MERGE HEALTHCARE INC Form S-4/A July 06, 2009

As filed with the Securities and Exchange Commission on July 6, 2009

Registration No. 333-159998

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549 Amendment No. 2 to FORM S-4

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

MERGE HEALTHCARE INCORPORATED (Exact name of Registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

7373 (Primary Standard Industrial Classification Code Number) 6737 West Washington Street Milwaukee, Wisconsin 53214-5650 (414) 977-4000

39-1600938 (I.R.S. Employer Identification No.)

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices) Justin C. Dearborn **Chief Executive Officer** Merge Healthcare Incorporated 6737 West Washington Street Milwaukee, WI 53214-5650 (414) 977-4000

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

Copies to:

Mark A. Harris McDermott Will & Emery LLP 227 West Monroe Street Chicago, Illinois 60606-5096 (312) 984-2121

Ann Mayberry-French Vice President, General Counsel and Secretary Merge Healthcare Incorporated 6737 West Washington Street Milwaukee, WI 53214-5650 (414) 977-4000

Approximate date of commencement of proposed sale of the securities to the public: As soon as practicable after the effective date of this Registration Statement and completion of the transactions described in the enclosed prospectus/offer to exchange.

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box o

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer o Non-accelerated filer x Accelerated filer o Smaller reporting company o

If applicable, place an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13e-4(i) (Cross-Border Issuer Tender Offer) o Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer) o

CALCULATION OF REGISTRATION FEE

Title Of Each Class Of		Proposed Maximum	Proposed Maximum	Amount Of
Securities To Be Registered	Amount To Be Registered(1)	Offering Price Per Share	Aggregate Offering Price(2)	Registration Fee(3)
Common Stock, \$0.01	4,379,611	N/A	\$ 14,685,750	\$ 820 (4)

(1)Based on the maximum number of shares of Merge Healthcare Incorporated ("Merge Healthcare") common stock to be issued in connection with the Merger Agreement described in the Form S-4 filed by the registrant on June 16, 2009, registration number 159998 which this Form S-4/A amends and supplements (the "Registration Statement"), calculated by multiplying (i) the exchange ratio of 0.3448 shares of Merge Healthcare Common Stock for each share of etrials Worldwide, Inc. ("etrials") common stock and (ii) 12,701,889, the estimated maximum aggregate number of shares of etrials common stock that could be exchanged for shares of Merge Healthcare Common Stock pursuant to the merger described in the Registration Statement, including shares of etrials common stock issuable upon lapse of restrictions on outstanding restricted stock awards and exercise of all outstanding stock option awards.

- (2) Estimated solely for the purposes of calculating the registration fee, and calculated pursuant to Rules 457(c) and 457(f) under the Securities Act of 1933, as amended, the proposed maximum aggregate offering price is equal to the market value of shares of etrials common stock less the total cash consideration expected to be paid in the merger by Merge Healthcare, calculated as follows: (i) (x) \$1.815, the average of the high and low prices per share of etrials common stock on June 10, 2009, as reported on The NASDAQ Global Market, multiplied by (y) 11,064,142, the estimated maximum aggregate number of shares of etrials common stock that could be exchanged for shares of Merge Healthcare Common Stock pursuant to the merger described in the Registration Statement, including shares of etrials common stock issuable upon lapse of restrictions on outstanding restricted stock awards, plus (ii) (x) \$2.110, the average of the high and low prices per share of etrials common stock on June 19, 2009, as reported on The NASDAQ Global Market, multiplied by (y) 1,637,747, the estimated maximum aggregate number of shares of etrials common stock on June 19, 2009, as reported on The NASDAQ Global Market, multiplied by (y) 1,637,747, the estimated maximum aggregate number of shares of etrials common stock that could be exchanged for shares of Merge Healthcare Common stock that could be exchanged for shares of the maximum aggregate number of shares of etrials common stock that could be exchanged for shares of the average of the merger described in the Registration Statement, including shares of etrials common stock that could be exchanged for shares of there are common stock pursuant to the merger described in the Registration Statement, including shares of etrials common stock that could be exchanged for shares of there are common stock pursuant to the merger described in the Registration Statement, including shares of etrials common stock that could be exchanged for shares of etrials common stock pursuant to the merger desc
- (3) Equal to \$55.80 per \$1,000,000 of the proposed aggregate offering price.
 (4)Previously paid. An amount of \$1,121 was paid by registrant in conjunction with the filing of the Registration Statement and Schedule TO with the Securities and Exchange Commission on June 16, 2009.

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

Table of Contents

The information contained in this prospectus/offer to exchange ("Prospectus/Offer to Exchange" or "Prospectus") may be changed. Merge Healthcare Incorporated may not complete the exchange offer and issue these securities until the registration statement filed with the Securities and Exchange Commission becomes effective. This Prospectus is not an offer to sell these securities and Merge Healthcare Incorporated is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

MERGE HEALTHCARE INCORPORATED

Offer by Merge Acquisition Corp. to Exchange Each Outstanding Share of Common Stock of etrials Worldwide, Inc. for \$0.80 in Cash and 0.3448 Shares of Common Stock of Merge Healthcare Incorporated

subject to the procedures described in this Prospectus and the related letter of transmittal

THE OFFER AND THE WITHDRAWAL RIGHTS WILL EXPIRE AT 12:00 MIDNIGHT, NEW YORK CITY TIME, AT THE END OF JULY 14, 2009, UNLESS EXTENDED.

Merge Acquisition Corp., a Delaware corporation ("Offeror"), a wholly-owned subsidiary of Merge Healthcare Incorporated ("Merge Healthcare"), is offering to exchange for each outstanding share of common stock of etrials Worldwide, Inc. ("etrials"), par value \$0.0001 per share (the "Shares"), validly tendered in the Offer and not withdrawn, \$0.80 in cash, without interest, and 0.3448 shares of Merge Healthcare common stock, par value \$0.01 per share ("Merge Healthcare Common Stock") (collectively, the "Consideration") subject to the procedures described in this Prospectus and the related letter of transmittal (which together, as each may be amended, supplemented or otherwise modified from time to time, constitute the "Offer"). etrials stockholders who otherwise would be entitled to receive a fractional share of Merge Healthcare Common Stock will instead receive an amount in cash (without interest) equal to the amount of such fraction multiplied by \$2.610, rounded to the nearest cent.

The purpose of the Offer is for Merge Healthcare to acquire control of, and ultimately the entire equity interest in and all the outstanding shares of, etrials. The Offer is the first step in Merge Healthcare's plan to acquire all of the outstanding Shares. Promptly after completion of the Offer, Merge Healthcare intends to consummate a merger of Offeror with and into etrials, with etrials surviving the merger (this merger is referred to herein as the "Merger" and etrials after the Merger is sometimes referred to herein as the "Surviving Corporation"). The purpose of the Merger is for Merge Healthcare to acquire all Shares not acquired in the Offer. After the Merger, the Surviving Corporation will be a wholly-owned subsidiary of Merge Healthcare and the former etrials stockholders will no longer have any direct ownership interest in the Surviving Corporation.

Offeror's obligation to accept for exchange, and to exchange, Shares for cash and shares of Merge Healthcare Common Stock in the Offer is subject to a number of conditions, which are more fully described in "The Offer — Terms of the Offer."

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

For a discussion of certain factors that etrials stockholders should consider in connection with the Offer, please carefully read "Risk Factors" beginning on page 7.

Merge Healthcare has not authorized any person to provide any information or to make any representation in connection with the Offer other than the information contained or incorporated by reference in this Prospectus, and if

any person provides any information or makes any representation of this kind, that information or representation must not be relied upon as having been authorized by Merge Healthcare.

Neither the Securities and Exchange Commission ("SEC") nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this Prospectus. Any representation to the contrary is a criminal offense.

The date of this Prospectus is June 16, 2009, as amended on June 23, 2009 and July 6, 2009.

[This page is intentionally left blank.]

TABLE OF CONTENTS

WHERE TO OBTAIN MORE INFORMATION		i	
FORWARD-LOOKING STATEME	INTS	ii	
OUESTIONS AND ANSWERS		iv	
	Who is offering to buy my Shares?		iv
	What are the classes and amounts of etrials securities that Offeror is		
	offering to acquire in the Offer?		iv
	What will I receive for my Shares?		iv
	What will I receive for my options to purchase Shares?		v
	Will I have to pay any fee or commission to exchange Shares?		v
	Why is Offeror making this Offer?		v
	What does the etrials board of directors recommend?		v
	What are the conditions of the Offer?		vi
	How long will it take to complete the proposed transaction?		vi
	Is Merge Healthcare's financial condition relevant to my decision to tender	r	
	Shares in the Offer?		vi
	When does the Offer expire? Can the Offer be extended and, if so, under		
	what circumstances?		vi
	How do I tender my Shares?		vii
	Until what time can I withdraw tendered Shares?		vii
	How do I withdraw previously tendered Shares?		vii
	When and how will I receive the Offer consideration in exchange for my		
	tendered Shares?		vii
	What are the United States federal income tax consequences of the Offer		
	and the Merger to me?		vii
	Why does the cover page to this Prospectus state that this Offer is subject		
	to change and that the registration statement filed with the SEC is not yet		
	effective? Does this mean that the Offer has not commenced?	v	viii
	Do I have appraisal rights in connection with the Offer or the Merger?	v	viii
	Where can I find more information about Merge Healthcare and etrials?	v	viii
<u>SUMMARY</u>		1	
	The Offer		1
	Purpose of the Offer; The Merger		1
	The Companies		2
	Reasons for the Offer		3
	Expiration of the Offer		3
	Extension, Termination or Amendment		3
	Withdrawal Rights		4
	Procedure for Tendering		4
	Exchange of Shares		4
	Top-Up Option		4
	Interests of Certain Persons		4
	Regulatory Approvals		5
	Source and Amount of Funds		5
	Appraisal Rights		5

Comparative Market Price Data	5
Ownership of Merge Healthcare After the Offer and the Merger	5
Comparison of Stockholders' Rights	5
Material U.S. Federal Income Tax Consequences	6
Accounting Treatment	6
Questions about the Offer and the Merger	6

TABLE OF CONTENTS

<u>RISK FACTORS</u>		7
	Risk Factors Relating to the Offer	7
	Risk Factors Relating to etrials and the Merger	10
	Risk Factors Relating to Owning Merge Common Stock	10
	Risk Factors Relating to Merge Healthcare and the Combined Company	12
	LIDATED FINANCIAL DATA OF MERGE HEALTHCARE	23
	LIDATED FINANCIAL DATA OF WERGE HEALTHCARE	23
	D SUMMARY UNAUDITED PRO FORMA PER SHARE	24
INFORMATION	D SUMMART UNAUDITED TROTORMATER SHARE	25
COMPARATIVE MARKET PRICE	ρατα ανό δινισένο σατά	26
RATIO OF EARNINGS TO FIXED		20
THE MERGER		28
	<u>The Companies</u>	28
	etrials' Reasons for the Merger	30
	Background and Recommendation of the etrials Board of Directors	34
	Opinion of Emerging Growth Equities Ltd. Financial Advisor to etrials	40
	Merge Healthcare's Reasons for the Merger	48
	Interests of etrials Management and Board of Directors	49
-	Material U.S. Federal Income Tax Consequences	51
	Accounting Treatment	53
	Regulatory Approvals Required for the Merger	53
	Delisting and Termination of Registration	53
	Duotation on the NASDAO Global Market	53
	Appraisal Rights	53
- MERGER AGREEMENT		54
	<u>The Offer</u>	54
	<u>The Merger</u>	55
	Completion and Effectiveness of the Merger	55
	Merger Consideration	55
	Exchange of etrials Stock Certificates for the Merger Consideration	55
Ī	Fractional Shares	56
	Conditions to the Merger	56
	Representations and Warranties	56
1	No Solicitation of Other Offers by etrials	58
<u>(</u>	Changes of Recommendation	59
	Stockholder Approval	60
<u>(</u>	Conduct of Business Before Completion of the Merger	60
<u> </u>	Access	62
<u> </u>	Additional Agreements	62
e	etrials' Benefit Plans	64
I	Directors' and Officers' Indemnification	64
]	Fermination of the Merger Agreement	65
	Termination Fees and Expenses	65
<u>I</u>	Effect of Termination	66

Amendments, Extensions and Waivers	66
The Stockholder Support Agreements	66
Confidentiality and Non-Disclosure Agreement	67

