factors" in any prospectus supplement as well as in "Part I, Item 1A. Risk Factors," in our most recent annual report on Form 10-K, and in "Part II, Item 1A. Risk Factors," in our quarterly reports on Form 10-Q filed subsequent to such Form 10-K, which are incorporated by reference into this prospectus and any prospectus supplement in their entirety, as the same may be updated from time to time by our future filings under the Exchange Act. Each of the risks described in these sections and documents could materially and adversely affect our business, financial condition, results of operations and prospects, and could result in a loss of your investment.

We may not be able to realize the anticipated benefits from our acquisitions of Confirma and etrials.

We may not be able to realize the anticipated benefits from our acquisitions of Confirma and etrials. Achieving those benefits depends on the timely, efficient and successful execution of a number of post-acquisition events, including integrating the businesses of Confirma and etrials into our company. Factors that could affect our ability to achieve these benefits include:

- Difficulties in integrating and managing personnel, financial reporting and other systems used by the businesses of Confirma and etrials into our company;
- The failure of the businesses of Confirma and etrials to perform in accordance with our expectations;
- Any future goodwill impairment charges that we may incur with respect to the assets of Confirma or etrials;
- Failure to achieve anticipated synergies between our business units and the business units of Confirma and etrials;
- The loss of customers; and
- The loss of any of the key managers and employees.

If the businesses of Confirma and etrials do not operate as we anticipate, our business, financial condition and results of operations could be materially harmed. In addition, the loss of any key managers or employees of Confirma or etrials could have a material adverse effect on our business.

In addition, as a result of the acquisitions, we have assumed all of the liabilities of Confirma and etrials. We may learn additional information about the businesses of Confirma and etrials that adversely affects us, such as unknown or contingent liabilities, issues relating to internal controls over financial reporting and issues relating to compliance with the Sarbanes-Oxley Act or other applicable laws. As a result, there can be no assurance that the acquisitions will be successful or will not, in fact, harm our business. Among other things, if liabilities of Confirma and etrials are greater than projected, or if there are obligations of which we were not aware at the time of completion of the acquisition, our business could be materially adversely affected.

In addition, both Confirma and etrials have accumulated deficits from operations and might never achieve or maintain profitability, which could materially adversely affect our business and operating results.

Table of Contents

The successful integration of the businesses of Confirma and etrials into our company will present significant challenges.

We anticipate that the acquisitions of Confirma and etrials will place significant demands on our administrative, operational and financial resources, and we cannot assure you that we will be able to successfully integrate the businesses of Confirma and etrials into our company. Our failure to successfully integrate Confirma and etrials into our company, and to manage the challenges presented by the integration process successfully, may prevent us from achieving the anticipated benefits of the acquisitions and could have a material adverse effect on our business.

Our acquisition of etrials could trigger certain provisions contained in etrials' agreements with third parties that could permit such parties to terminate that agreement.

etrials may be a party to agreements that permit a counter-party to terminate an agreement or receive payments because the acquisition would cause a default or violate an anti-assignment, change of control or similar clause in such agreements. If this happens, we may have to seek to replace that agreement with a new agreement or make additional payments under such agreements. However, we may be unable to replace a terminated agreement on comparable terms or at all. Depending on the importance of such agreement to etrials' business, the failure to replace a terminated agreement on similar terms or at all, and requirements to pay additional amounts, may increase our costs of operating etrials' business or prevent us from operating etrials' business.

We expect to incur significant costs associated with the acquisition of etrials.

We estimate that we or etrials will incur direct transaction costs of approximately $2.8 million associated with the acquisition of etrials, including direct costs of the acquisition as well as liabilities to be accrued in connection with the acquisition (excluding any related severance costs). All such direct acquisition costs will be expensed as incurred. We believe the combined entity may incur charges to operations, which are not currently reasonably estimable, in the quarter in which the acquisition is completed or the following quarters, to reflect costs associated with integrating the two companies. We may incur additional material charges in subsequent quarters to reflect additional costs associated with the acquisition. We anticipate that the combination will require significant cash outflows for acquisition and integration related costs. If the benefits of the acquisition do not exceed the costs of integrating the businesses, our financial results may be adversely affected.

The market price of our common stock may decline as a result of our acquisition of Confirma.

The market price of our common stock may decline after our acquisition of Confirma. Some of the issues that we could face are:

- The integration of Confirma's business is unsuccessful or takes longer or is more disruptive than anticipated;
- We do not achieve the expected synergies or other benefits of the Confirma acquisition as rapidly or to the extent anticipated, if at all;
- The effect of the acquisition of Confirma on our financial results does not meet our expectations; or
- After the acquisition, Confirma's business does not perform as anticipated.

In connection with the acquisition of Confirma, we will issue 5,422,104 additional shares of our common stock. The increase in the number of outstanding shares of our Common Stock may lead to sales of such shares or the perception that such sales may occur, either of which may adversely affect the market price of our common stock.

Table of Contents

There are a limited number of stockholders who have significant control over our common stock, allowing them to have significant influence over the outcome of all matters submitted to stockholders for approval, which may conflict with our interests and the interests of other stockholders.

Our directors, officers and principal stockholders (stockholders owning 10% or more of our common stock) beneficially owned approximately 30,429,682, or 46.0%, of the outstanding shares of common stock and stock options that could have been converted to common stock at September 30, 2009, and such stockholders will have significant influence over the outcome of all matters submitted to our stockholders for approval, including the election of directors and other corporate actions. In addition, such influence by these affiliates could have the effect of discouraging others from attempting us to take over, thereby increasing the likelihood that the market price of the common stock will not reflect a premium for control.

Our business could be harmed by the deteriorating general economic and market conditions that lead to reduced spending on information technology products.

Our business and operating results might be adversely affected by worldwide economic conditions and, in particular, conditions in the pharmaceutical, biotechnology and medical device industries we serve. As our business expands globally, we have become increasingly subject to the risks arising from adverse changes in domestic and global economic and political conditions. Economic growth in the U.S. and other countries slowed since the second half of 2008, which caused our customers to delay or reduce information technology purchases. As a result of slowing global economic growth, the credit market crisis, declining consumer and business confidence, shifts in consumer spending patterns, increased unemployment, reduced levels of capital expenditures, fluctuating commodity prices, bankruptcies and other challenges currently affecting the global economy, our clients might experience deterioration of their businesses, cash flow shortages, and difficulty obtaining financing. If economic conditions in the U.S. and other countries continue to deteriorate, customers may continue to delay or further reduce purchases. This could result in additional reductions in sales of our products, longer sales cycles, slower adoption of new technologies and increased price competition. In addition, weakness in the end-user market could negatively affect the cash flow of our OEM and VAR customers who could, in turn, delay paying their obligations, which would increase our credit risk exposure and cause a decrease in operating cash flows. Also, if OEM and VAR customers experience excessive financial difficulties and/or insolvency, and we are unable to successfully transition end-users to purchase products from other vendors or directly from us, sales could decline significantly. Any of these events would likely harm our business, results of operations and financial condition.

Continued disruption in credit markets and world-wide economic changes may adversely affect our business, financial condition, and results of operations.

