MERGE HEALTHCARE INC Form 424B5 November 16, 2009

PROSPECTUS SUPPLEMENT (To Prospectus dated November 5, 2009)

MERGE HEALTHCARE INCORPORATED 9,084,032 Shares of Common Stock

We are selling up to 9,084,032 shares of our common stock. The common stock will be sold at a price of \$3.00 per share

For a more detailed description of our common stock, see the section entitled "Description of Common Stock and Preferred Stock" beginning on page 12 of the accompanying prospectus.

Our common stock is quoted on the Nasdaq Global Market under the symbol "MRGE." On November 12, 2009, the last reported sale price of our common stock on the Nasdaq Global Market was \$3.60 per share.

We have retained William Blair & Company, L.L.C., Robert W. Baird & Co. Incorporated and Craig-Hallum Capital Group LLC to act as exclusive placement agents in connection with this offering. See "Plan of Distribution" beginning on page S-25 of this prospectus supplement for more information regarding these arrangements.

Investing in our securities involves a high degree of risk. See "Risk Factors" beginning on page S-7 of this prospectus supplement.

	Pe	er Share	Total
Public offering price of common			
stock	\$	3.000	\$ 27,252,096
Placement agency fees	\$	0.180	\$ 1,635,126
Proceeds, before expenses, to us	\$	2.820	\$ 25,616,970

William Blair & Company, L.L.C., Robert W. Baird & Co. Incorporated and Craig-Hallum Capital Group LLC are acting as the placement agents in this offering. The placement agents are not purchasing or selling any of the securities pursuant to this prospectus supplement or the accompanying prospectus. We estimate the total expenses of this offering, excluding the placement agency fees, will be approximately \$375,000. Because there is no minimum offering amount required as a condition to closing in this offering, the actual offering amount, the placement agency fees and net proceeds to us, if any, in this offering may be substantially less than the total offering amounts set forth above. We are not required to sell any specific number or dollar amount of the securities offered in this offering, but the placement agent will use its reasonable best efforts to arrange for the sale of all of the securities offered. We currently anticipate that closing of the sale of securities will take place on or about November 18, 2009.

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

William Blair & Company Robert W. Baird & Co. Incorporated Craig-Hallum Capital Group LLC

The date of this prospectus supplement is November 13, 2009.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement is a supplement to the accompanying prospectus that is also a part of this document. This prospectus supplement and the accompanying prospectus, dated November 5, 2009, are part of a registration statement on Form S-3 (File No. 333-161691) that we filed with the Securities and Exchange Commission, or the SEC, utilizing a "shelf" registration process. Under this shelf registration process, we may offer and sell from time to time in one or more offerings the securities described in the accompanying prospectus.

This document is in two parts. The first part is this prospectus supplement, which describes the securities we are offering and the terms of the offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into the accompanying prospectus. The second part is the accompanying prospectus, which provides more general information, some of which may not apply to the securities offered by this prospectus supplement. Generally, when we refer to this "prospectus," we are referring to both documents combined. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or any document incorporated by reference therein, on the other hand, you should rely on the information in this prospectus supplement. We urge you to carefully read this prospectus supplement and the accompanying prospectus and any related free writing prospectus, together with the information incorporated herein and therein by reference as described under the heading "Where You Can Find More Information," before buying any of the securities being offered.

You should rely only on the information that we have provided or incorporated by reference in this prospectus supplement and the accompanying prospectus and any related free writing prospectus that we may authorize to be provided to you. We have not, and the placement agents have not, authorized anyone to provide you with different information. No other dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus supplement and the accompanying prospectus or any related free writing prospectus that we may authorize to be provided to you. You must not rely on any unauthorized information or representation. This prospectus supplement is an offer to sell only the securities offered hereby, and only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus supplement and the accompanying prospectus or any related free writing prospectus is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus supplement and the accompanying prospectus or any related free writing prospectus, or any sale of a security.

This prospectus supplement contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus supplement is a part, and you may obtain copies of those documents as described below under the heading "Where You Can Find More Information."

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PROSPECTUS SUPPLEMENT SUMMARY

This summary is not complete and does not contain all of the information that you should consider before investing in the securities offered by this prospectus. You should read this summary together with the entire prospectus supplement and prospectus, including our financial statements, the notes to those financial statements and the other documents that are incorporated by reference in this prospectus supplement, before making an investment decision. See the Risk Factors section of this prospectus supplement on page S-7 for a discussion of the risks involved in investing in our securities. In this prospectus supplement, unless the context otherwise indicates, "we," "us," and "our" refer to Merge Healthcare Incorporated and its subsidiaries.

Our Business

Merge Healthcare Incorporated

Merge Healthcare Incorporated, a Delaware corporation, 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. Our 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. Our 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. We 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 our medical imaging software offerings. In 2009, we acquired:

- 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.

Our business is health IT software, which can involve any aspect of moving medical images and/or information into electronic media. Our 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;

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- 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 our customers.

We generate 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.

Our 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. These 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. We have continued to innovate with its product lines and has extended its business into new areas of medical imaging.

Our software is deployed in hospitals and clinics worldwide through our partner, direct end-user and eCommerce channels and used by clinical trial sponsors and CRO's worldwide. This 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(TM), a downloadable diagnostic imaging application, and MergeCOM-3 DICOM toolkits, we believe we are able to generate a foothold in new international markets upon which it can expand into additional product lines.

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The Offering

Common stock offered by us

Up to 9,084,032 shares

Common stock to be outstanding after this offering 75,211,822 shares

Use of proceeds We intend to use the net proceeds from this offering to

prepay in full our senior secured note due June 2010 (the "Note"), which includes all amounts owed under the Note of \$15.0 million and an additional \$3.1 million amount due as a result of the prepayment, and for general

corporate purposes, including working capital. See "Use of

Proceeds" on page S-22.

Market for the common stock

Our common stock is quoted and traded on the Nasdaq

Global Market under the symbol "MRGE."

Risk factors You should read the "Risk Factors" section of this

prospectus supplement and in the documents incorporated

by reference in this prospectus supplement for a discussion of factors to consider before deciding to

purchase our securities.

Nasdaq Global Market trading symbol for common stock MRGE

The number of shares of common stock to be outstanding after this offering as reflected in the table above is based on the actual number of shares outstanding as of September 30, 2009, which was 66,127,790, and does not include, as of that date:

- •4,853,113 shares of common stock issuable upon the exercise of outstanding options, with a weighted average exercise price of \$3.74 per share; and
- •3,982,812 shares of common stock reserved for future issuance under our 1996 Stock Option Plan for Employees of Merge Healthcare Incorporated dated May 13, 1996, as amended and restated in its entirety as of September 1, 2003, 1998 Stock Option Plan for Directors, 2000 Employee Stock Purchase Plan, and 2005 Equity Incentive Plan.

Unless otherwise stated, outstanding share information throughout this prospectus supplement excludes such outstanding options and shares available for issuance.

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RISK FACTORS

Before you make a decision to invest in our securities, you should consider carefully the risks described below, together with other information in this prospectus supplement, the accompanying prospectus and the information incorporated by reference herein and therein. Each of the risks described in these sections and documents incorporated by reference could materially and adversely affect our business, financial condition, results of operations and prospects, and could result in a loss of your investment. If any of the following events actually occur, our business, operating results, prospects or financial condition could be materially and adversely affected. This could cause the trading price of our common stock to decline and you may lose all or part of your investment. The risks described below are not the only ones that we face. Additional risks not presently known to us or that we currently deem immaterial may also significantly impair our business operations and could result in a complete loss of your investment.

Risks Related To The Company

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.

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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.

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 have incurred and will continue 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 could be materially adversely affected as a result of our acquisition of Confirma. Some of the risks 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

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• After the acquisition, Confirma's business does not perform as anticipated.

In connection with the acquisition of Confirma, we issued 5,422,104 additional shares of our common stock. On November 5, 2009, a registration statement governing the resale of these shares became effective with the SEC and therefore these shares will be freely tradable, subject to certain restrictions. 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.