TABLE OF CONTENTS

THE OFFER	68
Consideration	68
<u>Top-Up Option</u>	68
Distribution of Offering Materials	68
Expiration of the Offer	68
Extension, Termination and Amendment	69
Subsequent Offering Period	70
Exchange of Shares; Delivery of Cash and Shares of Merge Healthcare	
Common Stock	70
Withdrawal Rights	70
Procedure for Tendering	71
Guaranteed Delivery	72
<u>Grant of Proxy</u>	73
Fees and Commissions	73
Matters Concerning Validity and Eligibility	73
Announcement of Results of the Offer	74
Ownership of Merge Healthcare After the Offer and the Merger	74
Conditions to the Offer	74
Purpose of the Offer; the Merger	76
<u>Plans for etrials</u>	76
Effect of the Offer on the Market for Shares; NASDAQ Listing;	
Registration Under the Exchange Act; Margin Regulations	77
Certain Relationships With etrials	77
Source and Amount of Funds	78
DESCRIPTION OF MERGE HEALTHCARE CAPITAL STOCK	79
Common Stock	79
Preferred Stock	79
Delaware Law Anti-takeover Provisions	80
Certificate of Incorporation and Bylaw Provisions	80
COMPARISON OF STOCKHOLDERS' RIGHTS	82
Authorized Capital Stock	82
Annual Meetings of Stockholders	82
Special Meetings of Stockholders	82
Quorum Requirements	83
Stockholder Action by Written Consent	83
Amending the Bylaws	83
Special Voting Requirements and Provisions	83
Number and Election of Directors	83
Notice Requirements for Stockholder Nomination of Directors and Other	
Proposals Deviation	84
Board Vacancy	85
Removal of Directors	85
Indemnification and Liability of Directors and Officers	85
Business Combinations	87

LEGAL MATTERS	88
<u>EXPERTS</u>	89
UNAUDITED PRO FORMA CONDENSED CONSOLIDATED FINANCIAL STATEMENTS	90
ETRIALS BUSINESS	101

TABLE OF CONTENTS

<u>(</u>	Dverview	101
<u> H</u>	History and Merger	101
<u>(</u>	General	101
<u>\</u>	Value Proposition	101
<u> </u>	Products	102
<u> </u>	<u>Sechnology Acquisitions</u>	104
<u>A</u>	Research and Development	104
<u>E</u>	Business Segments and Geographic Information	104
<u>(</u>	Customers	104
<u> </u>	Competition	105
<u>I</u>	ntellectual Property Rights	106
<u>P</u>	Potential Liability and Insurance	107
<u> </u>	Regulatory Matters	107
<u>E</u>	Employees	108
	Properties	108
<u>I</u>	Legal Proceedings	109
MANAGEMENT'S DISCUSSION AI	ND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF	
OPERATIONS FOR ETRIALS		110
<u>(</u>	Dverview	110
	Sources of Revenues	110
<u>(</u>	Cost of Revenues and Operating Expenses	111
	Foreign Currency	112
	Critical Accounting Policies and Estimates	112
	Revenue Recognition	112
	Accounting for Stock-Based Compensation	113
	Goodwill	113
<u>A</u>	Accounting for Income Taxes	114
<u> </u>	Results of Operations	114
	Liquidity and Capital Resources	116
	Contractual Obligations	117
<u>I</u>	nflation	118
<u>(</u>	Certain Factors That Might Affect Future Results	118
	Quantitative and Qualitative Disclosures about Market Risk	119
	AIN BENEFICIAL OWNERS AND MANAGEMENT	120
	Beneficial Ownership of etrials Shares	120
INDEX TO CONSOLIDATED FINAL	NCIAL STATEMENTS ETRIALS WORLDWIDE, INC.	F-1

<u>Appendix A – Agreement and Plan of Merger</u>

Appendix B – Form of Stockholder Support Agreement

Appendix C – Fairness Opinion of Emerging Growth Equities, Ltd.

Appendix D – Directors and Executive Officers of Merge Healthcare and Offeror

Appendix E – Section 262 of the Delaware General Corporate Law

Table of Contents

This Prospectus incorporates by reference important business and financial information about Merge Healthcare and its subsidiaries from documents filed with the SEC that have not been included in or delivered with this Prospectus. This information is available without charge at the SEC's website at www.sec.gov and at Merge Healthcare's website at www.merge.com, as well as from other sources. See "Where To Obtain More Information."

etrials stockholders also may request copies of these publicly filed documents from Merge Healthcare, without charge, upon written or oral request to Merge Healthcare's information agent for the Offer and Merger, Morrow & Co., LLC, at 470 West Avenue, Stamford, Connecticut 06902, 1-(800) 607-0088. In order to receive timely delivery of the documents, etrials stockholders must make such request no later than July 7, 2009, or five business days before the expiration date of the Offer, whichever is later.

This Prospectus does not constitute a solicitation of proxies for any meeting of stockholders of etrials. We are not asking you for a proxy and you are requested not to send us a proxy. Any solicitation of proxies that Merge Healthcare or etrials might make will be made only pursuant to separate proxy solicitation materials complying with the requirements of Section 14(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act").

WHERE TO OBTAIN MORE INFORMATION

Merge Healthcare and etrials file 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 or etrials file 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 and etrials' 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 and etrials' filings with the SEC are also available on their websites at www.merge.com and www.etrials.com, respectively. The contents of those websites are not incorporated by reference into this Prospectus.

Merge Healthcare has filed with the SEC a Registration Statement on Form S-4 to register the offer and sale of shares of Merge Healthcare Common Stock to be issued in the Offer and the Merger (the "Registration Statement"). This Prospectus is a part of that registration statement. Merge Healthcare may also file amendments to such registration statement. In addition, on June 16, 2009, Merge Healthcare filed with the SEC a Tender Offer Statement on Schedule TO under the Exchange Act, together with exhibits, to furnish certain information about the Offer. Merge Healthcare may file amendments to the Schedule TO. As allowed by SEC rules, this Prospectus does not contain all of the information in the Registration Statement or the Schedule TO or the exhibits to the Registration Statement or Schedule TO. You may obtain copies of the Form S-4 and Schedule TO (and any amendments to those documents) by contacting the information agent as directed on the back cover of this Prospectus.

The SEC allows Merge Healthcare to incorporate information into this Prospectus "by reference," which means that Merge Healthcare and Offeror can disclose important information to etrials stockholders 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.

Table of Contents

Merge Healthcare Filings (File No. 29486)

Merge Healthcare Information Incorporated by Reference Quarterly Report on Form 10-Q for fiscal quarter ended March 31, 2009, as filed with the SEC on May 8, 2009

Annual Report on Form 10-K for fiscal year ended 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

Period Covered or Date of Filing Fiscal quarter ended March 31, 2009

Fiscal year ended December 31, 2008

Filed with the SEC on:

- June 2, 2009
- April 30, 2009
- April 16, 2009
- April 6, 2009
- March 5, 2009
- February 17, 2009
- February 13, 2009
- January 7, 2009
- June 16, 2009
- July 6, 2009

Merge Healthcare also incorporates by reference into this Prospectus any additional documents that it may file with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act from the date of this Prospectus to the termination of the Offer. Nothing in this Prospectus shall be deemed to incorporate information furnished but not filed with the SEC.

Merge Healthcare has supplied all information contained or incorporated by reference in this Prospectus about Merge Healthcare, and etrials has supplied all information contained or incorporated by reference in this Prospectus about etrials.

FORWARD-LOOKING STATEMENTS

Information both included and incorporated by reference in this Prospectus may contain forward-looking statements, concerning, among other things, each of Merge Healthcare's and etrials' outlook, financial projections and business strategies, including regarding the Offer, the proposed Merger and the Surviving Corporation, all of which are subject to risks, uncertainties and assumptions. These forward-looking statements are identified by their use of terms such as

"intend," "plan," "may," "should," "will," "anticipate," "believe," "could," "estimate," "expect," "continue," "potential," "opportion 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. Neither Merge Healthcare nor etrials can guarantee that either actually will achieve these plans, intentions or expectations, including completing the Offer and the Merger on the terms summarized in this Prospectus. Forward-looking statements speak only as of the date they are made, and Merge Healthcare and etrials undertake no obligation to publicly update or revise any of them in light of new information, future events or otherwise. Factors that could have an adverse effect on operations and future prospects of Merge Healthcare and etrials or the completion of the Offer and the Merger include, but are not limited to:

-ii-

Table of Contents

.

- failure to satisfy the conditions to consummate the Offer and the Merger;
- the occurrence of any event, change or other circumstances that could give rise to the termination of the Agreement and Plan of Merger, dated May 30, 2009, among Merge Healthcare, Offeror and etrials (the "Merger Agreement");
 - the failure of the Offer or the Merger to close for any other reason;
 - the amount of the costs, fees, expenses and charges related to the Offer and the Merger;
 - the ability of Merge Healthcare to integrate etrials successfully;
- whether the transaction will result in the enhancement of value and benefits to customers and to Merge Healthcare's and etrials' stockholders;
 - general economic and business conditions;
 global economic growth and activity;
 industry conditions; and
 changes in laws or regulations.

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 and etrials or any person acting on their behalf are qualified by the cautionary statements in this section.

-iii-

Table of Contents

QUESTIONS AND ANSWERS

Below are some of the questions that you as a holder of Shares may have regarding the Offer and the Merger and answers to those questions. You are urged to carefully read the remainder of this Prospectus and the related letter of transmittal and the other documents to which we have referred because the information contained in this section and in the "Summary" is not complete. Additional important information is contained in the remainder of this Prospectus and the related letter of transmittal. See "Where To Obtain More Information."

As used in this Prospectus, unless otherwise indicated or the context requires, "Merge Healthcare" or "we" refers to Merge Healthcare Incorporated and its consolidated subsidiaries, "Offeror" refers to "Merge Acquisition Corp." or "Merger Sub", and "etrials" refers to etrials Worldwide, Inc. and its consolidated subsidiaries.

Who is offering to buy my Shares?

The Offer is made by Merge Acquisition Corp., a Delaware corporation formed for the purpose of making the Offer and consummating the Merger. Offeror is a wholly-owned subsidiary of Merge Healthcare.

Merge Healthcare develops software solutions that automate healthcare data and diagnostic workflow to create a more comprehensive electronic record of the patient experience. Merge Healthcare products, ranging from standards-based development toolkits to fully integrated clinical applications, have been used by healthcare providers worldwide for over 20 years.

Merge Healthcare goes to market through two different channels, placing it in a unique space in the healthcare market. The Merge OEM business unit sells toolkits, customizable applications and engineering services to modality and medical device manufacturers, pharmaceutical companies and health IT vendors. The Merge Fusion business unit sells workflow solutions and services to hospitals, physician practices and outpatient clinics directly and through distributors.

Merge Healthcare was founded in 1987 and was reincorporated in Delaware on December 5, 2008. It currently markets its products and services throughout the world. Merge Healthcare Common Stock is listed and traded on the NASDAQ Global Market under the symbol "MRGE."

What are the classes and amounts of etrials securities that Offeror is offering to acquire in the Offer?

The Offeror seeks to acquire all issued and outstanding shares of etrials common stock (the "Shares").

What will I receive for my Shares?

The Offeror is offering to exchange for each outstanding Share validly tendered pursuant to the Offer and not properly withdrawn:

- \$0.80 in cash, without interest, plus
- 0.3448 shares of Merge Healthcare Common Stock (collectively, the "Consideration"),

subject to the procedures described in this Prospectus and the related letter of transmittal (which together, as each may be amended, supplemented or otherwise modified from time to time, constitute the "Offer"). etrials stockholders who otherwise would be entitled to receive a fractional share of Merge Healthcare Common Stock will instead receive an amount in cash (without interest) equal to the amount of such fraction multiplied by \$2.610, rounded to the nearest

cent.

-iv-

What will I receive for my options to purchase Shares?

Holders of options to purchase Shares may not tender their options in the Offer. However, as a result of the Merger, all outstanding and unexercised stock options under etrials' stock option plans and agreements, including stock options held by executive officers and directors of etrials, will fully vest and become exercisable immediately prior to the closing of the Merger. Persons who exercise their stock options prior to the effective time of the Merger will be entitled to receive the Consideration, on the same basis as the other etrials stockholders. Unexercised stock options will be cancelled immediately prior to the effective time of the Merger and converted into the right to receive a net payment, if any, in cash. If the per share exercise price of an etrials stock option is less than \$1.70, the option holder will receive cash equal to the product of (A) \$1.70 less the applicable per share exercise price of the etrials stock option, and (B) the number of shares subject to the unexercised etrials stock option. An amount necessary to satisfy any applicable minimum withholding tax obligation will be withheld from the cash consideration to be received. If the per share exercise price of an etrials stock option will be cancelled at the closing of the Merger and the holder of such option will not receive any Consideration with respect thereto.

Will I have to pay any fee or commission to exchange Shares?

If you are the record owner of your Shares and you tender your Shares in the Offer, you will not have to pay any brokerage fees, commissions or similar expenses. If you own your Shares through a broker, dealer, commercial bank, trust company or other nominee and your broker, dealer, commercial bank, trust company or other nominee tenders your Shares on your behalf, your broker or such other nominee may charge a fee for doing so. You should consult your broker, dealer, commercial bank, trust company or other any charges will apply.