Continued disruptions in the financial and credit markets may adversely affect our business and financial results. The tightening of credit markets may reduce the funds available to our customers to buy our products and services. It may also result in customers extending the length of time in which they pay and in our having higher customer receivables with increased default rates. General concerns about the fundamental soundness of domestic and foreign economies may also cause customers to reduce their purchases, even if they have cash or if credit is available to them.

Our future capital needs are uncertain and our ability to access additional financing may be negatively impacted by the volatility and disruption of the capital and credit markets and adverse changes in the global economy.

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

- Acceptance of and demand for its products;

- The extent to which we invest in new technology and product development;
- The costs of developing new products, services or technologies;

Table of Contents

- The number and method of financing of acquisitions and other strategic transactions; and
- The costs associated with the growth of its business, if any.

We intend to finance our operations and any growth of our business with existing cash and cash flows from operations. We believe existing cash and anticipated cash flows from operations will be sufficient to meet operating and capital requirements through at least the twelve month period following the filing of this Prospectus. If adverse global economic conditions persist or worsen, however, we could experience a decrease in cash flows from operations and may need additional financing to fund operations. Due to the existing uncertainty in the capital markets (including debt, private equity, venture capital and traditional bank lending), access to additional debt or equity may not be available on acceptable terms or at all. If we cannot raise funds on acceptable terms when necessary, we may not be able to develop or enhance products and services, execute our business plan, take advantage of future opportunities or respond to competitive pressures or unanticipated customer requirements.

We may experience significant fluctuations in revenue growth rates and operating results.

We may not be able to accurately forecast our growth rate. We base expense levels and investment plans on sales estimates and review all estimates on a quarterly basis. Many of our expenses and investments are fixed and we may not be able to adjust spending quickly enough if sales are lower than expected.

Our revenue growth may not be sustainable and our percentage growth rates may decrease or fluctuate significantly. Our revenue and operating profit growth depends on the continued growth of demand for our products and services offered through us or our OEM and VAR customers, and our business is affected by general economic and business conditions worldwide. A softening of demand, whether caused by changes in customer preferences or a weakening of the U.S. or global economies, may result in decreased revenue or growth.

Our net sales and operating results will also fluctuate for many other reasons, including due to risks described elsewhere in this section and the following:

- Demand for our software solutions and services;
- Our sales cycle;
- Economic cycles;
- The level of reimbursements to our end-user customers from government sponsored healthcare programs (principally, Medicare and Medicaid);
- Accounting policy changes mandated by regulating entities;
- Delays due to customers' internal budgets and procedures for approving capital expenditures, by competing needs for other capital expenditures and the deployment of new technologies and personnel resources;
- Our ability to retain and increase sales to existing customers, attract new customers and satisfy our customers' demands;
- Our ability to fulfill orders;
- The introduction of competitive products and services;

- Price decreases;
- Changes in the usage of the Internet and eCommerce, including in non-U.S. markets;

Table of Contents

- Timing, effectiveness and costs of expansion and changes in our systems and infrastructure;
- The outcomes of legal proceedings and claims involving us; and
- Variations in the mix of products and services offered by us.

Delays in the expected sales or installation of our software may have a significant impact on our anticipated quarterly revenues and, consequently, our earnings since a significant percentage of expenses are relatively fixed. Additionally, we sometimes depend, in part, upon large contracts with a small number of OEM customers to meet sales goals in any particular quarter. Delays in the expected sales or installation of solutions under these large contracts may have a significant impact on our quarterly net sales and consequently our earnings, particularly because a significant percentage of expenses are fixed.

The length of our sales and implementation cycles may adversely affect our operating results.

We have experienced long sales and implementation cycles. How and when to implement, replace, expand or substantially modify medical imaging management software, or to modify or add business processes, are major decisions for our end-user target market. The sales cycle for our software ranges from six to 18 months or more from initial contact to contract execution. Our end-user implementation cycle has generally ranged from three to nine months from contract execution to completion of implementation. During the sales and implementation cycles, we will expend substantial time, effort and resources preparing contract proposals, negotiating the contract and implementing the software, and may not realize any revenues to offset these expenditures. Additionally, any decision by our customers to delay or cancel purchases or the implementation of our software may adversely affect net sales.

We have outstanding debt and may incur additional debt in the future.

On June 4, 2008, we closed a financing transaction with Merrick RIS, LLC in which we received gross proceeds of $20.0 million from Merrick Ventures, LLC in exchange for a $15.0 million senior secured term note (the “Note”) due June 4, 2010 and 21,085,715 shares of our common stock. Our ability to repay the principal of the Note and any additional indebtedness that we may incur is dependent upon our ability to manage business operations and generate sufficient cash flows to service such debt. There can be no assurance that we will be able to manage any of these risks successfully.

If we are unable to successfully identify or effectively integrate acquisitions, our financial results may be adversely affected.

We have in the past and may in the future acquire and make investments in companies, products or technologies that we believe complement or expand our existing business and assist in quickly bringing new products to market. There can be no assurance that we will be able to identify suitable candidates for successful acquisitions at acceptable prices. In addition, our ability to achieve the expected returns and synergies from past and future acquisitions and alliances depends in part upon our ability to integrate the offerings, technology, administrative functions, and personnel of these businesses into our business in an efficient and effective manner. We cannot predict whether we will be successful in integrating acquired businesses or that our acquired businesses will perform at anticipated levels. In addition, our past and future acquisitions may subject us to unanticipated risks or liabilities, or disrupt operations and divert management’s attention from day-to-day operations. In addition, we may use our capital stock to acquire acquisition targets, which could be dilutive to existing stockholders and cause a decline in the price of our common stock.

In making or attempting to make acquisitions or investments, we face a number of risks, including risks related to:

· Identifying suitable candidates, performing appropriate due diligence, identifying potential liabilities and negotiating acceptable terms;

Table of Contents

- Reducing our working capital and hindering our ability to expand or maintain our business, if acquisitions are made using cash;
- The potential distraction of our management, diversion of our resources and disruption to our business;
- Retaining and motivating key employees of the acquired companies;
- Managing operations that are distant from our current headquarters and operational locations;
- Entering into industries or geographic markets in which we have little or no prior experience;
- Competing for acquisition opportunities with competitors that are larger or have greater financial and other resources than us;
- Accurately forecasting the financial impact of a transaction;
- Assuming liabilities of acquired companies, including existing or potential litigation related to the operation of the business prior to the acquisition;
- Maintaining good relations with the customers and suppliers of the acquired company; and
- Effectively integrating acquired companies and achieving expected synergies.

In addition, any acquired business, products or technologies may not generate sufficient revenue and net income to offset the associated costs of such acquisitions, and such acquisitions could result in other adverse effects. Moreover, from time to time, we may enter into negotiations for the acquisition of businesses, products or technologies but be unable or unwilling to consummate the acquisitions under consideration. This can be expensive and could cause significant diversion of managerial attention and resources.

A portion of our business relies upon a network of independent contractors and distributors whose actions could have an adverse effect on our business.

We obtain some critical information from independent contractors. In addition, we rely on a network of VAR's and distributors to sell our offerings in locations where we do not maintain a sales office or sales team. These independent contractors and distributors are not our employees. As a result, we have limited ability to monitor and direct their activities. The loss of a significant number of these independent contractors or dealers could disrupt our sales, marketing and distribution efforts. Furthermore, if any actions or business practices of these individuals or entities violate our policies or procedures or otherwise are deemed inappropriate or illegal, we could be subject to litigation, regulatory sanctions or reputation damage, any of which could adversely affect our business and require us to terminate relationships with them.