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.

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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 our products;
- The extent to which we invest in new technology and product development;
 - The costs of developing new products, services or technologies;
- The number and method of financing of acquisitions and other strategic transactions; and
 - The costs associated with the growth of our 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 supplement. 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 currently 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;

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- 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;
 - 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 may need to raise additional capital in the future.

We must continue to enhance and expand our product and service offerings in order to maintain our competitive position, satisfy our working capital obligations and to increase our market share. As a result, the continuing

operations of our business may require substantial capital infusions. For example, in June 2008, we borrowed \$20.0 million from Merrick Ventures, LLC, an affiliate of Merrick RIS, 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. We intend to use the net proceeds from this offering to prepay all outstanding amounts due the under the Note. Unless we can achieve cash flow levels sufficient to support our operations, we may require additional borrowings or the sale of debt or equity securities, sale of non-strategic assets, or some combination thereof, to provide funding for our operations. Our ability to borrow in the future is dependent upon our ability to manage business operations and generate sufficient cash flows to service such debt. If we are unable to generate sufficient working capital or obtain alternative financing, we may not be unable to borrow or otherwise obtain additional funds to finance our operations when needed, our financial condition and operating results would be materially adversely affected.

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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;
- 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;

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- 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.

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.

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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.

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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;

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- Local import, export or other business licensing requirements;
- Local limitations on the repatriation and investment of funds and foreign currency exchange restrictions;
 - 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 November 4, 2009, the SEC filed a complaint related to this investigation under which the SEC charged Merge with record–keeping violations under Sections 13(a), 13(b)(2)(A) and 13(b)(2)(B) of the Securities Exchange Act of 1934 and Rules 12b-20, 13a-1, 13a-11 and 13a-13 promulgated thereunder. The SEC also charged two of Merger's former executives with accounting fraud and assessed financial penalties against such executives. In resolving this matter, the SEC decided not to charge Merge with fraud nor assess any penalty against Merge for the actions of its former executives. The SEC did enjoin Merge from violating Sections 13(a), 13(b)(2)(A) and 13(b)(2)(B) of the Securities Exchange Act of 1934 and Rules 12b-20, 13a-1, 13a-11 and 13a-13 promulgated thereunder.

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.

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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.

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.

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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.

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.

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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.

Risks Relating to Our Common Stock

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 September 30, 2009, we had 66,127,790 shares of common stock outstanding. After giving effect to this offering, as of September 30, 2009, we would have had 75,211,822 shares outstanding. On September 1, 2009, we issued 5,422,104 shares to former stockholders of Confirma, Inc. in connection with our purchase of Confirma, Inc. These shares will become freely tradable, subject only to certain contractual restrictions, on or about November 17, 2009. In addition, 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 sale in the public market, due to the exercise of options or the issuance of shares as a result of acquisitions, the market supply of shares of common stock will increase, which could also decrease the 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.

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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.

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 directors and may deter a change of control.

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 directors in the event our stockholders believe this would be in our best interest and the best interests our stockholders.

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We may become involved in securities class action litigation that could divert management's attention and harm our business and our insurance coverage may not be sufficient to cover all costs and damages.

The stock market has from time to time experienced significant price and volume fluctuations that have affected the market prices for the common stock of pharmaceutical and biotechnology companies. These broad market fluctuations may cause the market price of our common stock to decline. In the past, following periods of volatility in the market price of a particular company's securities, securities class action litigation has often been brought against that company. We may become involved in this type of litigation in the future. Litigation often is expensive and diverts management's attention and resources, which could hurt our business, operating results and financial condition.

Additional Risks Related to This Offering

You will experience immediate dilution in the book value per share of the common stock you purchase.

Because the price per share of our common stock being offered is substantially higher than the book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. After giving effect to the sale by us of up to 9,084,032 shares of common stock in this offering, and based on a public offering price of \$3.00 per share in this offering and a pro forma net tangible book value per share of our common stock of \$(0.03) as of September 30, 2009, if you purchase common stock in this offering, you will suffer immediate and substantial dilution of \$2.74 per share in the net tangible book value of the common stock purchased. See "Dilution" on page S-24 for a more detailed discussion of the dilution you will incur in connection with this offering.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus, including the documents that we incorporate by reference herein and therein, contain "forward-looking statements." These forward-looking statements can generally be identified as such because the context of the statement will include words such as "may," "will," "intends," "plans," "believe "anticipates," "expects," "estimates," "predicts," "potential," "continue," "likely," "unlikely" or "opportunity," the negat words or words of similar import. Similarly, statements that describe our future plans, strategies, intentions, expectations, objectives, goals or prospects are also forward-looking statements. Discussions containing these forward-looking statements may be found, among other places, in the "Business" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections incorporated by reference from our most recent Annual Report on Form 10-K, as well as any amendments thereto reflected in subsequent filings with the SEC. These forward-looking statements are based largely on our expectations and projections about future events and future trends affecting our business, and are subject to risks and uncertainties that could cause actual results to differ materially from those anticipated in the forward-looking statements. The risks and uncertainties include, among others, those noted in "Risk Factors" above and those included in the documents that we incorporate by reference herein.

In addition, past financial and/or operating performance is not necessarily a reliable indicator of future performance and you should not use our historical performance to anticipate results or future period trends. We can give no assurances that any of the events anticipated by the forward-looking statements will occur or, if any of them do, what impact they will have on our results of operations and financial condition. Except as required by law, we undertake no obligation to publicly revise our forward-looking statements to reflect events or circumstances that arise after the filing of this prospectus supplement or the filing of the accompanying prospectus or documents incorporated by reference herein and therein that include forward-looking statements.

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USE OF PROCEEDS

We estimate that the net proceeds from the sale of the securities we are offering will be approximately \$25.2 million, assuming that we sell all of the common stock shares we are offering. "Net proceeds" is what we expect to receive after paying the placement agency fees and other expenses of this offering payable by us.

We intend to use \$18.1 million of the net proceeds from this offering to prepay in full our senior secured note due June 2010 (the "Note"), which includes all amounts owed under the Note of \$15.0 million and an additional amount \$3.1 million payable as a result of the prepayment of the Note. We intend to use the remaining net proceeds from this offering for general corporate purposes, including working capital. We will retain broad discretion in determining how we will allocate the net proceeds from this offering. Until we use the net proceeds of this offering, we intend to invest the funds in short-term, investment grade, interest-bearing securities.

The Note is held by Merrick RIS, LLC ("Merrick") and bears interest at 13.0% per annum, payable quarterly, and becomes payable in a single installment in June 2010. As a result of the prepayment, we are required to pay 118% of the outstanding principal of the Note, together with accrued and unpaid interest. The Note is secured by a first priority lien on all of the assets of our and our subsidiaries' U.S. and Canadian operations.

The Company agreed to prepay the Note in exchange for Merrick's agreement to waive its piggyback registration rights with respect to this offering and for Merrick's and Michael W. Ferro, Jr.'s agreement not to offer, sell, offer or agree to sell, grant any option to purchase or otherwise dispose (or announce any offer, sale, grant of an option to purchase or other disposition) of, directly or indirectly, any of our common stock (or any securities convertible into, exercisable for or exchangeable or exercisable for shares of Common Stock) prior to 90 days following the date of this prospectus supplement, except for transfers (i) to Mr. Ferro's spouse, relatives or lineal descendants or ancestors, natural or adopted (collectively, "Relatives"), provided that the transferee agrees in writing to be bound by the terms of these restrictions, (ii) any trust, partnership or other entity for the direct or indirect benefit of Mr. Ferro or the Relatives, (iii) transfers upon the death of Mr. Ferro pursuant to the laws of descent and distribution or pursuant to wills, (iv) gifts, provided that the transferee agrees in writing to be bound by the terms of these restrictions, or (v) to the Company.