Why is Offeror making this Offer?

The purpose of the Offer is for Merge Healthcare to acquire control of, and ultimately the entire equity interest in and all the outstanding shares of, etrials. The Offer is the first step in Merge Healthcare's plan to acquire all of the outstanding Shares. Promptly after completion of the Offer, Merge Healthcare intends to consummate the Merger. The purpose of the Merger is for Merge Healthcare to acquire all Shares not acquired in the Offer. In the Merger, etrials stockholders who did not tender their Shares in the Offer will receive the Consideration. After the Merger, the Surviving Corporation will be a wholly-owned subsidiary of Merge Healthcare and the former etrials stockholders will no longer have any direct ownership interest in the Surviving Corporation.

What does the etrials board of directors recommend?

The etrials board of directors has unanimously (i) authorized the execution, delivery and performance of the Merger Agreement, (ii) approved, and declared advisable, the Merger Agreement, the Offer and the Merger, (iii) determined that the terms of the Offer and the Merger are fair to and in the best interests of etrials' stockholders, and (iv) recommended that the holders of Shares accept the Offer and tender their Shares pursuant to the Offer (the "etrials Recommendation").

A description of the reasons why the etrials board of directors approved the Offer is set forth in etrials' Solicitation/Recommendation Statement on Schedule 14D-9 that is being mailed to you together with this Prospectus.

As described below, the directors and executive officers of etrials and their affiliates currently beneficially own approximately 33% of the outstanding Shares. After reasonable inquiry and to the best of etrials' knowledge, each executive officer and director of etrials and its affiliates currently intends, subject to compliance with applicable law including Section 16(b) of the Exchange Act, to tender all Shares held of record or beneficially owned by such person to the Offeror pursuant to the Offer. These directors and executive officers of etrials and their affiliates (the

"Stockholders"), hold 3,621,299 shares of common stock (including 397,313 shares of restricted stock) and options to purchase 403,662 shares of common stock and have entered into Stockholder Support Agreements with Merge Healthcare pursuant to which they have agreed to accept the Offer with respect to all of their Shares and tender all of their Shares pursuant to the Offer, vote all their Shares in favor of approval of the Merger Agreement and each of the transactions contemplated thereby and not to sell or otherwise transfer their Shares other than in compliance with the Stockholder Support Agreement. See "Merger Agreement — The Stockholder Support Agreements."

What are the conditions of the Offer?

Offeror's obligation to accept for exchange and to exchange Shares validly tendered and not properly withdrawn in the Offer is subject to the satisfaction or waiver by Offeror of certain conditions, including the valid tender of at least a majority of the outstanding Fully Diluted Shares (the "Minimum Tender Condition") and the effectiveness of this Form S-4, as more fully described below under the heading "The Offer — Conditions to the Offer." The Merger Agreement defines Fully Diluted Shares to mean all outstanding securities entitled generally to vote in the election of directors of the Company on a fully diluted basis, after giving effect to the exercise or conversion of all options, rights and securities exercisable or convertible into such voting securities having an exercise price or conversion price less than the "Cash Value of the Offer Price," which is the greater of \$1.70 or an amount equal to the highest price per Share paid pursuant to the Offer.

Offeror may, without the consent of etrials, from time to time extend the Offer for increments of not more than five (5) business days if, at the scheduled expiration date, any of the conditions of the Offer shall not have been satisfied or waived until such time as such conditions are satisfied or waived. See "The Offer – Extension, Termination and Amendment."

Merge Healthcare and etrials cannot be certain when, or if, the conditions to the Offer will be satisfied or waived or whether or not the Offer will be completed. The conditions to the Offer are for the sole benefit of Merge Healthcare and Offeror and may be asserted by Merge Healthcare or Offeror or may be waived by Merge Healthcare or Offeror, by express and specific action to that effect, in whole or in part at any time and from time to time, in each case except for the Minimum Tender Condition which may only be waived by Merge Healthcare or Offeror with the express prior written consent of etrials.

How long will it take to complete the proposed transaction?

The transaction is expected to be completed in the third quarter of calendar year 2009, subject to the conditions described in "The Merger Agreement — Conditions to the Merger" and "The Offer —Conditions to the Offer."

Is Merge Healthcare's financial condition relevant to my decision to tender Shares in the Offer?

Yes. Merge Healthcare's financial condition is relevant to your decision to tender your Shares because part of the Consideration you will receive if your Shares are exchanged in the Offer will consist of shares of Merge Healthcare Common Stock, assuming you own at least three Shares. You should, therefore, consider Merge Healthcare's financial condition as you could become a Merge Healthcare stockholder through the Offer. You should also consider the likely effect that Merge Healthcare's acquisition of etrials could have on Merge Healthcare's financial condition. This Prospectus contains and/or incorporates by reference financial information regarding Merge Healthcare and etrials, all of which we encourage you to review.

When does the Offer expire? Can the Offer be extended and, if so, under what circumstances?

The Offer is scheduled to expire at 12:00 midnight, New York City time, at the end of July 14, 2009, which is the "Initial Expiration Date," unless further extended by Offeror. Any extension, delay, termination, waiver or amendment of the Offer will be followed as promptly as practicable by public announcement thereof to be made no later than 9:00 a.m., New York City time, on the next business day after the previously scheduled Expiration Date. During any such extension, all Shares previously tendered and not properly withdrawn will remain subject to the Offer, subject to the rights of a tendering stockholder to withdraw such stockholder's Shares. "Expiration Date" means the Initial Expiration Date, unless and until Offeror has extended the period during which the Offer is open, subject to the terms and conditions of the Merger Agreement, in which event the term "Expiration Date" means the latest time and date at which

the Offer, as so extended by Offeror, will expire.

Subject to the provisions of the Merger Agreement and the applicable rules and regulations of the SEC, Offeror may, without the consent of etrials, from time to time extend the Offer (A) in increments of not more than five (5) business days for one or more periods if, at the scheduled Expiration Date, any of the conditions of the Offer shall not have been satisfied or waived until the time as such conditions are satisfied or waived or (B) for any period required by any rule, regulation, interpretation or position of the SEC or the staff thereof applicable to the Offer. Offeror shall, at the request of etrials, extend the Offer for not less than five (5) business days if, at the initial Expiration Date or any subsequent scheduled Expiration Date, any of the conditions of the Offer have not been satisfied or waived. Offeror shall, if requested by etrials or Merge Healthcare, make available a subsequent offering period of not less than ten (10) business days; but Offeror shall not be required to make available a subsequent offering period if, prior to such period, Merge Healthcare and Offeror own more than 80% of the Fully Diluted Shares.

-vi-

Any decision to extend the Offer will be made public by an announcement regarding such extension as described under "The Offer — Extension, Termination and Amendment."

How do I tender my Shares?

To tender Shares into the Offer, you must deliver the certificates representing your Shares, together with a completed letter of transmittal and any other documents required by the letter of transmittal, to American Stock Transfer & Trust Company LLC, the exchange agent for the Offer, not later than the time the Offer expires. The letter of transmittal (and the instructions thereto) is enclosed with this Prospectus. If your Shares are held in street name (i.e., through a broker, dealer, commercial bank, trust company or other nominee), your Shares can be tendered by your nominee by book-entry transfer through the Depository Trust Company.

For a complete discussion of the procedures for tendering your Shares, please see the section of this Prospectus entitled "The Offer — Exchange of Shares; Delivery of Cash and Shares of Merge Healthcare Common Stock."

Until what time can I withdraw tendered Shares?

You may withdraw previously tendered Shares at any time prior to the expiration of the Offer. For a complete discussion of the procedures for withdrawing your Shares, please see the section of this Prospectus entitled "The Offer — Withdrawl Rights."

How do I withdraw previously tendered Shares?

To withdraw previously tendered Shares, you must deliver a written or facsimile notice of withdrawal with the required information to the exchange agent while you still have the right to withdraw. If you tendered Shares by giving instructions to a broker, dealer, commercial bank, trust company or other nominee, you must instruct the broker, dealer, commercial bank, trust company or other nominee to arrange for the withdrawal of your Shares. For a complete discussion on the procedures for withdrawing your Shares, including the applicable deadlines for effecting withdrawals, please see the section of this Prospectus entitled "The Offer — Withdrawl Rights."

When and how will I receive the Offer consideration in exchange for my tendered Shares?

Offeror will exchange all validly tendered and not properly withdrawn Shares promptly after the Expiration Date, subject to the terms thereof and the satisfaction or waiver of the conditions to the Offer, as set forth in the section of this Prospectus entitled "The Offer — Conditions to the Offer." Offeror will deliver the consideration for your validly tendered and not properly withdrawn Shares by depositing the cash and stock consideration therefor with the exchange agent, which will act as your agent for the purpose of receiving the Offer consideration from Offeror and transmitting such consideration to you. In all cases, an exchange of tendered Shares will be made only after timely receipt by the exchange agent of certificates for such Shares (or a confirmation of a book-entry transfer of such Shares as described in the section of this Prospectus entitled "The Offer — Procedure for Tendering") and a properly completed and duly executed letter of transmittal and any other required documents for such Shares.

What are the United States federal income tax consequences of the Offer and the Merger to me?

The sale or exchange of Shares for cash and Merge Healthcare Common Stock pursuant to the Offer or the Merger will be a taxable transaction for U.S. federal income tax purposes. In general, you will recognize gain or loss, equal, in each case, to the difference between (1) the sum of (a) the fair market value of the shares of Merge Healthcare Common Stock received at the effective time of the exchange pursuant to the Offer or the Merger and (b) the cash proceeds received pursuant to the Offer or the Merger, as applicable and (2) your adjusted tax basis in your Shares

surrendered in exchange therefor. If the Shares sold or exchanged constitute capital assets, such gain or loss will be capital gain or loss, and will be long-term capital gain or loss if your holding period for such Shares is more than one year at the time of consummation of the Offer or the Merger, as the case may be. Gain or loss generally will be determined separately for each block of Shares (i.e., Shares acquired at the same cost in a single transaction) exchanged pursuant to either the Offer or the Merger. Because the tax consequences of the Offer and the Merger are complex and may vary depending on your particular circumstances, we recommend that you consult your own tax advisor concerning the federal (and any state, local or foreign) tax consequences to you of the Offer and the Merger. Please see "The Merger — Material U.S. Federal Income Tax Consequences."

-vii-

Table of Contents

Why does the cover page to this Prospectus state that this Offer is subject to change and that the registration statement filed with the SEC is not yet effective? Does this mean that the Offer has not commenced?

No. As permitted under SEC rules, we commenced the Offer without the registration statement, of which this Prospectus is a part, having been declared effective by the SEC. We cannot, however, complete the Offer and accept for exchange any Shares tendered in the Offer until the registration statement is declared effective by the SEC and the other conditions to the Offer have been satisfied or, where permissible, waived.

Do I have appraisal rights in connection with the Offer or the Merger?

etrials stockholders do not have appraisal rights in connection with the Offer, but do have appraisal rights in connection with the Merger.

etrials stockholders will have the right, under Section 262 of the DGCL, to dissent and demand appraisal of their Shares in connection with the Merger, if the stockholders perfect their appraisal rights. Under Section 262, dissenting stockholders who (i) do not vote in favor of the Merger, in the event that a stockholder vote is necessary, and (ii) comply with the applicable statutory requirements and procedures, may be entitled to receive a judicial determination of the fair value of their Shares not tendered nor accepted by Offeror in the Offer (exclusive of any element of value arising from the accomplishment or expectation of the Merger) and to receive payment of such fair value in cash, together with a fair rate of interest, if any. This fair value may be greater than, less than or equal to the Consideration. For more information about your appraisal rights, see "See "The Merger — Appraisal Rights."

Where can I find more information about Merge Healthcare and etrials?

You can find more information about Merge Healthcare and etrials from various sources described in the section of this Prospectus entitled "Where To Obtain More Information."

-viii-

SUMMARY

This section summarizes material information presented in greater detail elsewhere in this Prospectus. However, this summary does not contain all of the information that may be important to etrials stockholders. You are urged to carefully read the remainder of this Prospectus and the related letter of transmittal and the other documents to which we have referred because the information in this section is not complete. See "Where To Obtain More Information."

The Offer (Page 68)

Under the terms of the Offer, each etrials stockholder may elect to receive, for each outstanding Share validly tendered in the Offer and not withdrawn:

- \$0.80 in cash, without interest, plus
- 0.3448 shares of Merge Healthcare Common Stock (collectively, the "Consideration"),

subject to the procedures described in this Prospectus and the related letter of transmittal (which together, as each may be amended, supplemented or otherwise modified from time to time, constitute the "Offer").

etrials stockholders will not receive any fractional shares of Merge Healthcare Common Stock in the Offer. Instead of receiving a fractional share of Merge Healthcare Common Stock to which etrials stockholders otherwise would be entitled, tendering etrials stockholders will receive an amount in cash (without interest) equal to such fraction multiplied by \$2.610, rounded to the nearest cent.