Our investments in technology may not be sufficient and may not result in an increase in our revenues or decrease in our operating costs.

As the technological landscape continues to evolve, it may become increasingly difficult for us to make timely, cost-effective changes to our offerings in a manner that adequately differentiates them from those of our competitors. We cannot provide any assurance that our investments have been or will be sufficient to maintain or improve our competitive position or that the development of new or improved technologies and products by our competitors will not have a material adverse effect on our business.

We operate in competitive markets, which may adversely affect our market share and financial results.

Some of our competitors are focused on sub-markets within targeted industries, while others have significant financial and information-gathering resources with recognized brands, technological expertise and market experience. We believe that competitors are continuously enhancing their products and services, developing new products and services and investing in technology to better serve the needs of their existing customers and to attract new customers.

Table of Contents

We face competition in specific industries and with respect to specific offerings. We may also face competition from organizations and businesses that have not traditionally competed with us, but that could adapt their products and services to meet the demands of our customers. Increased competition may require us to reduce the prices of our offerings or make additional capital investments that would adversely affect margins. If we are unable or unwilling to do so, we may lose market share in target markets and our financial results may be adversely affected.

We face aggressive competition in many areas, and our business will be harmed if we fail to compete effectively.

The markets for medical imaging solutions are highly competitive and subject to rapid technological change. We may be unable to maintain our competitive position against current and potential competitors. Many of our current and potential competitors have greater financial, technical, product development, marketing and other resources, and we may not be able to compete effectively with them. In addition, new competitors may emerge and our system and software solution offerings may be threatened by new technologies or market trends that reduce the value of our solutions. Further, our recent challenges may have weakened our competitive position.

We often "compete" with our OEM customers' own internal software engineering groups. The size and competency of these groups may create additional competition. In the area of Radiology Information Systems ("RIS") and Picture Archiving and Communication Systems ("PACS") workflow applications, many competitors offer portions of an integrated radiology solution through their RIS and PACS. Additionally, certain competitors are integrating RIS and PACS technologies through development, partnership and acquisition activities.

The development and acquisition of additional products, services and technologies, and the improvement of our existing products and services, require significant investments in research and development. For example, our current product candidates are in various stages of development and may require significant further research, development, pre-clinical or clinical testing, regulatory approval and commercialization. If we fail to successfully sell new products and update existing products, our operating results may decline as existing products reach the end of their commercial life cycles.

Our performance and future success depends on our ability to attract, integrate and retain qualified technical, managerial and sales personnel.

We are dependent, in part, upon the services of our senior executives and other key business and technical personnel. We do not currently maintain key-man life insurance on our senior executives. The loss of the services of any of our senior executives or key employees could have a material adverse effect on our business. Our commercial success will depend upon, among other things, the successful recruiting and retention of highly skilled technical, managerial and sales personnel with experience in similar business activities. Competition for the type of highly skilled individuals that we seek is intense. We may not be able to retain existing key employees or be able to find, attract and retain skilled personnel on acceptable terms.

We may not be able to adequately protect our intellectual property rights or may be accused of infringing intellectual property rights of third parties.

We regard our trademarks, service marks, copyrights, patents, trade secrets, proprietary technology and similar intellectual property as critical to our success. We rely on trademark, copyright and patent law, trade secret protection and confidentiality and/or license agreements with employees, customers and others to protect our proprietary rights. Effective intellectual property protection may not be available in every country in which our products and services are made available. We also may not be able to acquire or maintain appropriate intellectual property rights in all countries where we do business.

We may not be able to discover or determine the extent of any unauthorized use of our proprietary rights. Third parties that license our proprietary rights also may take actions that diminish the value of these rights. Such claims, whether or not meritorious, may result in the expenditure of significant financial and managerial resources, injunctions against us or the payment of damages. We may need to obtain licenses from third parties who allege that we have infringed on their rights, but such licenses may not be available on terms acceptable to us or at all. In addition, we may not be able to obtain or utilize on favorable terms, or at all, licenses or other rights with respect to intellectual property we do not own in providing services under commercial agreements. These risks have been amplified by the increase in third parties whose sole or primary business is to assert such claims.

Table of Contents

We also rely on proprietary know how and confidential information and employ various methods, such as entering into confidentiality and non-compete agreements with our current employees and with certain third parties to whom we have divulged proprietary information to protect the processes, concepts, ideas and documentation associated with our solutions. Such methods may not afford sufficient protection, and we may not be able to protect trade secrets adequately or ensure that other companies would not acquire information that we consider proprietary.

We may be subject to product liability claims if people or property is harmed by the products and services that we sell.

Some of the products we sell or manufacture may expose us to product liability claims relating to personal injury, death or environmental or property damage and may require product recalls or other actions. Certain third parties, primarily our customers, also sell products or services using our products. This may increase our exposure to product liability claims. Although we maintain liability insurance, we cannot be certain that coverage will be adequate for liabilities actually incurred or that insurance will continue to be available on economically reasonable terms or at all. In addition, some of our agreements with vendors and sellers do not indemnify us from product liability.

We have foreign exchange rate risk.

Our international operating results are exposed to foreign exchange rate fluctuations. While the functional currency of most of our international operations is the U.S. Dollar, certain account balances are maintained in the local currency. Upon remeasurement of such accounts or through normal operations, results may differ materially from expectations, and we may record significant gains or losses on the remeasurement of such balances. As we expand international operations, our exposure to exchange rate fluctuations may increase.

We may not be successful in our efforts to expand into international market segments.

Our international activities are significant to our revenues and profits, and we plan to further expand internationally. We have relatively little experience operating in these or future market segments and may not benefit from any first-to-market advantages or otherwise succeed. It is costly to establish, develop and maintain international operations and websites and promote our brand internationally. Our international operations may not be profitable on a sustained basis.

In addition to risks described elsewhere in this section, our international sales and operations are subject to a number of risks, including:

- Local economic and political conditions;
- Foreign government regulation of healthcare and government reimbursement of health services;
- Local restrictions on sales or distribution of certain products or services and uncertainty regarding liability for products and services;
- Local import, export or other business licensing requirements;
- Local limitations on the repatriation and investment of funds and foreign currency exchange restrictions;

Table of Contents

- Shorter payable and longer receivable cycles and the resultant negative impact on cash flow;
- Local laws and regulations regarding data protection, privacy, network security and restrictions on pricing;
- Difficulty in staffing, developing and managing foreign operations as a result of distance, language and cultural differences;
- Different employee/employer relationships and the existence of workers' councils and labor unions;
- Laws and policies of the U.S. and other jurisdictions affecting trade, foreign investment, loans and taxes; and
- Geopolitical events, including war and terrorism.

Litigation or regulatory actions could adversely affect our financial condition.