Merrick RIS, LLC beneficially owns, as of September 30, 2009, 42.7% of our outstanding common stock. Michael W. Ferro, Jr., our Chairman of the Board, and trusts for the benefit of Mr. Ferro's family members beneficially own a majority of the equity interest in Merrick RIS, LLC. Mr. Ferro also serves as the chairman and chief executive officer of Merrick RIS, LLC. Accordingly, Mr. Ferro indirectly owns or controls the Note and all of the shares of common stock owned by Merrick RIS, LLC. In addition, Justin C. Dearborn, our Chief Executive Officer and a Director, served as Managing Director and General Counsel of Merrick Ventures, LLC, an affiliate of Merrick RIS, LLC, from January 2007 until his appointment as Chief Executive Officer of our company on June 4, 2008.

PRO FORMA PER SHARE INFORMATION

Our historical information includes (i) unaudited historical basic and diluted earnings per share for the nine months ended September 30, 2009 and (ii) audited historical basic and diluted earnings per share for the year ended December 31, 2008.

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For the nine months ended September 30, 2009, and the year ended December 31, 2008, the unaudited pro forma basic and diluted earnings per share for each period are based on our historical financial statements, giving effect to this offering and the application of the net proceeds from this offering as contemplated under "Use of Proceeds" as if it had occurred at the beginning of the periods presented.

On June 19, 2008, we paid a dividend of \$0.001 on each share of common stock as part of the termination of a rights plan.

The information in the tables should be read in conjunction with our audited and unaudited consolidated financial statements, and the notes thereto, which are incorporated by reference into this prospectus supplement. The unaudited pro forma financial information is not necessarily indicative of the earnings per share that would have been achieved had the offering been completed as of the beginning of the period presented and should not be construed as representative of such amounts for any future dates or periods.

	Nine		
	Months	Year	
	Ended	Ended	
	September	December	
	30, 2009	31, 2008	
Historical – Merge Healthcare	,	,	
Basic earnings (loss) per share	\$ 0.04	\$ (0.51)	
Diluted earnings (loss) per share	0.04	(0.51)	
	Nine Months Ended September 30, 2009	Year Ended December 31, 2008	
Unaudited Pro Forma Earnings Per Share			
Basic earnings (loss) per share	\$ 0.07	\$ (0.39)	
Diluted earnings (loss) per share	0.07	(0.39)	
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DILUTION

Our net tangible book value on September 30, 2009 was approximately \$(2.3) million, or approximately \$(0.03) per share of common stock. "Net tangible book value" is total assets minus the sum of liabilities and intangible assets. "Net tangible book value per share" is net tangible book value divided by the total number of shares of common stock outstanding.

After giving effect to the sale of common stock in this offering at a price of \$3.00 per share, less the placement agency fees and other estimated expenses of this offering payable by us, our adjusted net tangible book value on September 30, 2009 would have been approximately \$19.2 million, or \$0.26 per share of common stock. Assuming the completion of the offering, this represents an immediate increase in net tangible book value of \$0.29 per share to our existing stockholders and an immediate dilution of \$2.74 per share to anyone who purchases our common stock in the offering. The following table illustrates this calculation on a per share basis, assuming that we sell all of the common stock we are offering:

Public offering price per share of common stock		\$3.00
Net tangible book value per share as of September 30, 2009	\$ (0.03))
Increase per share attributable to the offering	0.29	
Adjusted net tangible book value per share as of September 30, 2009		
after giving effect to the offering		0.26
Dilution per share to new investors		\$2.74

The foregoing table is based on 66,127,790 shares of common stock outstanding at September 30, 2009, which does not take into effect further dilution to new investors that could occur upon the exercise of outstanding options having a per share exercise price less than the public offering price.

In addition, the calculations in the foregoing table do not take into account, as of September 30, 2009:

- •4,853,113 shares of common stock issuable upon the exercise of outstanding options, with a weighted average exercise price of \$3.74 per share;
- •3,982,812 shares of common stock reserved for future issuance under our 1996 Stock Option Plan for Employees of Merge Healthcare Incorporated dated May 13, 1996, as amended and restated in its entirety as of September 1, 2003, 1998 Stock Option Plan for Directors, 2000 Employee Stock Purchase Plan, and 2005 Equity Incentive Plan.

To the extent that any of our outstanding options are exercised, we grant additional options under our stock option plans, or we issue additional shares of common stock in the future, there may be further dilution to new investors.

DESCRIPTION OF THE SECURITIES WE ARE OFFERING

In this offering, we are selling 9,084,032 shares of our common stock. We are offering the common stock at a negotiated price of \$3.00 per share of common stock. A description of the common stock we are offering pursuant to this prospectus supplement is set forth under the heading "Description of Common Stock and Preferred Stock," starting on page 12 of the prospectus. As of September 30, 2009, we had 66,127,790 shares of common stock outstanding, before giving effect to the sale of any shares in this offering.

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PLAN OF DISTRIBUTION

Placement Agency Agreement and Subscription Agreements

William Blair & Company, L.L.C., Robert W. Baird & Co. Incorporated, and Craig-Hallum Capital Group LLC, which we refer to as the placement agents, have agreed to act as the exclusive placement agents in connection with this offering subject to the terms and conditions of a placement agency agreement dated as of November 13, 2009. The placement agents are not purchasing or selling any shares of common stock offered by this prospectus supplement, nor are they required to arrange the purchase or sale of any specific number or dollar amount of the shares, but they have agreed to use their reasonable efforts to arrange for the sale of all of the shares offered hereby. Therefore, we will enter into subscription agreements directly with investors in connection with this offering and we may not sell the entire amount of shares offered pursuant to this prospectus supplement.

The placement agency agreement provides that the obligations of the placement agents are subject to certain conditions precedent, including, among other things, the absence of any material adverse change in our change in our business and the receipt of customary opinions, letters and closing certificates.

The placement agents propose to arrange for the sale to one or more purchasers of the shares offered pursuant to this prospectus supplement through subscription agreements between the purchasers and us. We will enter into subscription agreements with the purchasers pursuant to which, subject to certain conditions, we will sell to the purchasers an aggregate of 9,084,032 shares of our common stock, at a price of \$3.00 per share. We negotiated the price for the shares offered in this offering with the purchasers. The factors considered in determining the price included the recent market price of our common stock, the general condition of the securities market at the time of this offering, the history of, and the prospects, for the industry in which we compete, our past and present operations, and our prospects for future revenues.

We have agreed to indemnify the placement agents against liabilities under the Securities Act of 1933, as amended, and against breaches of our representations and warranties and covenants in the placement agency agreement. We have also agreed to contribute to payments the placement agents may be required to make in respect of such liabilities.

We have agreed, subject to limited exceptions, for a period of 90 days after the date of this prospectus supplement, not to, without the prior written consent of the placement agents, directly or indirectly,

- offer to sell, hypothecate, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of, directly or indirectly, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Exchange Act, with respect to, any shares of common stock, or any securities convertible into or exercisable or exchangeable for shares of common stock,
- file or cause to become effective a registration statement under the Securities Act relating to the offer and sale of any shares of common stock or securities convertible into or exercisable or exchangeable for shares of common stock, or
- enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the common stock,

other than the issuance of stock options or shares of restricted stock to employees, directors and consultants pursuant to our stock benefit plans, issuances of shares of common stock upon the exercise of options disclosed in the accompanying prospectus or upon the conversion or exchange of convertible or exchangeable securities disclosed as outstanding in the accompanying prospectus or the issuance of any shares of common stock as consideration for mergers, acquisitions, other business combinations, or strategic alliances, occurring after the date of this prospectus

supplement (provided that each recipient of such shares agrees that all such shares remain subject to these transfer restrictions), or the purchase or sale of our securities pursuant to a plan, contract or instruction that satisfies all of the requirements of Rule 10b5-1(c)(1)(i)(B) that was in effect prior to the date of this prospectus supplement.