Holders of options to purchase Shares may not tender their options in the Offer. However, as a result of the Merger, all outstanding and unexercised stock options under etrials' stock option plans and agreements, including stock options held by executive officers and directors of etrials, will fully vest and become exercisable immediately prior to the closing of the Merger. Persons who exercise their stock options prior to the effective time of the Merger will be entitled to receive the Consideration on the same basis as the other etrials stockholders. Unexercised stock options will be cancelled immediately prior to the effective time of the Merger and converted into the right to receive a net payment, if any, in cash. If the per share exercise price of an etrials stock option is less than \$1.70, the option holder will receive cash equal to the product of (A) \$1.70 less the applicable per share exercise price of the etrials stock option. An amount necessary to satisfy any applicable minimum withholding tax obligation will be withheld from the cash consideration to be received. If the per share exercise price of an etrials stock option will be cancelled at the closing of the Merger and the holder of such option will not receive any Consideration with respect thereto.

Purpose of the Offer; The Merger (Page 76)

Merge Healthcare intends, promptly after the completion of the Offer, to have Offeror merge into etrials, with etrials surviving the Merger. In the Merger, etrials stockholders who did not tender their Shares in the Offer will receive the Consideration. If Offeror owns 90% or more of the outstanding Shares following consummation of the Offer and any subsequent offering period and exercise of an irrevocable option to purchase additional newly issued shares (the "Top-Up Option"), if exercised, Merge Healthcare intends to consummate the Merger as a "short-form" merger pursuant to Section 253 of the Delaware General Corporation Law ("DGCL"). In this case, neither the approval of any holder of Shares nor the approval of the etrials board of directors will be required. If Offeror owns less than 90% of the outstanding Shares following the consummation of the Offer and does not exercise the Top-Up Option, the etrials board of directors will submit the Merger to etrials' stockholders for approval at a stockholder meeting convened for that purpose in accordance with the DGCL. Merge Healthcare will, upon consummation of the Offer, have sufficient

voting power to ensure approval of the Merger at the stockholders' meeting without the affirmative vote of any other etrials stockholder. After the Merger, the Surviving Corporation will be a wholly-owned subsidiary of Merge Healthcare and the former etrials stockholders will not have any direct equity ownership interest in the Surviving Corporation. In the Merger, each issued and outstanding Share (other than dissenting Shares) will be converted into the right to receive the greater of the Consideration or the highest price per Share paid pursuant to the Offer, subject to appraisal rights under Delaware law, as more fully described under "The Offer — Purpose of the Offer; The Merger."

The Companies (Page 28)

Merge Healthcare

Merge Healthcare Incorporated 6737 West Washington Street Milwaukee, Wisconsin 53214-5650 (414) 977-4000

Merge Healthcare, a Delaware corporation, develops software solutions that automate healthcare data and diagnostic workflow to create a more comprehensive electronic record of the patient experience. Merge Healthcare products, ranging from standards-based development toolkits to fully integrated clinical applications, have been used by healthcare providers worldwide for over 20 years.

Merge Healthcare goes to market through two different channels, placing it in a unique space in the healthcare market. The Merge OEM business unit sells toolkits, customizable applications and engineering services to modality and medical device manufacturers, pharmaceutical companies and health IT vendors. The Merge Fusion business unit sells workflow solutions and services to hospitals, physician practices and outpatient clinics directly and through distributors.

Merge Healthcare was founded in 1987 and was reincorporated in Delaware on December 5, 2008. It currently markets its products and services throughout the world. Merge Healthcare Common Stock is listed and traded on the NASDAQ Global Market under the symbol "MRGE."

Merge Healthcare maintains a site on the Internet at www.merge.com; however, information found on Merge Healthcare's website is not part of this Prospectus.

Offeror

Merge Acquisition Corp. c/o Merge Healthcare Incorporated 6737 West Washington Street Milwaukee, Wisconsin 53214-5650 (414) 977-4000

Offeror, a Delaware corporation, is a wholly-owned subsidiary of Merge Healthcare. Offeror is newly formed, and was organized solely for the purpose of making the Offer and consummating the Merger. Offeror has engaged in no business activities to date and it has no material assets or liabilities of any kind, other than those incident to its formation and those incurred in connection with the Offer and the Merger.

etrials

etrials Worldwide, Inc. 4000 Aerial Center Parkway Morrisville, NC 27560 (919) 653-3400

etrials Worldwide Inc., a Delaware corporation, is a leading provider of eClinical software and services to pharmaceutical, biotechnology, medical device, and contract research organizations. It was established in 1988 and

has participated in over 900 clinical trials in over 70 countries. etrials provides the information systems backbone for a clinical trial by coordinating data capture, logistics, patient interaction and trial management through Web-based tools.

etrials differentiates itself by offering a flexible and integrated software-as-a-service (SaaS) platform that includes electronic data capture (EDC), interactive voice and Web response (IVR/IWR) and electronic patient diaries (eDiaries). These solutions allow for real-time acquisition of data from multiple sources (clinical trial sites, patients and labs) and then the quick compilation of these for fast decision-making.

etrials is located in the greater Raleigh area, North Carolina.

Reasons for the Offer (Page 76)

The purpose of the Offer is for Merge Healthcare to acquire control of, and ultimately the entire equity interest in and all the outstanding shares of, etrials. Offeror is making the Offer and Merge Healthcare plans to complete the Merger because it believes that the acquisition of etrials by Merge Healthcare will provide significant beneficial long-term growth prospects and increased stockholder value for the combined company. Merge Healthcare believes that the Offer and the Merger will increase its market presence and opportunities, enhance its product mix, increase operating efficiencies, combine significant management talent and enhance employee opportunities.

Expiration of the Offer (Page 68)

The Offer is scheduled to expire at 12:00 midnight, New York City time, at the end of July 14, 2009, which is the "Initial Expiration Date," unless further extended by Offeror. "Expiration Date" means the Initial Expiration Date, unless and until Offeror has extended the period during which the Offer is open, subject to the terms and conditions of the Merger Agreement, in which event the term "Expiration Date" means the latest time and date at which the Offer, as so extended by Offeror, will expire.

Extension, Termination or Amendment (Page 69)

Subject to the provisions of the Merger Agreement and the applicable rules and regulations of the SEC, Offeror may, without the consent of etrials, from time to time extend the Offer (A) in increments of not more than five (5) business days for one or more periods if, at the scheduled Expiration Date, any of the conditions of the Offer shall not have been satisfied or waived until the time as such conditions are satisfied or waived or (B) for any period required by any rule, regulation, interpretation or position of the SEC or the staff thereof applicable to the Offer. Offeror shall, at the request of etrials, extend the Offer for not less than five (5) business days if, at the initial Expiration Date or any subsequent scheduled Expiration Date, any of the conditions of the Offer have not been satisfied or waived. Offeror shall, if requested by etrials or Merge Healthcare, make available a subsequent offering period of not less than ten (10) business days; but Offeror shall not be required to make available a subsequent offering period if, prior to such period, Merge Healthcare and Offeror own more than 80% of the Shares outstanding on a Fully Diluted Basis.

Offeror will effect any extension, termination, amendment or delay by giving oral or written notice to the exchange agent and by making a public announcement as promptly as practicable thereafter as described under "The Offer — Extension, Termination and Amendment." In the case of an extension, any such announcement will be issued no later than 9:00 a.m., New York City time, on the next business day following the previously scheduled Expiration Date. Subject to applicable law (including Rules 14d-4(d) and 14d-6(c) under the Exchange Act, which require that any material change in the information published, sent or given to stockholders in connection with the Offer be promptly disseminated to stockholders in a manner reasonably designed to inform them of such change) and without limiting the manner in which Offeror may choose to make any public announcement, Offeror assumes no obligation to publish, advertise or otherwise communicate any such public announcement of this type other than by issuing a press release. During any extension, Shares previously tendered and not properly withdrawn will remain subject to the Offer, subject to the right of each etrials stockholder to withdraw previously tendered Shares.

The Merger Agreement provides that the agreement may be terminated if the Offer has not been consummated on or before July 29, 2009 (or August 28, 2009 in certain circumstances) and Offeror may not extend the Offer beyond such date without the prior written consent of etrials.

Subject to applicable SEC rules and regulations, Offeror also reserves the right, in its sole discretion, at any time or from time to time to waive any condition identified as subject to waiver in "The Offer — Conditions to the Offer" by giving oral or written notice of such waiver to the exchange agent.

3

Offeror may elect to provide subsequent offering periods of up to five business days (but no fewer than three business days) after the acceptance of Shares in the Offer in accordance with Rule 14d-11 under the Exchange Act if, on the expiration date of the offer, all of the conditions to the Offer have been satisfied or waived. If Offeror exercises its right to use a subsequent offering period, Offeror will first consummate the exchange with respect to the Shares validly tendered and not properly withdrawn in the initial offer period. You will not have the right to withdraw any Shares of etrials common stock that you tender in the subsequent offering period. If Offeror elects to provide a subsequent offering period, Offeror will publicly announce the results of the Offer, including the approximate number and percentage of Shares deposited to date no later than 9:00 a.m. New York City time on the next business day after the previously scheduled expiration and immediately begin the subsequent offering period.

Withdrawal Rights (Page 70)

Tendered Shares may be withdrawn at any time prior to the Expiration Date. Additionally, if Offeror has not agreed to accept the Shares for exchange on or prior to the 60th day after the Offer has commenced, etrials stockholders may thereafter withdraw their Shares from tender at any time after such date until Offeror accepts the Shares for exchange. Once Offeror accepts Shares for exchange pursuant to the Offer, all tenders not previously withdrawn become irrevocable.

Procedure for Tendering (Page 71)

To validly tender Shares pursuant to the Offer, etrials stockholders must:

- deliver a properly completed and duly executed letter of transmittal, along with any required signature guarantees and any other required documents, and certificates for tendered Shares to the exchange agent at its address set forth on the back cover of this Prospectus, all of which must be received by the exchange agent prior to the Expiration Date;
- deliver an agent's message in connection with a book-entry transfer, and any other required documents, to the exchange agent at its address set forth on the back cover of this Prospectus, and Shares must be tendered pursuant to the procedures for book-entry tender set forth herein (and a confirmation of receipt of that tender received), and in each case be received by the exchange agent prior to the Expiration Date; or
 - comply with the guaranteed delivery procedures set forth in "The Offer Guaranteed Delivery."

etrials stockholders who hold Shares in "street name" through a bank, broker or other nominee holder, and desire to tender their Shares pursuant to the Offer, should instruct the nominee holder to do so prior to the Expiration Date.

Exchange of Shares (Page 70)

Upon the terms and subject to the conditions of the Offer (including, if the Offer is extended or amended, the terms and conditions of any extension or amendment), as soon as practicable following the Expiration Date, Offeror will accept for exchange, and will exchange, all Shares validly tendered and not withdrawn prior to the Expiration Date.

Top-Up Option (Page 68)

Under the Merger Agreement, Offeror has a Top-Up Option to purchase up to a number of additional Shares such that following the consummation of the Offer, Merge Healthcare and Offeror shall own one Share more than 90% of the Fully Diluted Shares. The Top-Up Option's per share purchase price, which is equal to the Cash Value of the Offer Price, may be paid in cash, cashiers check or by wire transfer.

Interests of Certain Persons (Page 49)

Certain etrials directors, officers and stockholders have interests in the Offer and the Merger that are different from, or are in addition to, those of other stockholders. These interests include: the accelerated vesting of stock options and other unvested stock-based awards previously issued to certain etrials directors and officers; current and future employment arrangements; severance benefits; and the indemnification of directors and officers of etrials against certain liabilities.

The boards of directors of etrials and Merge Healthcare were aware of these interests and considered them, among other matters, when they approved the Offer, the Merger and the Merger Agreement.

Regulatory Approvals (Page 53)

Merge Healthcare and etrials have agreed to use reasonable efforts to do all things necessary, proper or advisable to consummate the Offer and the Merger, including obtaining all necessary waivers, consents and approvals from governmental entities and making all necessary registrations and filings as may be necessary to obtain an approval or waiver from, or to avoid an action or proceeding by, any governmental entity. This includes, if such filing is required, filing with the Department of Justice and the Federal Trade Commission a Notification and Report Form pursuant to the Hart-Scott-Rodino Act (the "HSR Act"); however, the purchase of Shares pursuant to the Offer is not subject to such requirements because the size of the transaction falls below the current statutory thresholds for pre-merger notification under the HSR Act. Merge Healthcare and etrials are not aware of any material governmental approvals or actions that are required for the Merger. Such legal matters and regulatory issues are discussed under "The Merger — Regulatory Approvals Required for the Merger."

Source and Amount of Funds (Page 78)

The Offer and the Merger are not conditioned upon any financing arrangements or contingencies.