On April 27, 2006, we received an informal, non-public inquiry from the SEC requesting voluntary production of documents and other information. The inquiry principally related to our announcement, on March 17, 2006, that we would investigate allegations of improprieties related to financial reporting and revise our results of operations for the fiscal quarters ended June 30, 2005, and September 30, 2005. On July 10, 2007, SEC Staff advised us that the SEC had issued a formal order of investigation in this matter. We are cooperating fully with the SEC. The SEC Staff has informed us that the Staff is considering recommending an injunctive or cease and desist order against us prohibiting violations of the reporting, record-keeping, and internal control provisions under the Securities Exchange Act of 1934. The Staff did not inform us that it is considering recommending any monetary sanctions. However, the matter has not yet been finally resolved, and, until such final resolution, we will continue to incur expenses, including legal fees and other costs, in connection with the SEC's investigation.

On June 1, 2009, we were served with a Summons and Complaint in the Milwaukee County Circuit Court, State of Wisconsin, captioned William C. Mortimore and David M. Nosay v. Merge Technologies Inc. n/k/a Merge Healthcare Inc. [sic], Case Number 09CV008356, Case Code 30301. The Complaint includes a demand for a jury trial and alleges that the corporation unreasonably refused Mortimore and Noshay's request for indemnification; requests the court order that they are entitled to indemnification under Wisconsin Statute Section 180.0851(2); alleges breaches of certain employment agreements; and a breach of the covenant of good faith and fair dealing. Monetary damages are unspecified. We have retained litigation counsel, notified our appropriate insurers and intend to vigorously defend this action.

As a result of lawsuits and regulatory matters, including the matters discussed above, we have incurred and may continue to incur substantial expenses.

We depend on licenses from third parties for rights to some technology we use, and if we are unable to continue these relationships and maintain our rights to this technology, our business could suffer.

Some of the technology used in our software depends upon licenses from third party vendors. These licenses typically expire within one to five years, can be renewed only by mutual consent and may be terminated if we breach the license and fail to cure the breach within a specified period of time. We may not be able to continue using the technology made available to us under these licenses on commercially reasonable terms or at all. As a result, we may have to discontinue, delay or reduce software shipments until we obtain equivalent technology, which could hurt our business. Most of our third party licenses are nonexclusive. Our competitors may obtain the same right to use any of the technology covered by these licenses and use the technology to compete directly with us. In addition, if our vendors choose to discontinue support of the licensed technology in the future or are unsuccessful in their continued

research and development efforts, particularly with regard to the Microsoft Windows/Intel platform on which most of our products operate, we may not be able to modify or adapt our own software.

Table of Contents

We are subject to government regulation, changes to which could negatively impact our business.

We are subject to regulation in the U.S. by the Food and Drug Administration (the "FDA"), including periodic FDA inspections, in Canada under Health Canada's Medical Devices Regulations, and in other countries by corresponding regulatory authorities. We may be required to undertake additional actions in the U.S. to comply with the Federal Food, Drug and Cosmetic Act (the "Act"), regulations promulgated under the Act, and any other applicable regulatory requirements. For example, the FDA has increased its focus on regulating computer software intended for the use in a healthcare setting. If our software solutions are deemed to be actively regulated medical devices by the FDA, we could be subject to more extensive requirements governing pre- and post-marketing activities. Complying with these regulations could be time consuming and expensive, and may include:

- Requiring us to receive FDA clearance of a pre-market notification submission demonstrating substantial equivalence to a device already legally marketed, or to obtain FDA approval of a pre-market approval application establishing the safety and effectiveness of the software;

- Requiring us to comply with rigorous regulations governing the pre-clinical and clinical testing, manufacture, distribution, labeling and promotion of medical devices; and

- Requiring us to comply with the Act regarding general controls, including establishment registration, device listing, compliance with good manufacturing practices, reporting of specified malfunctions and adverse device events.

A significant portion of our net sales are derived directly or indirectly from sales to end-users, including hospitals, diagnostic imaging centers and specialty clinics, many of which generate some or all of their revenues from government sponsored healthcare programs, principally, Medicare and Medicaid. We believe that the implementation of the reimbursement reductions contained in the Deficit Reduction Act has adversely impacted our end-user customers' revenues per examination, which has caused some of them to respond by reducing their investments or postponing investment decisions, including investments in our software solutions and services, including maintenance. The risk of more Medicare imaging reimbursement cuts remains.

Similar obligations may exist in other countries in which we do business, including Canada. Any failure by us to comply with other applicable regulatory requirements, both domestic and foreign, could subject us to a number of enforcement actions, including warning letters, fines, product seizures, recalls, injunctions, total or partial suspension of production, operating restrictions or limitations on marketing, refusal of the government to grant new clearances or approvals, withdrawal of marketing clearances or approvals and civil and criminal penalties.

Changes in federal and state regulations relating to patient data could depress the demand for our software and impose significant software redesign costs.

Federal regulations under the Health Insurance Portability and Accountability Act ("HIPAA") impose national health data standards on healthcare providers that conduct electronic health transactions, healthcare clearinghouses that convert health data between HIPAA compliant and non-compliant formats and health plans. Collectively, these groups are known as covered entities. The HIPAA regulations prescribe transaction formats and code sets for electronic health transactions, protect individual privacy by limiting the uses and disclosures of individually identifiable health information and require covered entities to implement administrative, physical and technological safeguards to ensure the confidentiality, integrity, availability and security of individually identifiable health information in electronic form. Although we are not a covered entity, most of our customers are, and they require that our software and services adhere to HIPAA regulations. Any failure or perceived failure of our software or services to meet HIPAA regulations could adversely affect demand for our software and services and potentially require us to expend significant capital, research and development and other resources to modify our software or services to address the privacy and security

requirements of our clients.

States and foreign jurisdictions have adopted, or may adopt, privacy standards that are similar to or more stringent than the federal HIPAA privacy regulations. This may lead to different restrictions for handling individually identifiable health information. As a result, our customers may demand IT solutions and services that are adaptable to reflect different and changing regulatory requirements, which could increase our development costs. In the future, federal, state or foreign governmental authorities may impose new data security regulations or additional restrictions on the collection, use, transmission and other disclosures of health information. We cannot predict the potential impact that these future rules may have on our business; however, the demand for our software and services may decrease if we are not able to develop and offer software and services that can address the regulatory challenges and compliance obligations facing our clients.

Table of Contents

Proposed federal U.S. government reductions in Medicare and Medicaid reimbursement rates for radiology procedures could negatively affect revenues of our hospital and imaging clinic customers, which could reduce our customers' ability to purchase our software and services.

Medicare and Medicaid use scanner utilization rates as a factor in determining reimbursement rates. They currently use a 50% utilization rate factor in the reimbursement formula. The Medicare Payment Advisory Commission (MedPAC) recommended increasing this factor to 90% utilization, or an increase of 80%, as part of the healthcare reform act currently under consideration in Congress. This change in the utilization rate has the potential to dramatically decrease reimbursements for radiology procedures, and could have a particularly devastating impact on patients, hospitals and imaging clinics in rural regions of the country where utilization rates are naturally lower. The resulting effect on our business could be a reduction in software and service procurement of our customers and potentially the closure of their facilities.

We provide customers with certain warranties that could result in higher costs than anticipated.

Software products such as ours that are used in a wide range of clinical and health information systems settings are likely to contain a number of errors or "bugs," especially early in their product life cycle. Our products include clinical information systems used in patient care settings where a low tolerance for bugs exists. Testing of products is difficult due to the wide range of environments in which systems are installed. The discovery of defects or errors in our software products may cause delays in product delivery, poor client references, payment disputes, contract cancellations or additional expenses and payments to rectify problems. Any of those factors may result in delayed acceptance of, or the return of, our software products.