In addition, Merrick and Michael Ferro, Jr. have agreed, subject to limited exceptions, for a period of 90 days after the date of this prospectus supplement, not to, without the prior written consent of the placement agents:

- sell, offer to sell, contract or agree to sell, hypothecate, pledge, grant any option to purchase or otherwise dispose of or agree to dispose of, directly or indirectly, to file (or participate in the filing of) a registration statement with the SEC in respect of, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position with respect to, any common stock or any other securities substantially similar to the common stock or securities convertible or exchangeable into, or exercisable for, common stock; or
- enter into any swap or other arrangement that transfers all or a portion of the economic consequences associated with the ownership of any common stock.

The 90-day lock-up periods will be extended if (1) we release earnings results or material news or a material event relating to our company occurs during the last 17 days of the lock-up period, or (2) prior to the expiration of the lock-up period, we announce that we will release earnings results during the 16-day period beginning on the last day of the lock-up period. In either case, the lock-up period will be extended for 18 days after the date of the release of the earnings results or the occurrence of the material news or material event unless the placement agents waive such extension.

Fees

The placement agents will be entitled to a cash fee of 6% of the gross proceeds paid to us for the shares of common stock which we sell in this offering. We will also reimburse the placement agents for all reasonable out-of-pocket expenses incurred by the placement agents in this offering so long as such expenses are not greater than the lesser of (i) \$150,000 and (ii) 8% of the gross proceeds received by the Company in the offering less the placement agent fees.

The following table shows the per common stock share and total placement agency fees we will pay to the placement agents in connection with the sale of the shares offered pursuant to this prospectus supplement assuming the purchase of all of the shares of common stock offered hereby:

Placement agent fees per share of common	
stock	\$0.18
Total	\$1,635,126

Because there is no minimum offering amount required as a condition to closing in this offering, the actual total placement agency fees, if any, are not presently determinable and may be substantially less than the maximum amount set forth above. The maximum fees to be received by any member of the Financial Industry Regulatory Association, or FINRA, or independent broker-dealer may not be greater than eight percent of the initial gross proceeds from the sale of any shares of common stock being offered hereby.

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Our obligation to issue and sell common stock to the purchasers is subject to the conditions set forth in the subscription agreements entered into with the purchasers, which may be waived by us at our discretion. A purchaser's obligation to purchase shares is subject to the conditions set forth in the applicable subscription agreement as well, which may be waived by the purchaser.

We currently anticipate that the sale of up to 9,084,032 shares of common stock will be completed on or about November 18, 2009. We estimate the total offering expenses of this offering that will be payable by us, excluding the placement agency fees, will be approximately \$375,000, which include legal and printing costs, various other fees and reimbursement of the placement agents' expenses. At the closing, The Depository Trust Company will credit the shares of common stock to the respective accounts of the investors.

The placement agents may be deemed to be underwriters within the meaning of Section 2(a)(11) of the Securities Act of 1933, as amended, or the Securities Act, and any fees or commissions received by them and any profit realized on the resale of securities sold by them while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. As underwriters, the placement agents would be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 415(a)(4) under the Securities Act and Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of shares of common stock by the placement agents. Under these rules and regulations, the placement agents:

- may not engage in any stabilization activity in connection with our securities; and
- may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until it has completed its participation in the distribution.

From time to time in the ordinary course of their respective businesses, the placement agents or their affiliates have in the past or may in the future engage in investment banking and/or other services with us and our affiliates for which they have or may in the future receive customary fees and expenses.

The foregoing does not purport to be a complete statement of the terms and conditions of the placement agency agreement and subscription agreements. Copies of the placement agency agreement and the subscription agreements will be included as exhibits to our current report on Form 8-K that will be filed with the SEC and incorporated by reference into the Registration Statement of which this prospectus supplement forms a part. See "Where You Can Find More Information" on page S-27

LEGAL MATTERS

Selected legal matters with respect to the validity of the common stock offered by this prospectus supplement will be passed upon for us by McDermott Will & Emery LLP, Chicago, Illinois. Lowenstein Sandler PC, Roseland, New Jersey, is acting as counsel for the placement agents in connection with various matters relating to the securities offered hereby.

EXPERTS

The financial statements of Merge Healthcare as of December 31, 2008 and for the year then ended incorporated by reference in this prospectus supplement 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.

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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

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities we are offering under this prospectus supplement. This prospectus supplement and the accompanying prospectus do not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities we are offering under this prospectus supplement, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. Statements contained in this prospectus supplement as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference. We also file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy the registration statement, as well as any other material we file with the SEC, at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for more information on the Public Reference Room. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including Merge Healthcare. The SEC's Internet site can be found at http://www.sec.gov.

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Our Internet address is www.merge.com. There we make available free of charge, on or through the investor relations section of our website, annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. The information found on our website is not part of this prospectus supplement or any other report we file with or furnish to the Securities and Exchange Commission.

IMPORTANT INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus supplement the information we file with it, which means that we can disclose important information to you by referring you to those documents. Information incorporated by reference is part of this prospectus supplement. Later information filed with the SEC will update and supersede this information. The SEC's Internet site can be found at http://www.sec.gov.

We incorporate by reference the documents listed below and any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act until this offering is completed:

Information Incorporated by Reference Quarterly Report on Form 10-Q for fiscal quarter ended Fiscal quarter ended September 30, 2009 September 30, 2009, as filed with the SEC on October 30, 2009

Period Covered or Date of Filing

Quarterly Report on Form 10-Q for fiscal quarter ended Fiscal quarter ended June 30, 2009 June 30, 2009, as filed with the SEC on July 31, 2009

Quarterly Report on Form 10-Q for fiscal quarter ended Fiscal quarter ended March 31, 2009 March 31, 2009, as filed with the SEC on May 8, 2009

Annual Report on Form 10-K for fiscal year ended Fiscal year ended December 31, 2008 December 31, 2008, as filed with the SEC on March 11, 2009

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

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- 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)
- November 5, 2009
- November 13, 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.

In accordance with Rule 412 under the Securities Act, any statement contained in a document incorporated by reference herein shall be deemed modified or superseded to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Information that we file with the SEC after the date of this prospectus supplement that is incorporated by reference will automatically update and supersede the information contained in this prospectus supplement.

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PROSPECTUS

MERGE HEALTHCARE INCORPORATED

\$100,000,000
Common Stock
Debt Securities
Preferred Stock
Warrants
Depositary Shares
Stock Purchase Contracts
Stock Purchase Units

From time to time, we may sell up to an aggregate of \$100,000,000 of any combination of the securities described in this prospectus. We will specify the terms of any offering of such securities in a prospectus supplement.

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 3.

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

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, utilizing a "shelf" registration process. Under this shelf process, we may sell the securities described in this prospectus in one or more offerings. This prospectus provides you with a general description of the securities we may offer. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and any prospectus supplement together with additional information described under the heading "Where You Can Find More Information." You should rely only on the information contained in or incorporated by reference in this prospectus and any prospectus supplement. We have not authorized anyone to provide you with information other than the information contained or incorporated by reference in this prospectus or any prospectus supplement. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. The information contained in this prospectus speaks only as of the date of this prospectus and the information in the documents incorporated or deemed to be incorporated by reference in this prospectus speaks only as of the respective dates those documents were filed with the SEC. To the extent that any statement that we make in a prospectus supplement is inconsistent with statements made in this prospectus, the statements made in this prospectus will be deemed modified or superseded by those made in a prospectus supplement. 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.

Merge Healthcare Incorporated

Merge Healthcare Incorporated, a Delaware corporation, 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:

- 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;

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- 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.

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(TM), 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.

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.

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FORWARD-LOOKING STATEMENTS

Information both included and incorporated by reference in this Prospectus may contain forward-looking statements, concerning, among other things, Merge Healthcare's 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," "conting "opportunity," "project" 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. Merge Healthcare can not guarantee that it will achieve these plans, intentions or expectations. Forward-looking statements speak only as of the date they are made, and Merge Healthcare undertakes 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, Merge Healthcare's ability to maintain the technological competitiveness of its current products, develop new products, successfully market its products, respond to competitive developments, develop and maintain partnerships with providers of complementary technologies, manage its costs and the challenges that may come with growth of its business, and attract and retain qualified sales, technical and management employees. Merge Healthcare is 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. Merge Healthcare is 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 its customers. Merge Healthcare is affected by other factors identified in its 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 Merge Healthcare has attempted to list comprehensively these important factors, it also wishes to caution investors that other factors may prove to be important in the future in affecting its operating results. New factors emerge from time to time, and it is not possible for Merge Healthcare to predict all of these factors, nor can Merge Healthcare assess the impact each factor or combination of factors may have on its 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 Merge Healthcare or any person acting on its behalf are qualified by the cautionary statements in this section.