Assuming all incentive equity awards tender into the Offer, and all outstanding vested in-the-money stock options remain unexercised prior to the Merger, the Offeror estimates the amounts required to purchase the then outstanding Shares and fund transaction-related fees and expenses will approximate 3.8 million shares of Merge Healthcare Common Stock and \$11.6 million of cash.

Merge Healthcare expects to have sufficient cash on hand to complete the transactions contemplated by the Offer and the Merger and to pay fees, expenses and other related amounts.

Appraisal Rights (Page 53)

Under Delaware law, you will not have any appraisal rights in connection with the Offer. However, the Merger is expected to entitle etrials stockholders to appraisal rights under Section 262 of the DGCL. A copy of the appraisal rights provisions of the DGCL is attached as Appendix E to this prospectus. See "The Merger — Appraisal Rights."

Comparative Market Price Data (Page 26)

Shares of Merge Healthcare Common Stock are listed on the NASDAQ Global Market under the symbol "MRGE." The etrials Shares trade on the NASDAQ Global Market under the symbol "ETWC." On May 29, 2009, the last full trading day before the public announcement of Merge Healthcare's proposal to acquire etrials, the closing sales price of Merge Healthcare Common Stock on the NASDAQ Global Market was \$3.14 and the closing sales price of etrials common stock on the NASDAQ Global Market was \$1.27. etrials stockholders should obtain current market quotations for Merge Healthcare Common Stock and the Shares before deciding whether to tender Shares in the Offer. See "Comparative Market Price and Dividend Data" and "Comparative Historical and Summary Unaudited Pro Forma Per Share Information" for a discussion of per share data.

Ownership of Merge Healthcare After the Offer and the Merger (Page 74)

Merge Healthcare estimates that if all Shares (assuming all outstanding vested in-the-money stock options remain unexercised prior to the Merger) are exchanged pursuant to the Offer and the Merger, former etrials stockholders

would own, in the aggregate, approximately 6.3% of the shares of Merge Healthcare Common Stock outstanding after the Merger.

Comparison of Stockholders' Rights (Page 82)

The rights of Merge Healthcare stockholders are different in some respects from the rights of etrials stockholders. Therefore, etrials stockholders will have different rights as stockholders once they become Merge Healthcare stockholders. The differences are described in more detail under "Comparison of Stockholders' Rights."

5

Table of Contents

Material U.S. Federal Income Tax Consequences (Page 51)

The Offer and the Merger, taken together, generally will be a taxable transaction within the meaning of the Internal Revenue Code of 1986, as amended (the "Code"). Neither the Offer nor the Merger is conditioned on the receipt of an opinion of counsel regarding the U.S. federal income tax treatment of the Offer and the Merger. A U.S. holder of etrials stock that holds etrials stock as a capital asset and receives Merge Healthcare Common Stock and cash in the Offer or the Merger generally will recognize capital gain or loss equal to the difference, if any, between (1) the sum of the fair market value of Merge Healthcare Common Stock at the effective time of the exchange and cash, including any cash received in lieu of fractional shares of Merge Healthcare Common Stock, received in the Offer or the Merger, and (2) such holder's adjusted tax basis in its etrials stock exchanged therefor.

Although not currently contemplated, a merger of etrials with and into Merge Healthcare or one of its affiliates after the Merger, if viewed as occurring as part of an integrated plan with the Offer and the Merger, could cause the Offer and the Merger to be treated as an overall tax-free reorganization for U.S federal income tax purposes.

Each etrials stockholder should read the discussion under "The Merger — Material U.S. Federal Income Tax Consequences" and should consult its own tax advisor for a full understanding of the tax consequences of the Offer and the Merger to such stockholder.

Accounting Treatment (Page 53)

Merge Healthcare intends to treat the merger as an acquisition by Merge Healthcare of etrials under U.S. generally accepted accounting principles. Under the acquisition method of accounting, the assets and liabilities of etrials will be recorded, as of the completion of the Merger, at their respective fair values in the financial statements of Merge Healthcare. Financial statements and reported results of operations of Merge Healthcare issued after the completion of the Merger will reflect these values, but will not be restated retroactively to reflect the historical financial position or results of operations of etrials.

Questions about the Offer and the Merger

etrials stockholders should contact the information agent for the Offer, at the following address and telephone numbers with any questions about the Offer or the Merger, or to request additional copies of this Prospectus or other documents:

470 West Avenue

Stamford, CT 06902

Banks and Brokerage Firms, Please Call: (203) 658-9400

Holders Call Toll Free: (800) 607-0088

Table of Contents

RISK FACTORS

etrials stockholders should carefully read this Prospectus and the other documents referred to or incorporated by reference into this Prospectus, including in particular the following risk factors, in deciding whether to tender Shares pursuant to the Offer.

Risk Factors Relating to the Offer

The market price of Merge Healthcare Common Stock may decline as a result of Merge Healthcare's acquisition of etrials.

The market price of Merge Healthcare Common Stock may decline after the Offer and Merger are announced as well as after completion. Some of the issues that Merge Healthcare could face are:

- the integration of etrials' business is unsuccessful or takes longer or is more disruptive than anticipated;
- Merge Healthcare does not achieve the expected synergies or other benefits of the etrials acquisition as rapidly or to the extent anticipated, if at all;
- the effect of Merge Healthcare's acquisition of etrials on Merge Healthcare's financial results does not meet the expectations of Merge, financial analysts or investors; or
 - after Merge Healthcare acquires etrials, etrials' business does not perform as anticipated.

As of May 31, 2009, there were 56,772,006 shares of Merge Healthcare Common Stock issued, including 479,997 shares subject to restricted stock awards and 15,414 shares held in treasury, and held of record by approximately 284 stockholders. On such date, 4,528,229 shares of Merge Healthcare Common Stock were subject to outstanding options. In connection with the Offer and Merger, Merge Healthcare estimates that it could issue up to approximately 3,814,916 additional shares of Merge Healthcare Common Stock. The increase in the number of outstanding shares of Merge Healthcare 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 Merge Healthcare Common Stock.

The value of the Consideration may fluctuate prior to the Expiration Date.

As a result of the fixed exchange ratio of the Offer, the value of the Consideration will fluctuate prior to the Expiration Date, if and as the market price of Merge Healthcare Common Stock fluctuates. If the price per share of Merge Healthcare Common Stock declines, the value of the Consideration to etrials stockholders will decline.

Even if the Offer is completed, full integration of etrials' operations with Merge Healthcare's may be delayed if Offeror does not acquire at least 90% of the issued and outstanding Shares pursuant to the Offer.

The Offer is subject to a condition that, before the Expiration Date, there shall have been validly tendered and not properly withdrawn at least a majority of the Shares on a fully diluted basis. If Offeror acquires at least 90% of the issued and outstanding Shares, the Merger will be able to be effected as a "short-form merger" under Delaware law. A short-form merger would enable Merge Healthcare to complete the acquisition of etrials without any action on the part of the other holders of Shares. If Merge Healthcare does not acquire 90% of the issued and outstanding Shares pursuant to the Offer or the Top-Up Option, if exercised, etrials will be required to hold a stockholder meeting in order to obtain the approval of etrials stockholders to consummate the Merger. Although this would not prevent the Merger from occurring because Offeror would hold sufficient Shares to approve the Merger, it would delay the

completion of the Merger and could delay the realization of some or all of the anticipated benefits from integrating etrials' operations with Merge Healthcare's operations.

7

Merge Healthcare's 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 Offer or the Merger would cause a default or violate an anti-assignment, change of control or similar clause in such agreements. If this happens, Merge Healthcare may have to seek to replace that agreement with a new agreement or make additional payments under such agreements. However, Merge Healthcare 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 the costs to Merge Healthcare of operating etrials' business or prevent Merge Healthcare from operating etrials' business.

etrials stockholders who receive Merge Healthcare Common Stock in the Offer will become Merge Healthcare stockholders. Merge Healthcare Common Stock may be affected by different factors than the factors that affect the Shares, and holders will have different rights than those they have as etrials stockholders.

Upon completion of the Offer, etrials stockholders receiving shares of Merge Healthcare Common Stock will become stockholders of Merge. Merge Healthcare's business differs from that of etrials, and Merge Healthcare's results of operations and the trading price of Merge Healthcare Common Stock may be adversely affected by factors different from those that would affect etrials' results of operations and stock price.

In addition, holders of shares of Merge Healthcare Common Stock will have different rights as stockholders than the rights they had as etrials stockholders before the Offer or the Merger. For a detailed comparison of the rights of Merge Healthcare stockholders compared to the rights of etrials stockholders, see "Comparison of Stockholders' Rights."

The receipt of shares of Merge Healthcare Common Stock in the Offer and/or the Merger will be taxable to etrials stockholders.

The receipt of Merge Healthcare Common Stock and cash in exchange for etrials stock in the Offer or the Merger generally will be a taxable transaction for U.S. federal income tax purposes. A U.S. holder of etrials stock who holds etrials stock as a capital asset and receives Merge Healthcare Common Stock and cash in the Offer or the Merger generally will recognize capital gain or loss equal to the difference, if any, between (1) the sum of the fair market value of Merge Healthcare Common Stock at the effective time of the exchange and cash, including any cash received in lieu of fractional shares of Merge Healthcare Common Stock received in the Offer or the Merger, and (2) such holder's adjusted tax basis in its etrials stock exchanged therefor. Gain or loss and holding period will be determined separately for each block of etrials stock, i.e., shares acquired at the same cost in a single transaction, exchanged in the exchange. Any capital gain or loss will be long-term capital gain or loss if the U.S. holder's holding period for its etrials stock is more than one year at the time of the exchange. Currently, long-term capital gain for non-corporate taxpayers is taxed at a maximum federal income tax rate of 15%. If the U.S. holder has held its etrials stock for one year or less at the time of the exchange, any capital gain or loss will be short-term capital gain or loss. The deductibility of capital losses is subject to certain limitations. A U.S. holder's aggregate tax basis in its Merge Healthcare Common Stock received in the Offer or the Merger will equal the fair market value of such stock at the effective time of such exchange, and the holder's holding period for such stock will begin on the day after such exchange.

A merger of etrials with and into Merge Healthcare or one of its affiliates subsequent to the Merger, if viewed as occurring as part of an integrated plan with the Offer and the Merger, could cause the Merger to be treated as an overall tax-free reorganization for U.S. federal income tax purposes. Merge Healthcare has no present plan or intent to merge etrials with and into Merge Healthcare or any of its affiliates subsequent to the Merger.

etrials stockholders should consult their tax advisors to determine the specific tax consequences to them of the Offer and the Merger, including any federal, state, local, foreign or other tax consequences, and any tax return filing or other reporting requirements.

Table of Contents

The transaction may adversely affect the liquidity and value of the Shares not tendered.

If the Offer is completed but all Shares are not tendered in the Offer, the number of etrials stockholders and the number of Shares publicly held will be greatly reduced. As a result, the closing of the Offer could adversely affect the liquidity and market value of the remaining Shares held by the public. In addition, following completion of the Offer, subject to the rules of NASDAQ and the SEC, etrials may seek to delist the Shares from NASDAQ and may seek to discontinue its reporting obligations under the Exchange Act. As a result of any such actions, Shares not tendered pursuant to the Offer may become illiquid and may be of reduced value. See "The Offer — Plans for etrials."

If the Offer and the Merger are not completed, Merge Healthcare's and etrials' stock prices and future businesses and operations could be harmed.

Merge Healthcare's and etrials' obligations to complete the Offer and the Merger are subject to conditions, many of which are beyond the control of Merge Healthcare and etrials. If the Offer and the Merger are not completed for any reason, each company may be subject to a number of material risks, including the following:

- etrials may be required to pay a termination fee or expense reimbursement upon termination of the Merger Agreement under certain circumstances;
 - the price of Merge Healthcare Common Stock and/or the Shares may decline;
- costs related to the Offer and the Merger, such as financial advisory, legal, accounting and printing fees, must be paid even if the Offer and the Merger are not completed; and
- if the Offer and the Merger are not completed, Merge Healthcare and etrials would fail to derive the benefits expected to result from the Offer and the Merger.

In addition, if the Offer and the Merger are terminated, either company may be unable to find a partner willing to engage in a similar transaction on terms as favorable as those set forth in the Merger Agreement, or at all. This could limit each company's ability to pursue its respective strategic goals.

Uncertainty regarding the Offer and the Merger may cause customers, suppliers and channel partners to delay or defer decisions concerning Merge Healthcare and etrials and adversely affect each company's business, financial condition and operating results.