Healthcare industry consolidation could impose pressure on our software prices, reduce our potential client base and reduce demand for our software.

Many hospitals and imaging centers have consolidated to create larger healthcare enterprises with greater market power. If this consolidation trend continues, it could reduce the size of our target market and give the resulting enterprises greater bargaining power, which may lead to erosion of the prices for our software. In addition, when hospitals and imaging centers combine, they often consolidate infrastructure, and consolidation of our customers could erode our revenue base.

Shares of our common stock eligible for public sale may have a negative impact on the market price of our commons stock, and dilute our stockholders' percentage ownership and voting power.

Sales of a substantial number of shares of our common stock in the public market, or the perception that these sales may occur, could cause the market price of our common stock to decline. In addition, the sale of these shares could impair our ability to raise capital, should we wish to do so, through the sale of additional common or preferred stock.

As of the close of business on September 30, 2009, we had 66,127,790 shares of common stock outstanding, including shares considered in this registration statement. Upon the filing of the registration statement, of which this prospectus forms a part, the 5,422,104 shares registered for resale under this prospectus will become freely tradable, subject only to certain contractual restrictions on resale to which the selling stockholders are subject. These contractual restrictions, which are automatically released in part, and eventually in their entirety, over time, are described in further detail in this prospectus under "Plan of Distribution—Transfer Restrictions."

Table of Contents

As of September 30, 2009, we had outstanding options to purchase 4,853,113 shares of our common stock, of which 1,941,805 options were then exercisable. Future sales of shares of our common stock by existing holders of our common stock or by holders of outstanding options, upon the exercise thereof, could have a negative impact on the market price of our common stock. As additional shares of common stock become available for resale in the public market pursuant to the registration statement and exercise of options, the market supply of shares of common stock will increase, which could also decrease its market price.

We are unable to estimate the number of shares that may be sold because this will depend on the market price for our common stock, the personal circumstances of the sellers and other factors. Any sale of substantial amounts of our common stock or other securities in the open market may adversely affect the market price of such securities and may adversely affect our ability to obtain future financing in the capital markets as well as create a potential market overhang.

Because we do not intend to pay dividends, stockholders will benefit from an investment in our stock only if it appreciates in value.

We currently intend to retain future earnings, if any, to finance further research and development and do not expect to pay any cash dividends in the foreseeable future. As a result, the success of an investment in our common stock will depend upon any future appreciation in its value. There is no guarantee that our common stock will appreciate in value or even maintain the price at stockholders have purchased and will purchase shares.

The trading price of our common stock has been volatile and may fluctuate substantially in the future.

The price of our common stock has been, and may continue to be, volatile. The trading price of our common stock may continue to fluctuate widely as a result of a number of factors, some of which are not in our control, including:

- Our ability to meet or exceed the expectations of analysts or investors;
- Changes in our forecasts or earnings estimates by analysts;
- Quarter-to-quarter variations in our operating results;
- Announcements regarding clinical activities or new products by us or our competitors;
- General conditions in the healthcare IT industry;
- Governmental regulatory action and healthcare reform measures, including changes in reimbursement rates for imaging procedures;
- Rumors about our performance or software solutions;
- Uncertainty regarding our ability to service existing debt;
- Price and volume fluctuations in the overall stock market, which have particularly affected the market prices of many software, healthcare and technology companies; and
- General economic conditions.

In addition, the market for our common stock may experience price and volume fluctuations unrelated or disproportionate to our operating performance. These fluctuations could have a significant impact on our business due to diminished incentives for management and diminished currency for acquisitions.

Table of Contents

Certain provisions of our charter and Delaware law could make a takeover difficult and may prevent or frustrate attempts by our stockholders to replace or remove our management team.

We have an authorized class of 1,000,000 shares of undesignated preferred stock and one authorized share of Series 3 Special Voting Stock preferred stock. These shares may be issued by our board of directors, on such terms and with such rights, preferences and designation as the board of directors may determine. Issuance of such preferred stock, depending upon the rights, preferences and designations thereof, may have the effect of delaying, deterring or preventing a change in control of us. In addition, we are subject to provisions of Delaware corporate law which, subject to certain exceptions, will prohibit us from engaging in any “business combination” with a person who, together with affiliates and associates, owns 15% or more of our common stock for a period of three years following the date that the person came to own 15% or more of our common stock, unless the business combination is approved in a prescribed manner.

These provisions of our certificate of incorporation, and of Delaware law, may have the effect of delaying, deterring or preventing a change in control, may discourage bids for our common stock at a premium over market price and may adversely affect the market price, and the voting and other rights of the holders, of our common stock. In addition, these provisions make it more difficult to replace or remove our current management team in the event our stockholders believe this would be in our best interest and the best interests our stockholders.

Table of Contents

FORWARD-LOOKING STATEMENTS

Information both included and incorporated by reference in this Prospectus may contain forward-looking statements, concerning, among other things, our outlook, financial projections and business strategies, all of which are subject to risks, uncertainties and assumptions. These forward-looking statements are identified by their use of terms such as "intend," "plan," "may," "should," "will," "anticipate," "believe," "could," "estimate," "expect," "continue," "potential," "oppo and similar terms. These statements are based on certain assumptions and analyses that each company believes are appropriate under the circumstances. Should one or more of these risks or uncertainties materialize, or should the assumptions prove incorrect, actual results may differ materially from those expected, estimated or projected. We can not guarantee that we will achieve these plans, intentions or expectations. Forward-looking statements speak only as of the date they are made, and we undertake no obligation to publicly update or revise any of them in light of new information, future events or otherwise.

Factors that may impact forward-looking statements include, among others, our ability 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 medical technology industry, including the acceptance of enterprise-wide advanced visualization by hospitals, clinics, and universities, product clearances and approvals by the United Sates Food and Drug Administration and similar regulatory bodies outside the U.S., and reimbursement and regulatory practices by Medicare, Medicaid, and private third-party payer organizations. We are also affected by the recent downturn in the U.S. and international economies and as such may be further impacted by the lack of credit available to our customers. We are affected by other factors identified in our filings with the Securities and Exchange Commission, some of which are set forth in the section entitled "Item 1A. Risk Factors" in our most recent Annual Report on Form 10-K and in "Part II, Item 1A. Risk Factors," in our quarterly reports on Form 10-Q filed subsequent to such Form 10-K, which are incorporated by reference into this prospectus and any prospectus supplement in their entirety, as the same may be updated from time to time by our future filings under the Exchange Act. 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.

These risks and uncertainties, along with the risk factors discussed under "Risk Factors" in this Prospectus, should be considered in evaluating any forward-looking statements contained in this Prospectus. All forward-looking statements speak only as of the date of this Prospectus. All subsequent written and oral forward-looking statements attributable to us or any person acting on its behalf are qualified by the cautionary statements in this section.

USE OF PROCEEDS

We will not receive any of the proceeds from the sale of shares by the selling stockholders under this Prospectus.