RATIO OF EARNINGS TO FIXED CHARGES

The following table sets forth our ratio of earnings to fixed charges for the periods indicated:

	Nine Months Ended September 30,			Year Ended December 31,			
	2009	2008 (1)	2008 (2)	2007 (3)	2006 (4)	2005	2004
Ratio of Earnings to Fixed Charges	1.9	_	_	_	_	14.6	3.3

(1)

For the nine months ended September 30, 2008, earnings were insufficient to cover fixed charges by \$25.6 million.

- (2) For the year ended December 31, 2008, earnings were insufficient to cover fixed charges by \$23.7 million.
- (3) For the year ended December 31, 2007, earnings were insufficient to cover fixed charges by \$171.8 million.
- (4) For the year ended December 31, 2006, earnings were insufficient to cover fixed charges by \$249.5 million.

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For purposes of computing these ratios, earnings consists of pre-tax income from continuing operations, plus fixed charges. Fixed charges consist of interest expense and interest portion of rental expense. The ratio is calculated by dividing earnings by the sum of the fixed charges. The interest portion of rental expense is estimated at 23% of rental expense based on net present value analysis.

USE OF PROCEEDS

Unless otherwise indicated in any prospectus supplement, we intend to use the net proceeds from the sale of securities under this prospectus for general corporate purposes, including working capital.

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DESCRIPTION OF DEBT SECURITIES

The following description, together with the additional information we include in any applicable prospectus supplement, summarizes the material terms and provisions of the debt securities that we may offer under this prospectus. The debt securities will be our direct general obligations and may include debentures, notes, bonds or other evidences of indebtedness. The debt securities will be either senior debt securities or subordinated debt securities. The debt securities will be issued under one or more separate indentures. Senior debt securities will be issued under a senior debt indenture, and subordinated debt securities will be issued under a subordinated debt indenture. We use the term "indentures" to refer to both the senior indenture and the subordinated indenture is filed as an exhibit to the registration statement of which this prospectus is a part. The indentures will be qualified under the Trust Indenture Act. We use the term "indenture trustee" to refer to either the senior trustee or the subordinated trustee, as applicable.

The following summaries of material provisions of the debt securities and indentures are subject to, and qualified in their entirety by reference to, all the provisions of the indenture applicable to a particular series of debt securities and the description thereof contained in the prospectus supplement.

General

We will describe in each prospectus supplement the following terms relating to a series of debt securities:

- The title or designation;
- Any limit on the principal amount that may be issued;
- Whether or not we will issue the series of debt securities in global form, the terms and the Depositary;
 - The maturity date;
- The annual interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;
 - Whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
 - The terms of the subordination of any series of subordinated debt;
 - The place where payments will be payable;
 - Our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- The date, if any, after which, and the price at which, we may, at our option, redeem the series of debt securities pursuant to any optional redemption provisions;
- The date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities;
- Whether the indenture will restrict our ability to pay dividends, or will require us to maintain any asset ratios or reserves:

- Whether we will be restricted from incurring any additional indebtedness;
- A discussion on any material or special U.S. federal income tax considerations applicable to the debt securities;
- The denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof; and
 - Any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities.

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Conversion or Exchange Rights

We will set forth in the prospectus supplement the terms on which a series of debt securities may be convertible into or exchangeable for common stock or other securities. We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of common stock or other securities that the holders of the series of debt securities receive would be subject to adjustment.

Consolidation, Merger or Sale

The indentures will not contain any covenant which restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of all or substantially all of our assets. However, any successor to or acquirer of our assets must assume all of our obligations under the indentures or the debt securities, as appropriate.

Events of Default Under the Indenture

The following may be events of default under the indentures with respect to any series of debt securities that we may issue:

- If we fail to pay interest when due and our failure continues for a number of days to be stated in the indenture and the time for payment has not been extended or deferred;
- If we fail to pay the principal, or premium, if any, when due and the time for payment has not been extended or delayed;
- If we fail to observe or perform any other covenant contained in the debt securities or the indentures, other than a covenant specifically relating to another series of debt securities, and our failure continues for a number of days to be stated in the indenture after we receive notice from the indenture trustee or holders of at least 25% in aggregate principal amount of the outstanding debt securities of the applicable series; and
 - If specified events of bankruptcy, insolvency or reorganization occur as to us.

If an event of default with respect to debt securities of any series occurs and is continuing, the indenture trustee or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series, by notice to us in writing, and to the indenture trustee if notice is given by such holders, may declare the unpaid principal, premium, if any, and accrued interest, if any, due and payable immediately.

The holders of a majority in principal amount of the outstanding debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any waiver will cure the default or event of default.

Subject to the terms of the indentures, if an event of default under an indenture occurs and is continuing, the indenture trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the indenture trustee reasonable indemnity. The holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the indenture trustee, or exercising any trust or power conferred on the indenture trustee, with respect to the debt securities of that series, provided that:

- The direction given by the holder is not in conflict with any law or the applicable indenture; and
- Subject to its duties under the Trust Indenture Act, the indenture trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

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A holder of the debt securities of any series will only have the right to institute a proceeding under the indentures or to appoint a receiver or trustee, or to seek other remedies if:

- The holder has given written notice to the indenture trustee of a continuing event of default with respect to that series;
- The holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made a written request, and such holders have offered reasonable indemnity to the indenture trustee to institute the proceeding as trustee; and
- The indenture trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series other conflicting directions within 60 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities.

We will periodically file statements with the indenture trustee regarding our compliance with specified covenants in the indentures.

Modification of Indenture; Waiver

We and the indenture trustee may change an indenture without the consent of any holders with respect to specific matters, including:

- To fix any ambiguity, defect or inconsistency in the indenture; and
- To change anything that does not materially adversely affect the interests of any holder of debt securities of any series.

In addition, under the indentures, the rights of holders of a series of debt securities may be changed by us and the indenture trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series that is affected. However, we and the indenture trustee may only make the following changes with the consent of each holder of any outstanding debt securities affected:

- Extending the fixed maturity of the series of debt securities;
- •Reducing the principal amount, reducing the rate of or extending the time of payment of interest, or any premium payable upon the redemption of any debt securities; or
 - Reducing the percentage of debt securities, the holders of which are required to consent to any amendment.

Discharge

Each indenture provides that we can elect to be discharged from our obligations with respect to one or more series of debt securities, except for obligations to:

• Register the transfer or exchange of debt securities of the series;

- Replace stolen, lost or mutilated debt securities of the series;
 - Maintain paying agencies;

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- Hold monies for payment in trust;
- Compensate and indemnify the indenture trustee; and
 - Appoint any successor indenture trustee.

In order to exercise our rights to be discharged, we must deposit with the indenture trustee money or government obligations sufficient to pay all the principal of, any premium, if any, and interest on, the debt securities of the series on the dates payments are due.

Form, Exchange and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we otherwise specify in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. The indentures provide that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The Depositary Trust Company or another Depositary named by us and identified in a prospectus supplement with respect to that series. See "Book-Entry Issuance" for a further description of the terms relating to any book-entry securities.

Subject to the terms of the indentures and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the debt securities of any series, at its option, can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indentures and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange, no service charge will be required for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

If we elect to redeem the debt securities of any series, we will not be required to:

- Issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or
- Register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

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We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement, we will make interest payments by check which we will mail to the holder. Unless we otherwise indicate in a prospectus supplement, we will designate the corporate trust office of the indenture trustee in the City of New York as our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series.