The Offer and the Merger will occur only if stated conditions are met, many of which are outside the control of Merge Healthcare and etrials, and both parties also have rights to terminate the Merger Agreement under specified circumstances. Accordingly, there may be uncertainty regarding the completion of the Merger. This uncertainty may cause customers and suppliers to delay or defer decisions concerning Merge Healthcare or etrials products, which could negatively affect their respective businesses. Customers and suppliers may also seek to change existing agreements with Merge Healthcare or etrials as a result of the Merger. Any delay or deferral of those decisions or changes in existing agreements could have a material adverse effect on the respective businesses of Merge Healthcare and etrials, regardless of whether the Merger is ultimately completed. Moreover, diversion of management focus and resources from the day-to-day operation of the business to matters relating to the Offer and the Merger could have a material adverse effect on each company's business, regardless of whether the Offer and the Merger are completed.

etrials officers and directors may have conflicts of interest that may influence them to support or approve the Offer and the Merger.

The directors and officers of etrials have interests in the Offer and Merger that are different from, or in addition to, those of etrials stockholders. The directors and officers of etrials could be more likely to recommend and approve the Offer and the Merger than if they did not hold these interests. etrials stockholders should consider whether these interests might have influenced these directors and officers to support or recommend the Offer and the Merger. These interests are more fully described under "The Merger—Interests of etrials Management and Board of Directors."

The termination fee and restrictions on solicitation contained in the Merger Agreement may discourage other companies from trying to acquire etrials.

Until the completion of the Merger, with limited exceptions, the Merger Agreement prohibits etrials from entering into an alternative acquisition transaction with, or soliciting any alternative acquisition proposal from, another party. etrials has agreed to pay Merge Healthcare a termination fee of \$500,000, plus reimbursement of reasonable out-of-pocket expenses up to \$250,000, in specified circumstances, including where etrials' board of directors withdraws its support of the Offer and the Merger to enter into a business combination with a third party. All of the directors and executive officers of etrials and certain stockholders of etrials who collectively own approximately 33% of the outstanding Shares have agreed in the Stockholder Support Agreements to tender their Shares in the Offer and to vote their Shares in favor of the Merger Agreement and against any competing acquisition transaction. These provisions could discourage other companies from trying to acquire etrials even though those other companies might be willing to offer greater value to etrials stockholders than Merge Healthcare has offered in the Offer and the Merger.

Merge Healthcare and etrials expect to incur significant costs associated with the Offer and Merger.

Merge Healthcare estimates that it will incur direct transaction costs of approximately \$0.4 million associated with the Offer and the Merger, 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 by Merge Healthcare. In addition, etrials estimates that it will incur direct transaction costs of approximately \$1.8 million, which will be expensed as incurred. Merge Healthcare and etrials believe the combined entity may incur charges to operations, which are not currently reasonably estimable, in the quarter in which the Merger is completed or the following quarters, to reflect costs associated with integrating the two companies. The combined company may incur additional material charges in subsequent quarters to reflect additional costs associated with the Merger. Merge Healthcare and etrials anticipate that the combination will require significant cash outflows for acquisition and integration related costs. If the benefits of the Merger do not exceed the costs of integrating the businesses of Merge Healthcare and etrials, the combined company's financial results may be adversely affected.

Litigation related to the Offer and the Merger may prevent or delay the completion of the Offer and the closing of the Merger, may result in significant monetary damages or may otherwise negatively impact the business and operations of Merge Healthcare and etrials.

Fluctuation in the price of Merge Healthcare or etrials common stock may expose each company to the risk of securities class-action lawsuits. Even if such litigation is ultimately proven to lack merit, these actions could prevent or delay the acceptance of Shares pursuant to the Offer and the closing of the Merger. Any conclusion of such litigation in a manner adverse to Merge Healthcare or etrials could have a material adverse effect on each company's business, financial condition and results of operations. In addition, the cost of defending this litigation, even if resolved favorably, could be substantial. Such litigation could also substantially divert the attention of management and resources in general. Furthermore, uncertainties resulting from the initiation and continuation of any litigation could harm the ability of Merge Healthcare or etrials to compete in the marketplace.

Risk Factors Relating to etrials and the Merger

There is no guarantee that the Offer or the Merger will be completed.

The Offer and the Merger are subject to a number of conditions, including the tender of at least a majority of the outstanding Shares. There is no assurance that this or any other condition to the completion of the Offer or the Merger will be satisfied. If the Merger is not completed, etrials will face the same operational challenges facing it prior to the execution of the Merger Agreement, including an accumulated deficit, possible continuing operating losses and a lack

of profitability.

10

Table of Contents

etrials has had recurring losses from operations and might never achieve or maintain profitability.

At March 31, 2009, etrials had an accumulated deficit of approximately \$46.7 million, including a net loss of approximately \$1.0 million for the three months ended March 31, 2009. etrials might not ever be able to achieve or maintain profitability.

Current conditions in the global economy and the major industries it serves might materially and adversely affect etrials' business and results of operations.

etrials' business and operating results might be adversely affected by worldwide economic conditions and, in particular, conditions in the pharmaceutical, biotechnology and medical device industries it serves. 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, etrials' clients might experience deterioration of their businesses, cash flow shortages, and difficulty obtaining financing. As a result, existing or potential clients might delay or cancel plans to purchase etrials' products and services and might not be able to fulfill their obligations to etrials in a timely fashion. For example, in December 2008, etrials had to pursue litigation against two former customers in excess of \$500,000, as described in "etrials Business — Legal Proceedings." Contract cancellations could affect etrials' ability to fully recover its contract costs. If the global economic slowdown continues for a significant period or there is significant further deterioration in the global economy, etrials' financial position and cash flows could be materially adversely affected.

etrials might require additional financing to fund operations or potential acquisitions. If financing is not available, etrials might not be able to grow as it plans.

At March 31, 2009, etrials had cash and cash equivalents totaling approximately \$9.0 million. In the future, etrials might be required to seek additional financing to fund operations or potential acquisition opportunities. The recent downturn in the capital markets and the general economic slowdown could prevent etrials from raising additional capital or obtaining additional financing on favorable terms, if at all. If etrials cannot raise sufficient capital, its ability to operate and to grow through acquisitions or otherwise respond to competitive pressures would be significantly limited.

etrials has several large clients from which it derives substantial revenue; the loss of even a few of its clients could significantly reduce its revenues.

etrials currently derives and expects to continue to derive a significant portion of its revenues from a limited number of clients. etrials' top two clients accounted for approximately 29% and 28% of its revenue for the year ended December 31, 2007 and 2008, respectively. These two clients accounted for approximately 22% and 20%, respectively, and a third client accounted for approximately 12% of etrials' revenue for the three months ended March 31, 2009. If etrials loses one of these clients or other significant clients and does not replace them with new clients, its revenues will decrease and may not be sufficient to cover its costs.

etrials faces risks associated with former employees competing with its business and the related litigation that aims to prevent them from using etrials' confidential, proprietary and/or non-public data.

On January 6, 2009, etrials filed a lawsuit against its former Chief Operating Officer and Vice President of Client Services, Robert Sammis, and its former Director of Product Development, Brendon Ball, to enforce Confidentiality Agreements that they signed while employed at etrials and to prevent the disclosure or unauthorized use of confidential or non-public information of etrials in connection with the employment of Sammis and Ball at Unithink,

Inc., a direct competitor of etrials. See "etrials Business — Legal Proceedings." etrials faces the risk that the defendants, or anyone acting in concert or participating with them (including Unithink), might make customers delay or not make purchases from etrials, use etrials' confidential information against it or legitimately compete effectively with it. Additionally, litigation can be expensive, time-consuming and uncertain in ultimate result. Even if etrials is successful in this litigation, its business might be materially and adversely harmed nevertheless.

etrials might not continue to meet NASDAQ listing requirements, which could result in its delisting, limiting the liquidity of the Shares.

The Shares trade on the NASDAQ Global Market, which has qualitative and quantitative listing criteria, including operating results, net assets, corporate governance, minimum trading price and minimums for public float, which is the amount of stock not held by affiliates of the issuer. Although NASDAQ has temporarily halted delisting procedures for certain of these criteria in light of current market conditions, etrials is at risk of delisting in the future due to its low capitalization and the low price of its common stock. If for any reason, the Shares are not eligible for continued quotation on the NASDAQ, holders of etrials common stock might have difficulty selling their Shares should they desire to do so.

Risk Factors Relating to Owning Merge Common Stock

Merge Healthcare's stockholders' percentage ownership and voting power and the price of Merge Healthcare Common Stock may decrease as a result of events that increase the number of Merge Healthcare outstanding shares.

As of May 31, 2009, Merge Healthcare had outstanding options to purchase 4,528,229 shares of Merge Healthcare Common Stock at exercise prices ranging from \$0.57 to \$24.88 per share (exercisable at a weighted average of \$3.85 per share), of which 1,508,481 options were then exercisable. Exercise of Merge Healthcare's outstanding options into shares of Merge Healthcare Common Stock may significantly and negatively affect the market price for Merge Healthcare Common Stock as well as decrease its stockholders' percentage ownership and voting power. In addition, Merge Healthcare may conduct future offerings of Merge Healthcare Common Stock or other securities with rights to convert the securities into shares of Merge Healthcare Common Stock. As a result of these and other events, such as future acquisitions, that increase the number of Merge Healthcare's outstanding shares, Merge Healthcare's stockholders' percentage ownership and voting power and the price of Merge Healthcare Common Stock may decrease.

Shares of Merge Healthcare Common Stock eligible for public sale may have a negative impact on its market price.

Merge Healthcare is registering all of the shares of Merge Healthcare Common Stock being issued to etrials stockholders pursuant to the Offer and the Merger. Future sales of these shares and shares of Merge Healthcare Common Stock by existing holders of Merge Healthcare Common Stock or by holders of outstanding options, upon the exercise thereof, could have a negative impact on the market price of Merge Healthcare Common Stock. As of May 31, 2009, Merge Healthcare had 56,772,006 shares of Merge Healthcare Common Stock issued, substantially all of which are currently freely tradable. As additional shares of common stock become available for resale in the public market pursuant to the registration statement and exercise of options, the market supply of shares of common stock will increase, which could also decrease its market price.

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

There are a limited number of stockholders who have significant control over Merge Healthcare Common Stock, allowing them to have significant influence over the outcome of all matters submitted to its stockholders for approval, which may conflict with Merge Healthcare's interests and the interests of its other stockholders.

Merge Healthcare's directors, officers and principal stockholders (stockholders owning 10% or more of Merge Healthcare Common Stock) beneficially owned approximately 52% of the outstanding shares of common stock and stock options that could have been converted to common stock at May 31, 2009, and such stockholders will have significant influence over the outcome of all matters submitted to Merge Healthcare's stockholders for approval, including the election of its directors and other corporate actions. In addition, such influence by these affiliates could have the effect of discouraging others from attempting to take Merge Healthcare over, thereby increasing the likelihood that the market price of the common stock will not reflect a premium for control.

Because Merge Healthcare does not intend to pay dividends, stockholders will benefit from an investment in its stock only if it appreciates in value.

Merge Healthcare currently intends to retain its future earnings, if any, to finance further research and development and does not expect to pay any cash dividends in the foreseeable future. As a result, the success of an investment in Merge Healthcare Common Stock will depend upon any future appreciation in its value. There is no guarantee that Merge Healthcare Common Stock will appreciate in value or even maintain the price at which etrials stockholders exchange their Shares pursuant to the Offer and the Merger or at which stockholders have purchased and will purchase their shares.

The trading price of Merge Healthcare's common stock has been volatile and may fluctuate substantially in the future.

The price of Merge Healthcare Common Stock has been, and may continue to be, volatile. Between June 1, 2008 and June 10, 2009, Merge Healthcare Common Stock has traded at a low of \$0.26 per share (on November 28, 2008) and a high of \$3.24 per share (on May 18, 2009).

The trading price of Merge Healthcare Common Stock may continue to fluctuate widely as a result of a number of factors, some of which are not in Merge Healthcare's control, including:

- Merge Healthcare's ability to meet or exceed the expectations of analysts or investors;
 - Changes in Merge Healthcare's own forecasts or earnings estimates by analysts;
 - Quarter-to-quarter variations in Merge Healthcare's operating results;
- Announcements regarding clinical activities or new products by Merge Healthcare or its 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 Merge Healthcare's performance or software solutions;
 - Uncertainty regarding Merge Healthcare's 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 Merge Healthcare Common Stock may experience price and volume fluctuations unrelated or disproportionate to its operating performance. These fluctuations could have a significant impact on Merge Healthcare's business due to diminished incentives for management and diminished currency for acquisitions.

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

Merge Healthcare has 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 its 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 Merge Healthcare. In addition, Merge Healthcare is subject to provisions of Delaware corporate law which, subject to certain exceptions, will prohibit it from engaging in any "business combination" with a person who, together with affiliates and associates, owns 15% or more of Merge Healthcare Common Stock for a period of three years following the date that the person came to own 15% or more of Merge Healthcare Common Stock, unless the business combination is approved in a prescribed manner.