Table of Contents

SELLING STOCKHOLDERS

This prospectus relates to the resale of our common stock held by the selling stockholders listed below. The selling stockholders are the former stockholders of Confirma, Inc. ("Confirma"). On September 1, 2009, we acquired Confirma pursuant to a merger in which Confirma became one of our wholly-owned subsidiaries. In the Merger, shareholders of Confirma received 5,422,104 shares of our common stock. As a result of the acquisition, upon completion of the Merger, former shareholders of Confirma beneficially own approximately 8% of our outstanding common stock. In connection with the Merger, certain stockholders of Confirma entered into a voting agreement pursuant to which they agreed to vote in favor of the Merger.

The selling stockholders acquired these shares from us in a private offering pursuant to an exemption from registration provided by Section 4(2) of the Securities Act of 1933, as amended, in connection with our acquisition of Confirma. The registration statement of which this prospectus is a part has been filed pursuant to registration rights granted to the selling stockholders in connection with the acquisition.

The shares offered hereby are being registered to permit public secondary trading as and when the selling stockholders' contractual resale restrictions are released over time, as described below. The selling stockholders, including their donees, pledgees, transferees or other successors-in-interest, may offer all or part of the shares for resale from time to time. However, the selling stockholders are under no obligation to resell all or any portion of such shares, nor are the selling stockholders obligated to resell any shares immediately under this prospectus.

Under the terms of the Shareholders agreement between us and the selling stockholders, we will pay all expenses of the registration of the shares of common stock, including SEC filing fees, except that the selling stockholders will pay all discounts and selling commissions, if any. Our expenses for the registration of the shares of common stock are estimated to be $61,000.

The table reflected below sets forth certain information known to us, based upon written representations from the selling stockholders, with respect to the beneficial ownership of our shares of common stock held by each of the selling stockholders as of September 1, 2009. Because the selling stockholders may sell, transfer or otherwise dispose of all, some or none of the shares of our common stock covered by this prospectus, we cannot determine the number of such shares that will ultimately be sold, transferred or otherwise disposed of by the selling stockholders, or the amount or percentage of shares of our common stock that will continue to be held by the selling stockholders upon termination of this or any offering hereunder or pursuant to any prospectus supplement in connection herewith. See "Plan of Distribution." For purposes of the tables below, however, we assume that the selling stockholders will sell all their shares of common stock covered by this prospectus.

In the table, the percentage of shares beneficially owned is based on 66,127,790 shares of our common stock outstanding as of September 30, 2009, determined in accordance with Rule 13d-3 of the Securities Exchange Act of 1934, as amended. Under such rule, beneficial ownership includes any shares over which the individual has sole or shared voting power or investment power and also any shares which the individual has the right to acquire within sixty days of such date through the exercise of any options or other rights. Unless otherwise indicated in the footnotes, each person has sole voting and investment power (or shares such powers with his or her spouse) with respect to the shares of common stock shown as beneficially owned.

To our knowledge, none of the selling stockholders are affiliates of any broker-dealers.

Table of Contents

Selling Shareholders	Shares Beneficially Owned Prior to Offering		Shares Being Offered	Shares to be Beneficially Owned After Offering (1)	
	Number	Percent		Number	Percent
Raymond M. Benford	16,219	*	16,219	–	0
Thomas J. Cable	3,326	*	3,326	–	0
Fluke Venture Partners II, L. P. (2)	973,849	1.5%	973,849	–	0
William H. Gates	12,118	*	12,118	–	0
Mark D. Mecham	13,386	*	13,386	–	0
David M. Moore	2,584	*	2,584	–	0
Saemundur and Olafia Magusdottir Palsson	18,161	*	18,161	–	0
Prism Venture Partners III, L. P. (3)	525,803	*	525,803	–	0
Prism Venture Partners III–A, L. P. (3)	16,157	*	16,157	–	0
Jean K. Rosen Trust Nonexempt Share, Jean K. Rosen, Trustee	1,520	*	1,520	–	0
Justin M. Smith and Megan Ann Smith	1,605	*	1,605	–	0
Telegraph Hill Partners II, LP (4)	2,130,567	3.2%	2,130,567	–	0
Telegraph Hill Partners SBIC, LP (4)	525,312	*	525,312	–	0
Versant Affiliates Fund I–A, L. P. (5)	12,091	*	12,091	–	0
Versant Affiliates Fund I–B, L. P. (5)	25,393	*	25,393	–	0
Versant Side Fund I, L. P. (5)	10,882	*	10,882	–	0
Versant Venture Capital I, L. P. (5)	556,253	*	556,253	–	0
Christian Wedell	42,996	*	42,996	–	0
David V. and Valerie L. Whiting	3,180	*	3,180	–	0
David V. Whiting	22,563	*	22,563	–	0
C. Bagley Wright, Jr.	3,041	*	3,041	–	0
Ten legal entities (6)	505,098	*	505,098	–	0
	5,422,104		5,422,104	–	

* Less than one percent

(1) Assumes the sale of all Shares offered by this Prospectus.

(2) As Managing Directors of the general partners of these limited partnerships, Denny Weston and Kevin Gabelein may be deemed to have beneficial ownership over the shares held by this limited partnerships due to their voting and investment control over these shares. Messrs. Weston and Gabelein disclaim beneficial ownership of such shares, except to the extent of their pecuniary interest therein.

(3) As partners of the general partners of these limited partnerships, Steven J. Benson, James A. Counihan and Brendan O'Leary may be deemed to have beneficial ownership over the shares held by these limited partnerships due to their voting and investment control over these shares. Messrs. Benson, Counihan and Brendan O'Leary disclaim beneficial ownership of such shares, except to the extent of their pecuniary interest therein.

(4) As partners of the general partners of these limited partnerships, Robert G. Shepler and Matthew Mackowski may be deemed to have beneficial ownership over the shares held by these limited partnerships due to their voting and investment control over these shares. Messrs. Shepler and Mackowski disclaim beneficial ownership of such shares, except to the extent of their pecuniary interest therein.

(5) Brian G. Atwood, Samuel D. Colella, Ross A. Jaffe, M.D., William J. Link, Ph.D., Barbara N. Lubash, Donald B. Milder and Rebecca B. Robertson are Managing Directors of Versant Ventures I, LLC. Versant Ventures I, LLC is the general partner of Versant Venture Capital I, L.P., Versant Side Fund I, L.P., Versant Affiliates Fund I-A, L.P., and Versant Affiliates Fund I-B, L.P. As Managing Directors of Versant Ventures I, LLC, Brian G. Atwood, Samuel D. Colella, Ross A. Jaffe, M.D., William J. Link, Ph.D., Barbara N. Lubash, Donald B. Milder and Rebecca B. Robertson may be deemed to have beneficial ownership over the shares held by Versant Venture Capital I, L.P., Versant Side Fund I, L.P., Versant Affiliates Fund I-A, L.P., and Versant Affiliates Fund I-B, L.P. Brian G. Atwood, Samuel D. Colella, Ross A. Jaffe, M.D., William J. Link, Ph.D., Barbara N. Lubash, Donald B. Milder and Rebecca B. Robertson disclaim beneficial ownership of such shares, except to the extent of their pecuniary interest therein.

(6) Consists of shares held by DRW Venture Partners L.P., E. Bruce Merchant Trust, R. D. Merrill Associates II, Inland Northwest Investors, L.P., Northwest Venture Partners II., L.P., Tenwall Investment Co., THP II Affiliates Fund, LLC, THP Affiliates Fund, LLC, Transcosmos, Inc. and Washington Research Foundation.