All money we pay to a paying agent or the indenture trustee for the payment of the principal of or any premium or interest on any debt securities which remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the security thereafter may look only to us for payment thereof.

Governing Law

The indentures and the debt securities will be governed by and construed in accordance with the laws of the State of New York, except to the extent that the Trust Indenture Act is applicable.

Subordination of Subordinated Notes

The subordinated notes will be unsecured and will be subordinate and junior in priority of payment to certain of our other indebtedness to the extent described in a prospectus supplement. The subordinated indenture does not limit the amount of subordinated notes which we may issue. It also does not limit us from issuing any other secured or unsecured debt.

Regarding the Indenture Trustee

We will name the indenture trustee for debt securities issued under the applicable indenture in the applicable supplement to this prospectus and, unless otherwise indicated in a prospectus supplement, the indenture trustee will also act as Transfer Agent and Paying Agent with respect to the debt securities. The indenture trustee may be removed at any time with respect to the debt securities of any series by act of the holders of a majority in principal amount of the outstanding debt securities of such series delivered to the indenture trustee and to us.

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DESCRIPTION OF COMMON STOCK AND PREFERRED STOCK

Merge Healthcare's authorized capital stock consists of 100,000,000 shares of common stock, par value \$.01 per share, 1,000,000 shares of preferred stock, par value \$.01 per share, and one share of Series 3 Special Voting Stock preferred stock, par value \$.01 per share. As of September 30, 2009, there were 66,127,790 shares of Merge Healthcare Common Stock issued, including 479,997 shares subject to restricted stock awards. There are currently no shares of preferred stock outstanding. The Merge Healthcare Common Stock is held of record by approximately 350 stockholders. On September 30, 2009, 4,853,113 shares of Merge Healthcare Common Stock were subject to outstanding options.

The following description of the terms of the common stock and preferred stock of Merge Healthcare is not complete and is qualified in its entirety by reference to Merge's certificate of incorporation and bylaws, each as amended to date. To find out where copies of these documents can be obtained, see "Where to Obtain More Information."

Common Stock

Holders of Merge Healthcare Common Stock are entitled to receive dividends when, as and if declared by the board of directors, out of funds legally available for the payment of dividends, subject to the rights of holders of preferred stock, if any. On June 19, 2008, Merge Healthcare paid a dividend of \$0.001 on each share of Merge Healthcare Common Stock as part of the termination of a rights plan. Merge Healthcare does not anticipate paying any cash dividends in the foreseeable future. Each holder of Merge Healthcare Common Stock is entitled to one vote per share. Upon any liquidation, dissolution or winding-up of its business, the holders of Merge Healthcare Common Stock are entitled to share equally in all assets available for distribution after payment of all liabilities and provision for liquidation preference of any shares of preferred stock then outstanding. The holders of Merge Healthcare Common Stock have no preemptive rights and no rights to convert their common stock into any other securities. There are also no redemption or sinking fund provisions applicable to the Merge Healthcare Common Stock.

Merge Healthcare Common Stock is listed on the NASDAQ Global Market under the symbol "MRGE."

The transfer agent and registrar for the Merge Healthcare Common Stock is American Stock Transfer and Trust Company LLC.

Preferred Stock

Merge Healthcare's board of directors has the authority, without further action by the stockholders, to issue up to 1,000,001 shares of Merge Healthcare preferred stock in one or more series and to fix the following terms of the preferred stock:

- Designations, powers, preferences, privileges;
- Relative participating, optional or special rights; and
- The qualifications, limitations or restrictions, including dividend rights, conversion rights, voting rights, terms of redemption and liquidation preferences.

Any or all of these rights may be greater than the rights of the Merge Healthcare Common Stock. Of the authorized preferred stock, one share has been designated Series 3 Special Voting Stock preferred stock ("Series 3 Stock"), \$0.01

par value per share. The Series 3 Stock ranks senior to Merge Healthcare Common Stock and junior to all other classes or series of the stock of Merge Healthcare.

Merge Healthcare's board of directors, without stockholder approval, can issue preferred stock with voting, conversion or other rights that could negatively affect the voting power and other rights of the holders of Merge Healthcare Common Stock. Preferred stock could thus be issued quickly with terms calculated to delay or prevent a change in control of Merge Healthcare or make it more difficult to remove Merge Healthcare's management. Additionally, the issuance of Merge Healthcare preferred stock may have the effect of decreasing the market price of Merge Healthcare Common Stock.

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Delaware Law Anti-takeover Provisions

As a Delaware corporation, Merge Healthcare is subject to the provisions of Section 203 of the DGCL. Under Section 203, Merge Healthcare generally would be prohibited from engaging in any business combination with an interested stockholder for a period of three years following the time that the stockholder became an interested stockholder unless:

- Prior to such time, Merge Healthcare's board of directors approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder; or
- •Upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of Merge Healthcare's voting stock outstanding at the time the transaction commenced, excluding shares owned by persons who are directors and officers, and also by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or at or subsequent to such time, the business combination is approved by Merge Healthcare's board of directors and authorized at an annual or special meeting of Merge Healthcare's stockholders, and not by written consent, by the affirmative vote of at least 66-2/3% of the outstanding voting stock that is not owned by the interested stockholder.

Under Section 203, a "business combination" includes:

- Any merger or consolidation involving the corporation and the interested stockholder;
- Any sale, transfer, pledge or other disposition of 10% or more of a corporation's assets involving the interested stockholder;
- Any transaction that results in the issuance or transfer by the corporation of any of its stock to the interested stockholder, subject to limited exceptions;
- Any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation's capital stock beneficially owned by the interested stockholder; or the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an "interested stockholder" of Merge Healthcare as any entity or person beneficially owning 15% or more of the outstanding Merge Healthcare voting stock and any entity or person affiliated with or controlling or controlled by such entity or person.

The description of Section 203 of the DGCL above is qualified in its entirety be reference to such section.

Certificate of Incorporation and Bylaw Provisions

Various provisions contained in Merge's certificate of incorporation and bylaws, each as amended to date, could delay or discourage some transactions involving an actual or potential change in control of Merge Healthcare or its management and may limit the ability of Merge Healthcare stockholders to remove current management or approve transactions that Merge Healthcare stockholders may deem to be in their best interests. These provisions:

• Authorize Merge Healthcare's board of directors to establish one or more series of undesignated preferred stock, the terms of which can be determined by the board of directors at the time of issuance;

- Require that any action required or permitted to be taken by Merge Healthcare's stockholders must be effected at a duly called annual or special meeting of stockholders and may not be effected by any consent in writing;
- •Provide an advanced written notice procedure with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of Merge Healthcare's board of directors or a committee of its board of directors;

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- State that special meetings of Merge Healthcare's stockholders may be called only by the chairman of its board of directors, its chief executive officer or by a majority of its board of directors then in office; and
- Allow Merge Healthcare's directors to fill vacancies on its board of directors, including vacancies resulting from removal or enlargement of the board.

DESCRIPTION OF WARRANTS

The following description, together with the additional information we include in any applicable prospectus supplement, summarizes the material terms and provisions of the warrants that we may offer under this prospectus. The following statements with respect to the warrants are summaries of, and subject to, the detailed provisions of a warrant agreement to be entered into by Merge Healthcare and a warrant agent to be selected at the time of issue (the "warrant agent"), a form of which will be filed with the SEC.