Table of Contents

These provisions of Merge Healthcare's certificate of incorporation, and of Delaware law, may have the effect of delaying, deterring or preventing a change in control of Merge Healthcare, may discourage bids for Merge Healthcare 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 Merge Healthcare Common Stock. In addition, these provisions make it more difficult to replace or remove its current management team in the event its stockholders believe this would be in the best interest of Merge Healthcare and its stockholders.

Risk Factors Relating to Merge Healthcare and the Combined Company

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

As Merge Healthcare's business has expanded globally, it has 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 during the second half of calendar year 2008, which caused Merge Healthcare's customers to delay or reduce information technology purchases. 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 Merge Healthcare's 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 Merge Healthcare's OEM and VAR customers who could, in turn, delay paying their obligations, which would increase Merge Healthcare's 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 Merge Healthcare is unable to successfully transition end-users to purchase its products from other vendors or directly from Merge Healthcare, sales could decline significantly. Any of these events would likely harm Merge Healthcare's business, results of operations and financial condition.

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

Continued disruptions in the financial and credit markets may adversely affect Merge Healthcare's business and financial results. The tightening of credit markets may reduce the funds available to Merge Healthcare's customers to buy its products and services. It may also result in customers extending the length of time in which they pay and may result in Merge Healthcare 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.

Merge Healthcare's future capital needs are uncertain and its 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.

Merge Healthcare's capital requirements in the future will depend on many factors, including:

- Acceptance of and demand for its products;
- The extent to which Merge Healthcare invests 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 its business, if any.

•

Table of Contents

.

•

.

Merge Healthcare intends to finance its operations and any growth of its business with existing cash and cash flows from operations. Merge Healthcare believes existing cash and anticipated cash flows from operations will be sufficient to meet operating and capital requirements through at least the twelve month period following the filing of this Prospectus. If adverse global economic conditions persist or worsen, however, Merge Healthcare 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 Merge Healthcare cannot raise funds on acceptable terms when necessary, it may not be able to develop or enhance products and services, execute its business plan, take advantage of future opportunities or respond to competitive pressures or unanticipated customer requirements.

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

Merge Healthcare may not be able to accurately forecast its growth rate. Merge Healthcare bases expense levels and investment plans on sales estimates and reviews all estimates on a quarterly basis. Many of its expenses and investments are fixed and Merge Healthcare may not be able to adjust spending quickly enough if sales are lower than expected.

Merge Healthcare's revenue growth may not be sustainable and its percentage growth rates may decrease or fluctuate significantly. Merge Healthcare's revenue and operating profit growth depends on the continued growth of demand for its products and services offered through Merge Healthcare or its OEM and VAR customers, and its 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.

Merge Healthcare's 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 Merge Healthcare's software solutions and services;

Merge Healthcare's sales cycle;
 economic cycles;

- the level of reimbursements to Merge Healthcare's 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;
- Merge Healthcare's ability to retain and increase sales to existing customers, attract new customers and satisfy its customers' demands;

Merge Healthcare's 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 Merge Healthcare's systems and infrastructure;
 - the outcomes of legal proceedings and claims involving Merge Healthcare; and
 - variations in the mix of products and services offered by Merge Healthcare.

Table of Contents

Delays in the expected sales or installation of Merge Healthcare's software may have a significant impact on its anticipated quarterly revenues and, consequently, its earnings since a significant percentage of expenses are relatively fixed. Additionally, Merge Healthcare sometimes depends, 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 Merge Healthcare's quarterly net sales and consequently its earnings, particularly because a significant percentage of expenses are fixed.

The length of Merge Healthcare's sales and implementation cycles may adversely affect its future operating results.

Merge Healthcare has 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 Merge Healthcare's end-user target market. The sales cycle for Merge Healthcare's software ranges from six to 18 months or more from initial contact to contract execution. Its 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, Merge Healthcare 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 Merge Healthcare's customers to delay or cancel purchases or the implementation of its software may adversely affect net sales.

Merge Healthcare has outstanding debt and may incur additional debt in the future.

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

If Merge Healthcare is unable to successfully identify or effectively integrate acquisitions, its financial results may be adversely affected.

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

In making or attempting to make acquisitions or investments, Merge Healthcare faces a number of risks, including risks related to:

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

•Reducing Merge Healthcare's working capital and hindering its ability to expand or maintain its business, if acquisitions are made using cash;

- The potential distraction of Merge Healthcare's management, diversion of its resources and disruption to its business;
 - Retaining and motivating key employees of the acquired companies;
 - Managing operations that are distant from Merge Healthcare's current headquarters and operational locations;
 - Entering into industries or geographic markets in which Merge Healthcare has little or no prior experience;
- Competing for acquisition opportunities with competitors that are larger or have greater financial and other resources than Merge Healthcare;
 - •
- Accurately forecasting the financial impact of a transaction;
- Assuming liabilities of acquired companies, including existing or potential litigation related to the operation of the business prior to the acquisition;
 - Maintaining good relations with the customers and suppliers of the acquired company; and
 - Effectively integrating acquired companies and achieving expected synergies.

In addition, any acquired business, products or technologies may not generate sufficient revenue and net income to offset the associated costs of such acquisitions, and such acquisitions could result in other adverse effects. Moreover, from time to time, Merge Healthcare 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 Merge Healthcare's business relies upon a network of independent contractors and distributors whose actions could have an adverse effect on its business.

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

Merge Healthcare's investments in technology may not be sufficient and may not result in an increase in its revenues or decrease in its operating costs.

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

Merge Healthcare operates in competitive markets, which may adversely affect its market share and financial results.

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

Table of Contents

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

Merge Healthcare faces aggressive competition in many areas of its business, and business will be harmed if it fails to compete effectively.

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

Merge Healthcare often "competes" with its OEM customers' own internal software engineering groups. The size and competency of these groups may create additional competition for Merge Healthcare. 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 Merge Healthcare's existing products and services, require significant investments in research and development. For example, Merge Healthcare's 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 Merge Healthcare fails to successfully sell new products and update existing products, its operating results may decline as existing products reach the end of their commercial life cycles.

Merge Healthcare's performance and future success depends on its ability to attract, integrate and retain qualified technical, managerial and sales personnel.

Merge Healthcare is dependent, in part, upon the services of its senior executives and other key business and technical personnel. Merge Healthcare does not currently maintain key-man life insurance on its senior executives. The loss of the services of any of Merge Healthcare's senior executives or key employees could have a material adverse effect on its business. Merge Healthcare's 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 sought by Merge Healthcare is intense. Merge Healthcare may not be able to retain existing key employees or be able to find, attract and retain skilled personnel on acceptable terms.

Merge Healthcare may not be able to adequately protect its intellectual property rights or may be accused of infringing intellectual property rights of third parties.

Merge Healthcare regards its trademarks, service marks, copyrights, patents, trade secrets, proprietary technology and similar intellectual property as critical to its success. It relies on trademark, copyright and patent law, trade secret protection and confidentiality and/or license agreements with employees, customers and others to protect its

proprietary rights. Effective intellectual property protection may not be available in every country in which its products and services are made available. Merge Healthcare also may not be able to acquire or maintain appropriate intellectual property rights in all countries where it does business.

18

Merge Healthcare may not be able to discover or determine the extent of any unauthorized use of its proprietary rights. Third parties that license Merge Healthcare's proprietary rights also may take actions that diminish the value of its proprietary rights. Such claims, whether or not meritorious, may result in the expenditure of significant financial and managerial resources, injunctions against Merge Healthcare or the payment of damages. Merge Healthcare may need to obtain licenses from third parties who allege that it has infringed their rights, but such licenses may not be available on terms acceptable to Merge Healthcare or at all. In addition, Merge Healthcare may not be able to obtain or utilize on favorable terms, or at all, licenses or other rights with respect to intellectual property it does 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.

Merge Healthcare also relies on proprietary know how and confidential information and employs various methods, such as entering into confidentiality and non-compete agreements with its current employees and with certain third parties to whom Merge Healthcare has divulged proprietary information to protect the processes, concepts, ideas and documentation associated with its solutions. Such methods may not afford sufficient protection, and Merge Healthcare may not be able to protect trade secrets adequately or ensure that other companies would not acquire information that it considers proprietary.

Merge Healthcare may be subject to product liability claims if people or property is harmed by the products and services that it sells.

Some of the products Merge Healthcare sells or manufactures may expose it 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 Merge Healthcare's customers, also sell products or services using its products. This may increase Merge Healthcare's exposure to product liability claims. Although Merge Healthcare maintains liability insurance, it 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 Merge Healthcare's agreements with its vendors and sellers do not indemnify Merge Healthcare from product liability.

Merge Healthcare has foreign exchange risk.

•

The results of Merge Healthcare's international operations are exposed to foreign exchange rate fluctuations. While the functional currency of most of Merge Healthcare's 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 Merge Healthcare may record significant gains or losses on the remeasurement of such balances. As Merge Healthcare expands international operations, its exposure to exchange rate fluctuations may increase.

Merge Healthcare may not be successful in its efforts to expand into international market segments.

Merge Healthcare's international activities are significant to its revenues and profits, and it plans to further expand internationally. Merge Healthcare has 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 Merge Healthcare's brand internationally. Merge Healthcare's international operations may not be profitable on a sustained basis.

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

Local economic and political conditions;

• Foreign government regulation of healthcare and government reimbursement of health services;

- •Local restrictions on sales or distribution of certain products or services and uncertainty regarding liability for products and services;
 - Local import, export or other business licensing requirements;
 - Local limitations on the repatriation and investment of funds and foreign currency exchange restrictions;
 - 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 Merge Healthcare's financial condition.

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

On Monday, June 1, 2009, Merge Healthcare was 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. Merge Healthcare is in the process of identifying counsel, has notified its appropriate insurers and intends to vigorously defend the action.

As a result of lawsuits and regulatory matters, including the matter discussed above, Merge Healthcare has incurred and may continue to incur substantial expenses.

Merge Healthcare depends on licenses from third parties for rights to some technology it uses, and if it is unable to continue these relationships and maintain Merge Healthcare's rights to this technology, its business could suffer.

Some of the technology used in Merge Healthcare's 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 Merge Healthcare breaches the license and fails to cure the breach within a specified period of time. Merge Healthcare may not be able to continue using the technology made available to it under these licenses on commercially reasonable terms or at all. As a result, Merge Healthcare may have to discontinue, delay or reduce software shipments until it obtains equivalent technology, which could hurt its business. Most of Merge Healthcare's third party licenses are nonexclusive. Merge Healthcare's competitors may obtain the same right to use any of the technology covered by these licenses and use the technology to compete directly with Merge Healthcare. In addition, if Merge Healthcare's 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 Merge Healthcare's products operate, Merge Healthcare may not be able to modify or adapt its own software.

Merge Healthcare is subject to government regulation, changes to which could negatively impact its business.

Merge Healthcare is 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. Merge Healthcare 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 Merge Healthcare 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 Merge Healthcare 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 Merge Healthcare to comply with rigorous regulations governing the pre-clinical and clinical testing, manufacture, distribution, labeling and promotion of medical devices; and
- Requiring Merge Healthcare 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 Merge Healthcare's 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. Merge Healthcare believes that the implementation of the reimbursement reductions contained in the Deficit Reduction Act has adversely impacted its 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 Merge Healthcare's software solutions and services, including maintenance. The risk of more Medicare imaging reimbursement cuts remains.

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

Changes in federal and state regulations relating to patient data could depress the demand for Merge Healthcare's software and impose significant software redesign costs on it.

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 Merge Healthcare is not a covered entity, most of its customers are, and

they require that Merge Healthcare's software and services adhere to HIPAA regulations. Any failure or perceived failure of Merge Healthcare's software or services to meet HIPAA regulations could adversely affect demand for its software and services and potentially require it to expend significant capital, research and development and other resources to modify its software or services to address the privacy and security requirements of its clients.

Table of Contents

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, Merge Healthcare's customers may demand IT solutions and services that are adaptable to reflect different and changing regulatory requirements, which could increase Merge Healthcare's 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. Merge Healthcare cannot predict the potential impact that these future rules may have on its business; however, the demand for Merge Healthcare's software and services may decrease if it is not able to develop and offer software and services that can address the regulatory challenges and compliance obligations facing its clients.

Merge Healthcare provides its customers with certain warranties that could result in higher costs than anticipated.

Software products as complex as those offered by Merge Healthcare 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. Merge Healthcare's 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 Merge Healthcare's 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, Merge Healthcare's software products.

Healthcare industry consolidation could impose pressure on Merge Healthcare's software prices, reduce its potential client base and reduce demand for its 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 Merge Healthcare's target market and give the resulting enterprises greater bargaining power, which may lead to erosion of the prices for its software. In addition, when hospitals and imaging centers combine, they often consolidate infrastructure, and consolidation of Merge Healthcare's customers could erode its revenue base.