The amounts set forth in the above table also include 46,641 shares that are held in escrow to satisfy potential claims arising under the Merger Agreement whereby Merge Healthcare acquired Confirma. Any shares remaining after the satisfaction of these potential claims will be distributed from the escrow to the stockholders of Confirma on or about September 1, 2010.

Under the Exchange Act, and the regulations thereunder, any person engaged in a distribution of the Shares offered by this Prospectus may not simultaneously engage in market–making activities with respect to the Shares during the applicable “cooling off” period prior to the commencement of such distribution. In addition, and without limiting the foregoing, the Selling Shareholders will be subject to applicable provisions of the Securities Act and the Exchange Act and the rules and regulations thereunder, including, without limitation, Regulation M under the Securities Act, in connection with transactions in the Shares, which provisions may limit the timing of purchases and sales of Shares.

Table of Contents

PLAN OF DISTRIBUTION

The shares of our common stock listed in the foregoing table are being registered to permit public secondary trading of these shares by the holders of such shares from time to time after the date of this prospectus, as and when certain contractual resale restrictions are automatically released, as described under "Transfer Restrictions." Registration of the shares of our common stock covered by this prospectus does not mean, however, that those shares of common stock necessarily will be offered or sold.

The selling stockholders and their pledgees, assignees, donees, or other successors-in-interest who acquire the selling stockholders' shares after the date of this prospectus, may sell such shares of common stock from time to time directly to purchasers or through underwriters, broker-dealers or agents, at market prices prevailing at the time of sale, at prices related to such market prices, at a fixed price or prices subject to change or at negotiated prices, by a variety of methods including the following:

- Through the Nasdaq Global Market or on any national securities exchange or quotation service on which the shares of our common stock may be listed or quoted at the time of sale;
- In the over-the-counter market;
- In transactions otherwise than on such exchanges or services or in the over-the-counter market;
- Through the exercise of purchased or written options, if and to the extent permitted under the Shareholders Agreement (as defined below);
- Through a combination of any such methods; or
- Through any other method permitted under applicable law and our insider trading policy.

In connection with sales of our common stock or otherwise, a selling stockholder who is neither an employee of Merge Healthcare nor otherwise subject to our insider trading policy may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the shares of our common stock in the course of hedging the positions they assume, and such selling stockholders may also sell short the shares of our common stock and deliver such shares to close out such short positions, or loan or pledge shares of our common stock to broker-dealers that in turn may sell such securities.

The selling stockholders have advised us that, to date, they have not entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of their shares. Upon our notification by a selling stockholders that any material arrangement has been entered into with an underwriter or broker-dealer for the sale of shares through a block trade, special offering, exchange distribution, secondary distribution or a purchase by an underwriter or broker-dealer, we will file a supplement to this prospectus, if required, pursuant to Rule 424(b) under the Securities Act, disclosing certain material information, including:

- The name of the selling stockholders;
- The number of shares being offered;
- The terms of the offering;
- The names of the participating underwriters, broker-dealers or agents;

- Any discounts, commissions or other compensation paid to underwriters or broker-dealers and any discounts, commissions or concessions allowed or reallowed or paid by any underwriters to dealers;

Table of Contents

- The public offering price; and
- Other material terms of the offering.

If underwriters are used in a firm commitment underwriting, the Selling Shareholders will execute an underwriting agreement with those underwriters relating to the shares of our common stock that the Selling Shareholders will offer. Unless otherwise set forth in a prospectus supplement, the obligations of the underwriters to purchase the shares of our common stock will be subject to conditions. The underwriters, if any, will purchase such shares on a firm commitment basis and will be obligated to purchase all of such shares.

If any shares of our common stock are subject to a firm commitment underwriting agreement, the shares will be acquired by the underwriters for their own account and may be resold by them from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Such underwriters may be deemed to have received compensation from the Selling Shareholders in the form of underwriting discounts or commissions and may also receive commissions from the purchasers of these shares of our common stock for whom they may act as agent. Underwriters may sell these shares to or through dealers. These dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they may act as agent. Any public offering price and any discounts or concessions allowed or reallowed or paid to dealers may be changed from time to time.

The selling stockholders may authorize underwriters to solicit offers from institutions to purchase shares of our common stock subject to the underwriting agreement from the selling stockholders, at the public offering price stated in a prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. If the selling stockholders sell shares of our common stock pursuant to these delayed delivery contracts, a prospectus supplement will state that as well as the conditions to which these delayed delivery contracts will be subject and the commission payable for that solicitation.

The applicable prospectus supplement, if any, will set forth whether or not underwriters may over-allot or effect transactions that stabilize, maintain or otherwise affect the market price of the shares of our common stock at levels above those that might otherwise prevail in the open market, including, for example, by entering stabilizing bids, effecting syndicate covering transactions or imposing penalty bids. Underwriters are not required to engage in any of these activities, or to continue such activities if commenced.

In effecting sales, brokers or dealers engaged by the selling stockholders may arrange for other brokers or dealers to participate. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated. The selling stockholders do not expect these commissions and discounts to exceed what is customary in the types of transactions involved. Broker-dealer transactions may include:

- Purchases of the shares of our common stock by a broker-dealer as principal and resales of the shares of our common stock by the broker-dealer for its account pursuant to this prospectus;
- Ordinary brokerage transactions; or
- Transactions in which the broker-dealer solicits purchasers on a best efforts basis.

If dealers are utilized in the sale of shares of our common stock, the names of the dealers and the terms of the transaction will be set forth in a prospectus supplement, if required.

The selling stockholders may sell shares of our common stock through agents designated by them from time to time. We will name any agent involved in the offer or sale of such shares and will list commissions payable by the selling stockholders to these agents in a prospectus supplement, if required. These agents will be acting on a best efforts basis to solicit purchases for the period of its appointment, unless we state otherwise in any required prospectus supplement.

Table of Contents

The selling stockholders may also sell any of the shares of our common stock directly to purchasers. In this case, the selling stockholders may not engage underwriters or agents in the offer and sale of such shares. In addition, we do not assure you that the selling stockholders will not transfer, devise or gift the shares of our common stock by other means not described in this prospectus. Moreover, any securities covered by this prospectus that qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than pursuant to this prospectus.

The selling stockholders may indemnify underwriters, dealers or agents who participate in the distribution of the shares of our common stock against certain liabilities, including liabilities under the Securities Act, and agree to contribute to payments which these underwriters, dealers or agents may be required to make.

The aggregate proceeds to the selling stockholders from the sale of the shares of our common stock offered by the selling stockholders hereby will be the purchase price of such shares, less discounts and commissions, if any. The selling stockholders reserve the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of shares of our common stock to be made directly or through agents.

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

The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of the shares of our common stock may be “underwriters” within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of such shares may be underwriting discounts and commissions under the Securities Act. Any selling stockholder who is an “underwriter” within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

Selling shareholders are subject to the applicable provisions of the Securities Exchange Act of 1934, as amended, or Exchange Act, and the rules and regulations under the Exchange Act, including Regulation M. This regulation may limit the timing of purchases and sales of any of the shares of common stock offered in this prospectus by Selling Shareholders. The anti-manipulation rules under the Exchange Act may apply to sales of shares in the market and to the activities of Selling Shareholders and their affiliates. Furthermore, Regulation M may restrict the ability of any person engaged in the distribution of the shares to engage in market-making activities for the particular securities being distributed for a period of up to five business days before the distribution. The restrictions may affect the marketability of the shares and the ability of any person or entity to engage in market-making activities for the shares.