General

The warrants, evidenced by warrant certificates, may be issued under the warrant agreement independently or together with any securities offered by any prospectus supplement and may be attached to or separate from such securities. If warrants are offered, the prospectus supplement will describe the terms of the warrants, including the following:

- The offering price, if any;
- •If applicable, the designation, aggregate principal amount, and terms of the debt securities purchasable upon exercise of the debt warrants;
- If applicable, the principal amount of debt securities purchasable upon exercise of one debt warrant and the price at which such principal amount of debt securities may be purchased upon such exercise;
- If applicable, the number of shares of preferred stock or common stock purchasable upon exercise of each warrant and the initial price at which such shares may be purchased upon exercise;
- If applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security;
- If applicable, the date on and after which the warrants and the related securities will be separately transferable;
- The date on which the right to exercise the warrants shall commence and the date on which such right shall expire;
 - Federal income tax consequences;
 - Call provisions of such warrants, if any;
 - Anti-dilution provisions of the warrants, if any;
 - Whether the warrants represented by the warrant certificates will be issued in registered or bearer form; and
- Any additional or other terms, procedures, rights, preferences, privileges, limitations and restrictions relating to the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

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The shares of preferred stock or common stock issuable upon the exercise of the warrants will, when issued in accordance with the warrant agreement, be fully paid and non-assessable.

DESCRIPTION OF DEPOSITARY SHARES

The following description, together with the additional information we include in any applicable prospectus supplement, summarizes the material terms and provisions of the depositary shares that we may offer under this prospectus. The following statements with respect to the depositary shares and depositary receipts are summaries of, and subject to, the detailed provisions of a deposit agreement to be entered into by Merge Healthcare and a depositary to be selected at the time of issue (the "depositary") and the form of depositary receipt. The form of deposit agreement and the form of depositary receipt will be filed with the SEC.

General

We may, at our option, elect to issue fractional shares of preferred stock, rather than full shares of preferred stock. In the event such option is exercised, we may elect to have a depositary issue receipts for depositary shares, each receipt representing a fraction, to be set forth in the prospectus supplement relating to a particular series of preferred stock, of a share of a particular series of preferred stock as described below.

The shares of any series of preferred stock represented by depositary shares will be deposited under a deposit agreement between us and a bank or trust company that we select. Subject to the terms of the deposit agreement, each owner of a depositary share will be entitled, in proportion to the applicable fraction of a share of preferred stock represented by such depositary share, to all the rights and preferences of the preferred stock represented by the depositary share, including dividend, voting, redemption and liquidation rights.

Depositary Receipts

The depositary shares will be evidenced by depositary receipts issued pursuant to the deposit agreement. Depositary receipts will be distributed to those persons purchasing the fractional shares of preferred stock in accordance with the terms of an offering of the preferred stock.

Withdrawal of Preferred Stock

Upon surrender of depositary receipts at the office of the depositary and upon payment of the charges provided in the deposit agreement, a holder of depositary receipts may have the depositary deliver to the holder the whole shares of preferred stock relating to the surrendered depositary receipts. Holders of depositary shares may receive whole shares of the related series of preferred stock on the basis set forth in the related prospectus supplement for such series of preferred stock, but holders of such whole shares will not after the exchange be entitled to receive depositary shares for their whole shares. If the depositary receipts delivered by the holder evidence a number of depositary shares in excess of the number of depositary shares representing the number of whole shares of the related series of preferred stock to be withdrawn, the depositary will deliver to the holder at the same time a new depositary receipt evidencing such excess number of depositary shares.

Dividends and Other Distributions

The depositary will distribute all cash dividends or other cash distributions received for the preferred stock to the record holders of depositary shares relating to the preferred stock in proportion to the numbers of such depositary shares owned by such holders.

In the event of a distribution other than in cash, the depositary will distribute property received by it to the record holders of depositary shares entitled thereto, unless the depositary determines that it is not feasible to make distribution of the property. In that case the depositary may, with our approval, sell such property and distribute the net proceeds from the sale to such holders.

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Redemption of Depositary Shares

If a series of preferred stock represented by depositary shares is subject to redemption, the depositary shares will be redeemed from the proceeds received by the depositary resulting from the redemption, in whole or in part, of the series of preferred stock held by the depositary. The redemption price per depositary share will be equal to the applicable fraction of the redemption price per share payable with respect to the series of the preferred stock. Whenever we redeem shares of preferred stock held by the depositary, the depositary will redeem as of the same redemption date the number of depositary shares representing shares of preferred stock redeemed by us. If less than all the depositary shares are to be redeemed, the depositary shares to be redeemed will be selected by lot or pro rata as may be determined by the depositary.

Voting the Preferred Stock

Upon receipt of notice of any meeting at which the holders of the preferred stock are entitled to vote, the depositary will mail the information contained in such notice of meeting to the record holders of the depositary shares relating to such preferred stock. Each record holder of such depositary shares on the record date, which will be the same date as the record date for the preferred stock, will be entitled to instruct the depositary as to the exercise of the voting rights pertaining to the amount of the preferred stock represented by such holder's depositary shares. The depositary will endeavor, insofar as practicable, to vote the amount of the preferred stock represented by such depositary shares in accordance with such instructions, and we will agree to take all action which may be deemed necessary by the depositary in order to enable the depositary to do so. The depositary will not vote the preferred stock to the extent it does not receive specific instructions from the holders of depositary shares representing such preferred stock.

Amendment and Termination of the Deposit Agreement

We and the depositary at any time may amend the form of depositary receipt evidencing the depositary shares and any provision of the deposit agreement. However, any amendment which materially and adversely alters the rights of the holders of depositary shares will not be effective unless such amendment has been approved by the holders of at least a majority of the depositary shares then outstanding. We or the depositary may terminate the deposit agreement only if all outstanding depositary shares have been redeemed, or there has been a final distribution in respect of the preferred stock in connection with any liquidation, dissolution or winding up of Merge Healthcare and such distribution has been distributed to the holders of depositary receipts.

Charges of Depositary

We will pay all transfer and other taxes and governmental charges arising solely from the existence of the depositary arrangements. We will pay charges of the depositary in connection with the initial deposit of the preferred stock and any redemption of the preferred stock. Holders of depositary receipts will pay other transfer and other taxes and governmental charges and such other charges as are expressly provided in the deposit agreement to be for their accounts.

Miscellaneous

The depositary will forward to the record holders of the depositary shares relating to such preferred stock all reports and communications from us which are delivered to the depositary.

Neither we nor the depositary will be liable if either one is prevented or delayed by law or any circumstance beyond their control in performing the obligations under the deposit agreement. The obligations of Merge Healthcare and the depositary under the deposit agreement will be limited to performance in good faith of their duties thereunder, and

they will not be obligated to prosecute or defend any legal proceeding in respect of any depositary shares or preferred stock unless satisfactory indemnity is furnished. The depositary may rely upon written advice of counsel or accountants, or information provided by persons presenting preferred stock for deposit, holders of depositary receipts or other persons believed to be competent and on documents believed to be genuine.

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Resignation and Removal of Depositary

The depositary may resign at any time by delivering to us notice of its election to do so, and we may at any time remove the depositary, any such resignation or removal to take effect upon the appointment of a successor depositary and its acceptance of such appointment. Such successor depositary must be appointed within 60 days after delivery of the notice of resignation or removal.

DESCRIPTION OF STOCK PURCHASE CONTRACTS AND STOCK PURCHASE UNITS

We may issue stock purchase contracts, representing contracts obligating holders to purchase from us, and we may sell to the holders, a specified number of shares of common stock at a future date or dates. The price per share of common stock may be fixed at the time the stock purchase contracts are issued or may be determined by reference to a specific formula set forth in the stock purchase contracts. Stock purchase contracts may be issued separately or as a part of units ("stock purchase units") consisting of a stock purchase contract and either (i) senior debt securities or subordinated debt securities or (ii) debt obligations of third parties, including U.S. Treasury securities, securing the holder's obligations to purchase the common stock under the stock purchase contracts. The stock purchase contracts may require us to make periodic payments to the holders of the stock purchase units or vice versa, and such payments may be unsecured or prefunded on some basis. The stock purchase contracts may require holders to secure their obligations thereunder in a specified manner and in certain circumstances we may deliver newly issued prepaid stock purchase contracts ("prepaid securities") upon release to a holder of any collateral securing such holder's obligations under the original stock purchase contract.

The applicable prospectus supplement will describe the terms of any stock purchase contracts or stock purchase units and, if applicable, prepaid securities. Certain material United States Federal income tax considerations applicable to the stock purchase units and stock purchase contracts will be set forth in the prospectus supplement relating thereto.