Transfer Restrictions

We entered into a Shareholders Agreement, dated August 31, 2009 with the selling stockholders (a copy of which we filed as an exhibit to our Current Report on Form 8-K filed with the SEC on August 7, 2009). Among other things, the Shareholders Agreement imposes certain time-based restrictions on the transfer of the shares covered by this prospectus. Under these transfer restrictions, no more than 33% of the shares covered by this prospectus may be issued prior to December 1, 2009 and no more than 66% of the shares covered by this prospectus may be sold prior to March 1, 2010. After March 1, 2010, the transfer restrictions pursuant to the Shareholders Agreement terminate.

Any shares that may be transferred free of the contractual transfer restrictions are deemed unrestricted shares thereafter, on a cumulative basis, and may be transferred free of any of the contractual restrictions.

LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplements, certain legal matters in connection with the securities will be passed upon for us by McDermott Will & Emery LLP, Chicago, Illinois.

Table of Contents

EXPERTS

The financial statements of Merge Healthcare as of December 31, 2008 and for the year then ended incorporated by reference in this Prospectus have been so incorporated in reliance on the report of BDO Seidman, LLP, an independent registered public accounting firm, incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

The consolidated financial statements of Merge Healthcare as of December 31, 2007, and for each of the years in the two-year period ended December 31, 2007, have been incorporated by reference herein in reliance upon the report, dated March 31, 2008, of KPMG LLP, an independent registered public accounting firm, incorporated by reference herein, and upon the authority of KPMG LLP as experts in accounting and auditing. KPMG LLP's report covering the December 31, 2007 consolidated financial statements contains an explanatory paragraph that states that Merge Healthcare's recurring losses from operations and negative cash flows raise substantial doubt about its ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty. KPMG LLP's report covering the December 31, 2007 consolidated financial statements also contains an explanatory paragraph relating to the adoption of Financial Accounting Standards Board Interpretation No. 48, Accounting for Uncertainty in Income Taxes, as of January 1, 2007, and the adoption of Statement of Financial Accounting Standards No. 123 (revised 2004), Share-Based Payment, as of January 1, 2006.

The consolidated financial statements of etrials Worldwide, Inc. appearing in etrials Worldwide Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2008 have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The consolidated financial statements of Confirma, Inc. as of and for the years ended December 31, 2008 and 2007 have been audited by Voldal Wartelle & Co., P.S., independent certified public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference to the Current Report on Form 8-K filed on September 2, 2009, as amended on September 4, 2009 and September 24, 2009. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

Merge Healthcare files annual, quarterly and current reports, proxy statements and other information with the SEC. The public may read and copy any reports, statements or other information that Merge Healthcare files with the SEC at the SEC's public reference room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information regarding the public reference room. Merge Healthcare's public filings also are available to the public from commercial document retrieval services and may be obtained without charge at the SEC's website at www.sec.gov. Merge Healthcare's filings with the SEC are also available on its website at www.merge.com. The contents of this website are not incorporated by reference into this Prospectus.

Merge Healthcare has filed with the SEC a Registration Statement on Form S-3 to register the offer and sale of shares of Merge Healthcare Common Stock (the "Registration Statement"). This Prospectus is a part of that registration statement. Merge Healthcare may also file amendments to such registration statement. As allowed by SEC rules, this Prospectus does not contain all of the information in the Registration Statement or the exhibits to the Registration Statement. You may obtain copies of the Form S-3 (and any amendments to those documents) by contacting the information agent as directed on the back cover of this Prospectus.

INCORPORATION OF INFORMATION BY REFERENCE

The SEC allows Merge Healthcare to incorporate information into this Prospectus "by reference," which means that Merge Healthcare can disclose important information by referring to another document or information filed separately with the SEC. The information incorporated by reference is deemed to be part of this Prospectus, except for any information amended or superseded by information contained in, or incorporated by reference into, this Prospectus. This Prospectus incorporates by reference the documents and information set forth below that Merge Healthcare (File No. 29486) has previously filed (but not furnished) with the SEC. These documents contain important information about Merge Healthcare and its financial condition.

Merge Healthcare Filings (File No. 29486)

Table of Contents

Merge Healthcare Information Incorporated by Reference	Period Covered or Date of Filing
Quarterly Report on Form 10-Q for fiscal quarter ended September 30, 2009, as filed with the SEC on October 30, 2009	Fiscal quarter ended September 30, 2009
Quarterly Report on Form 10-Q for fiscal quarter ended June 30, 2009, as filed with the SEC on July 31, 2009	Fiscal quarter ended June 30, 2009
Quarterly Report on Form 10-Q for fiscal quarter ended March 31, 2009, as filed with the SEC on May 8, 2009	Fiscal quarter ended March 31, 2009
Annual Report on Form 10-K for fiscal year ended December 31, 2008, as filed with the SEC on March 11, 2009	Fiscal year ended December 31, 2008
Proxy Statement on Schedule 14A as filed with the SEC on April 24, 2009 (other than such information that is included in the proxy statement but not deemed to be filed with the SEC).	
The description of Merge Healthcare Common Stock set forth in Merge Healthcare's Registration Statement on Form 8-A, filed with the SEC on January 9, 1998, including all amendments and reports filed for the purpose of updating such description.	
Current Reports on Form 8-K	Filed with the SEC on: • June 2, 2009 • April 16, 2009 • April 6, 2009 • March 5, 2009 • February 17, 2009 • January 7, 2009 • June 16, 2009 • July 15, 2009 • July 20, 2009 • August 10, 2009 • September 2, 2009 (as amended on September 4, 2009 and September 24, 2009)
The consolidated financial statements of etrials Worldwide, Inc. for the fiscal years ended December 31, 2008 and 2007, as set forth on pages F-15 to F-36 in the Prospectus filed with the SEC pursuant to Rule 424(b)(3) on July 16, 2009	
The unaudited pro forma condensed consolidated financial statements of Merge Healthcare Incorporated and etrials	

Worldwide, Inc. for the three and twelve month periods ended March 31, 2009 and December 31, 2008, respectively, as set forth on pages 90 to 100 in the Prospectus filed with the SEC pursuant to Rule 424(b)(3) on July 16, 2009	

Merge Healthcare does not incorporate portions of any document that is either (a) described in paragraphs (d)(1) through (3) and (e)(5) of Item 407 of Regulation S-K promulgated by the SEC or (b) furnished under Item 2.02 or Item 7.01 of any Current Report on Form 8-K. Merge Healthcare hereby incorporates by reference all future filings by Merge Healthcare made pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, after the date of this prospectus. Nothing in this Prospectus shall be deemed to incorporate information furnished but not filed with the SEC.

Merge Healthcare will provide without charge upon written or oral request, a copy of any or all of the documents which are incorporated by reference to this prospectus, other than exhibits which are specifically incorporated by reference into those documents. Requests should be directed to Corporate Secretary, Merge Healthcare Incorporated, 6737 West Washington Street, Milwaukee, WI 53214-5650, telephone: (414) 977-4000.