BOOK-ENTRY ISSUANCE

Unless otherwise indicated in a prospectus supplement, the debt securities of a series offered by us will be issued in the form of one or more fully registered global securities. We anticipate that these global securities will be deposited with, or on behalf of, the Depository Trust Company and registered in the name of its nominee. Except as described below, the global securities may be transferred, in whole and not in part, only to DTC or to another nominee of DTC.

DTC has advised us that it is:

- A limited-purpose trust company organized under the New York Banking Law;
- A "banking organization" within the meaning of the New York Banking Law;
 - A member of the Federal Reserve System;
- A "clearing corporation" within the meaning of the New York Uniform Commercial Code; and
- A "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934.

DTC was created to hold securities for institutions that have accounts with DTC ("participants") and to facilitate the clearance and settlement of securities transactions among its participants through electronic book-entry changes in participants' accounts. Participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations, some of whom (and/or their representatives) own DTC. Access to DTC's book-entry

system is also available to others that clear through or maintain a custodial relationship with a participant, either directly or indirectly. DTC administers its book-entry system in accordance with its rules and bylaws and legal requirements.

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Upon issuance of a global security representing offered securities, DTC will credit on its book-entry registration and transfer system the principal amount to participants' accounts. Ownership of beneficial interests in the global security will be limited to participants or to persons that hold interests through participants. Ownership of interests in the global security will be shown on, and the transfer of those ownership interests will be effected only through, records maintained by DTC (with respect to participants' interests) and the participants (with respect to the owners of beneficial interests in the global security). The laws of some jurisdictions may require that certain purchasers of securities take physical delivery of those securities in definitive form. These limits and laws may impair the ability to transfer beneficial interests in a global security.

So long as DTC (or its nominee) is the registered holder and owner of a global security, DTC (or its nominee) will be considered, for all purposes under the applicable indenture, the sole owner and holder of the related offered securities. Except as described below, owners of beneficial interests in a global security will not:

- Be entitled to have the securities registered in their names; or
- Receive or be entitled to receive physical delivery of certificated securities in definitive form.

Purchases of securities under the DTC system must be made by or through direct participants, which will receive a credit for the securities on DTC's records. The ownership interest of each actual purchaser of each debt security ("beneficial owner") is in turn recorded on the Direct and indirect participants' records. A beneficial owner does not receive written confirmation from DTC of its purchase, but is expected to receive a written confirmation providing details of the transaction, as well as periodic statements of its holdings, from the direct or indirect participants through which such beneficial owner entered into the action. Transfers of ownership interests in securities are accomplished by entries made on the books of participants acting on behalf of beneficial owners. Beneficial owners do not receive certificates representing their ownership interests in securities, except in the event that use of the book-entry system for the securities is discontinued.

To facilitate subsequent transfers, the securities are registered in the name of DTC's partnership nominee, Cede & Co. The deposit of the securities with DTC and their registration in the name of Cede & Co. will effect no change in beneficial ownership. DTC has no knowledge of the actual beneficial owners of the securities; DTC records reflect only the identity of the direct participants to whose accounts securities are credited, which may or may not be the beneficial owners. The participants remain responsible for keeping account of their holdings on behalf of their customers.

Delivery of notice and other communications by DTC to direct participants, by direct participants to indirect participants, and by direct participants and indirect participants to beneficial owners are governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

Neither DTC nor Cede & Co. consents or votes with respect to the securities. Under its usual procedures, DTC mails a proxy (an "Omnibus Proxy") to the issuer as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those direct participants to whose accounts the securities are credited on the record date (identified on a list attached to the Omnibus Proxy).

Redemption proceeds, distributions and dividend payments, if any, on the securities will be made to DTC. DTC's practice is to credit direct participants' accounts on the payment date in accordance with their respective holdings as shown on DTC's records, unless DTC has reason to believe that it will not receive payment on the payment date. Payments by participants to beneficial owners are governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and are the responsibility of such Participant and not of DTC, the trustee or us, subject to any statutory or regulatory requirements

as may be in effect from time to time. Payment of principal and interest, if any, to DTC is our or the trustee's responsibility, disbursement of such payments to direct participants is DTC's responsibility, and disbursement of such payments to the beneficial owners is the responsibility of direct and indirect participants.

DTC may discontinue providing its services as securities depository with respect to the securities at any time by giving reasonable notice to us or the trustee. Under such circumstances, in the event that a successor securities depository is not appointed, debt security certificates are required to be printed and delivered.

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We may decide to discontinue use of the system of book-entry transfers through DTC or a successor securities depository. In that event, debt security certificates will be printed and delivered.

We have obtained the information in this section concerning DTC and DTC's book-entry system from sources that we believe to be reliable, but we take no responsibility for the accuracy of this information.

None of us, any underwriter or agent, the trustee or any applicable paying agent will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial interests in a global security, or for maintaining, supervising or reviewing any records relating to such beneficial interest.

PLAN OF DISTRIBUTION

- Through underwriters or dealers;
- Directly to one or more purchasers;
 - Through agents; or
- Through any other methods described in a prospectus supplement.

The prospectus supplement will state the terms of the offering of the securities, including:

- The name or names of any underwriters, dealers or agents;
- The purchase price of such securities and the proceeds to be received by Merge, if any;
- Any underwriting discounts or agency fees and other items constituting underwriters' or agents' compensation;
 - Any public offering price;
 - Any discounts or concessions allowed or reallowed or paid to dealers; and
 - Any securities exchanges on which the securities may be listed.

Any public offering price and any discounts or concessions allowed or reallowed or paid to dealers may be changed from time to time.

Securities may also be sold in one or more of the following transactions, or in any transactions described in a prospectus supplement:

- •Block transactions in which a broker-dealer may sell all or a portion of the securities as agent but may position and resell all or a portion of the block as principal to facilitate the transaction;
 - Purchase by a broker-dealer as principal and resale by the broker-dealer for its own account;
- A special offering, an exchange distribution or a secondary distribution in accordance with the rules of any exchange on which the securities are listed;
 - Ordinary brokerage transactions and transactions in which a broker-dealer solicits purchasers;

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- Sales "at the market" to or through a market maker or into an existing trading market, on an exchange or otherwise; or
- Sales in other ways not involving market makers or established trading markets, including direct sales to purchasers.

The securities we sell by any of the methods described above may be sold to the public, in one or more transactions, either:

- At a fixed public offering price or prices, which may be changed;
 - At market prices prevailing at the time of sale;
 - At prices related to prevailing market prices; or
 - At negotiated prices.

We may sell the securities through agents from time to time. The prospectus supplement will name any agent involved in the offer or sale of the securities and any commissions we pay to them. Generally, any agent will be acting on a best efforts basis for the period of its appointment.

We may authorize underwriters, dealers or agents to solicit offers by certain purchasers to purchase the securities from Merge at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. The contracts will be subject only to those conditions set forth in the prospectus supplement, and the prospectus supplement will set forth any commissions we pay for solicitation of these contracts.

Underwriters and agents may be entitled under agreements entered into with Merge to indemnification by Merge against certain civil liabilities, including liabilities under the Securities Act of 1933, or to contribution with respect to payments which the underwriters or agents may be required to make. Underwriters and agents may engage in transactions with, or perform services for Merge and its affiliates in the ordinary course of business.

In compliance with the guidelines of the Financial Industry Regulatory Authority ("FINRA"), the aggregate maximum discount, commission or agency fees or other items constituting underwriting compensation to be received by any FINRA member or independent broker-dealer will not exceed 8% of any offering pursuant to this prospectus and any applicable prospectus supplement, as the case may be.

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.

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.

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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.

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Merge Healthcare Filings (File No. 29486)

Merge Healthcare Information Incorporated by Reference Quarterly Report on Form 10-Q for fiscal quarter ended September 30, 2009, as filed with the SEC on October 30, 2009

Period Covered or Date of Filing 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.

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