SELECTED HISTORICAL CONSOLIDATED FINANCIAL DATA OF MERGE HEALTHCARE

The following table sets forth summary consolidated financial data for Merge Healthcare for the three months ended March 31, 2009 and for each year of the five-year period ended December 31, 2008. The selected financial data should be read together with the historical consolidated financial statements, related notes to the financial statements and "Management's Discussion and Analysis of Financial Condition and Results of Operations" from Merge Healthcare's Annual Report on Form 10-K for the year ended December 31, 2008, incorporated by reference into this Prospectus.

The operating results for the three-month period ended March 31, 2009 are not necessarily indicative of the results for the remainder of the fiscal year or any future period. All adjustments which are, in the opinion of management, of a normal and recurring nature and necessary for a fair presentation of the interim financial statements have been included in the consolidated condensed financial statements for the quarterly period ended March 31, 2009.

	Three Months Ended March 31,	Months Ended Years Ended December 31,									
	2009	2008		2007(3)		2006(3)		2005(1)(2)	2004		
	(unaudited)	(in thousands, except per share data)									
Statements of Operations Data:											
Net sales	\$15,309	\$56,735		\$59,572		\$74,322		\$82,538	\$25,477		
Operating income (loss)(2)(3)	3,536	(21,697)	(171,238)	(252,087)	4,377	(250)	
Income (loss) before income											
taxes	2,864	(23,743)	(171,808)	(249,473)	5,113	219		
Income tax expense (benefit)	22	(60)	(240)	9,450		8,373	(1,444)	
Net income (loss)	2,842	(23,683)	(171,568)	(258,923)	(3,260) 1,663		
Earnings (loss) per share:											
Basic	\$0.05	\$(0.51)	\$(5.06)	\$(7.68)	\$(0.13) \$0.13		
Diluted	0.05	(0.51)	(5.06)	(7.68)	(0.13) 0.12		
Weighted average shares outstanding:											
Basic	56,305	46,718		33,913		33,702		24,697	13,014		
Diluted	57,190	46,718		33,913		33,702		24,697	13,828		
	As of March 31,	As of December 31,									
	2009	2008		2007		2006		2005	2004		
	(unaudited)		(in thousands)								
Balance Sheet Data:											
Working capital	\$12,866	\$8,254		\$878		\$27,101		\$56,964	\$22,786		
Total assets	54,816	54,737		61,635		234,875		500,045	85,853		
Long-term debt obligations	14,358	14,230		-		-		-	-		
Shareholders' equity	12,065	8,841		24,405		189,925		442,592	54,949		

(1)Includes the results of Cedara Software Corp. from June 1, 2005, the date of Merge Healthcare's business combination with Cedara.

(2) For the year ended December 31, 2005, Merge Healthcare incurred a charge for acquired in-process research and development of \$13.0 million.

(3)

For the years ended December 31, 2007 and 2006, Merge Healthcare incurred charges of \$122.4 million and \$214.1 million, respectively, related to the impairment of goodwill.

SELECTED HISTORICAL CONSOLIDATED FINANCIAL DATA OF ETRIALS

The following table sets forth summary consolidated financial data for etrials for the three months ended March 31, 2009 and for each year of the five year period ended December 31, 2008. The selected financial data should be read together with the historical Consolidated Financial Statements, related Notes to the Financial Statements and Management's Discussion and Analysis of Financial Condition and Results of Operations of etrials included in this Prospectus.

The operating results for the three-month period ended March 31, 2009, of etrials are not necessarily indicative of the results for the remainder of the fiscal year or any future period. All adjustments which are, in the opinion of management, of a normal and recurring nature and necessary for a fair presentation of the interim financial statements have been included in the consolidated condensed financial statements for the three-month period ended March 31, 2009.

	Three Months Ended March 31,	onths Ided Years Ended December 31,									
	2009	2008	2007	2006	2005(1)	2004(1)					
	(unaudited)			sands, except p							
Statements of Operations Data:	(unuunicu)		(in thou	sunds, encopep	er share duta)						
Service revenue	\$3,627	\$15,061	\$18,349	\$15,528	\$13,187	\$12,027					
Total revenue	3,638	16,242	22,440	19,180	13,623	12,766					
Income (loss) before interest	,	,	,	,	,	,					
and taxes	(916) (16,013) (6,945) (1,428) (1,284) 552					
Net income (loss)	(964) (15,817) (6,165) (641) (1,332) 260					
Loss per share											
Basic	\$(0.09) \$(1.45) \$(0.57) \$(0.18) \$(0.78) \$(0.24)				
Diluted	(0.09) (1.45) (0.57) (0.18) (0.78) (0.24)				
Weighted average shares outstanding:											
Basic	10,644	10,914	10,806	10,011	3,191	3,030					
Diluted	10,644	10,914	10,806	10,011	3,191	3,030					
	A C	As of As of December 31,									
	As of March 31,	1 31,			er 51,						
	2009	2008	2007	2006	2005	2004					
	(unaudited)		(in thousands, except for number of employees)								
Balance Sheet Data:											
Cash and cash equivalents	\$9,061	\$10,700	\$13,793	\$11,829	\$1,650	\$1,707					
Working capital	7,685	8,546	15,521	19,863	(212) 943					
Total assets	15,679	17,064	31,583	35,378	14,909	14,099					
Long-term debt	135	197	250	20	140	-					
Stockholders' equity (deficit)	9,626	10,495	25,393	29,796	(3,728) (1,935)				
Other data:											
Purchases of property and											
equipment	\$99	\$786	\$461	\$707	\$728	\$110					
Depreciation and amortization	288	1,152	1,223	766	1,084	1,059					

Edgar Filing: MERGE HEALTHCARE INC - Form S-4/A								
Number of employees	95	100	125	124	86	70		
(1) etrials was acquired to etrials Worldwide, Inc. as p periods presented prior to the	part of that tran	saction. CEA	was a shell co	mpany withou	t any operatio	ons. All data in all		

Table of Contents

COMPARATIVE HISTORICAL AND SUMMARY UNAUDITED PRO FORMA PER SHARE INFORMATION

The following tables set forth information derived from the audited, unaudited and pro forma combined results of Merge Healthcare and etrials.

Historical Merge Healthcare and etrials information includes (i) unaudited historical basic and diluted earnings per share for the three months ended March 31, 2009, (ii) audited historical basic and diluted earnings per share for the year ended December 31, 2008, and (iii) unaudited historical book value per share of the respective company's common stock as of March 31, 2009 and December 31, 2008.

For the three months ended March 31, 2009, and the year ended December 31, 2008, unaudited pro forma combined and "combined equivalent" data includes (i) unaudited pro forma condensed combined basic and diluted earnings per share for each period, and (ii) unaudited pro forma combined book value per share of Merge Healthcare Common Stock (after giving effect to the Merger) as of March 31, 2009.

etrials has not paid any cash dividends for any of the periods presented. 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. The unaudited pro forma combined equivalent for etrials is derived based on the exchange ratio of 0.3448 shares of Merge Healthcare Common Stock.

The information in the tables should be read in conjunction with the audited and unaudited consolidated financial statements of Merge Healthcare and etrials, and the notes thereto, which are incorporated by reference in this Prospectus for Merge Healthcare and included elsewhere herein for etrials, and the unaudited pro forma condensed combined financial information and notes thereto included elsewhere herein. The unaudited pro forma condensed combined financial information is not necessarily indicative of the earnings or book value per share that would have been achieved had the Merger been consummated as of the beginning of the period presented and should not be construed as representative of such amounts for any future dates or periods.

Historical – Merge Healthcare	Three Months Ended March 31, 2009				Year Ended December 31 2008	,
Basic earnings per share	\$	0.05		\$	(0.51)
Diluted earnings per share	\$	0.05		\$	(0.51)
Book value per share (at end of period)	\$	0.22		\$	0.16	
	Three Months Ended Year Ende December 3 March 31, 2009 2008					,
Historical – etrials						
Basic earnings per share	\$	(0.09)	\$	(1.45)
Diluted earnings per share	\$	(0.09)	\$	(1.45)
Book value per share (at end of period)	\$	0.90		\$	0.96	

Three Months Ended Year Ended

			Ι	December 3	1,
	N	larch 31, 2009		2008	
Unaudited Pro Forma — Combined					
Basic earnings (loss) per share	\$	0.03	\$	(0.76)
Diluted earnings (loss) per share	\$	0.03	\$	(0.76)
Book value per share (at end of period)	\$	0.25		N/A	
]	Three Months			
		Ended		Year Endec	1
			Ι	December 3	1,
	Μ	larch 31, 2009		2008	
Unaudited Pro Forma — Combined Equivalent — etrials					
Basic earnings (loss) per share	\$	0.01	\$	(0.26)

\$

\$

0.01

0.09

\$

(0.26

N/A

)

25

Diluted earnings (loss) per share

Book value per share (at end of period)

COMPARATIVE MARKET PRICE DATA AND DIVIDEND DATA

Shares of Merge Healthcare Common Stock are listed on the NASDAQ Global Market under the symbol "MRGE" and the Shares are listed on the NASDAQ Global Market under the symbol "ETWC." The following table sets forth, for the periods indicated, as reported by NASDAQ, the per share high and low sales prices of each company's common stock.

		Merge Healthcare Common Stock				
		High		Low		
Fiscal Year 2007 (ended December 31, 2007)		-				
1st Quarter	\$	6.73	\$	3.62		
2nd Quarter	\$	7.25	\$	4.78		
3rd Quarter	\$	6.61	\$	3.88		
4th Quarter	\$	4.43	\$	0.98		
Fiscal Year 2008 (ended December 31, 2008)						
1st Quarter	\$	1.26	\$	0.33		
2nd Quarter	\$	1.37	\$	0.26		
3rd Quarter	\$	1.60	\$	0.60		
4th Quarter	\$	1.75	\$	0.26		
Fiscal Year 2009 (ended December 31, 2009)						
1st Quarter	\$	1.84	\$	1.07		
		~	etrials			
			nmon Stoc			
		High		Low		
Fiscal Year 2007 (ended December 31, 2007)	.	- 10				
1st Quarter	\$	5.10	\$	3.06		
2nd Quarter				3.06		
	\$	5.54	\$	4.21		
3rd Quarter	\$	4.78	\$ \$	4.21 2.90		
3rd Quarter 4th Quarter			\$	4.21		
	\$	4.78	\$ \$	4.21 2.90		
4th Quarter	\$	4.78	\$ \$	4.21 2.90		
4th Quarter Fiscal Year 2008 (ended December 31, 2008)	\$ \$	4.78 4.10	\$ \$ \$	4.21 2.90 2.41		
4th Quarter Fiscal Year 2008 (ended December 31, 2008) 1st Quarter	\$ \$ \$	4.78 4.10 3.46	\$ \$ \$ \$	4.21 2.90 2.41 1.55		
4th Quarter Fiscal Year 2008 (ended December 31, 2008) 1st Quarter 2nd Quarter	\$ \$ \$ \$	4.78 4.10 3.46 2.25	\$ \$ \$ \$ \$	4.21 2.90 2.41 1.55 1.26		
4th Quarter Fiscal Year 2008 (ended December 31, 2008) 1st Quarter 2nd Quarter 3rd Quarter 4th Quarter	\$ \$ \$ \$ \$	4.78 4.10 3.46 2.25 2.10	\$ \$ \$ 	4.21 2.90 2.41 1.55 1.26 0.93		
4th Quarter Fiscal Year 2008 (ended December 31, 2008) 1st Quarter 2nd Quarter 3rd Quarter	\$ \$ \$ \$ \$	4.78 4.10 3.46 2.25 2.10	\$ \$ \$ 	4.21 2.90 2.41 1.55 1.26 0.93		

The following table contains historical closing prices per share for Merge Healthcare Common Stock and the Shares on May 29, 2009, the last full trading day before the public announcement of Merge Healthcare's proposal to acquire etrials, and June 10, 2009, the most recent practicable date before the mailing of this Prospectus. The implied value per Share of the Consideration in the Offer on each of the specified dates represents (i) with respect to the Merge Healthcare Common Stock portion of the Consideration, the closing sales price of a share of Merge Healthcare Common Stock on that date multiplied by 0.3448 per Share, plus (ii) \$0.80 in cash per Share.

	Merge		Per Share
	Healthcare Etrials		Implied
	Common	Common	Value of
	Stock	Stock	Offer
	(NASDAQ)	(NASDAQ)	Consideration
May 29, 2009	\$ 3.14	\$ 1.27	\$ 1.88
June 10, 2009	\$ 3.10	\$ 1.75	\$ 1.87

The market prices of shares of Merge Healthcare Common Stock and the Shares will fluctuate prior to the Expiration Date of the Offer and thereafter, and may be different at the Expiration Date from the prices set forth above, and for etrials stockholders tendering Shares in the Offer, at the time they receive cash and shares of Merge Healthcare Common Stock. etrials stockholders are encouraged to obtain current market quotations prior to making any decision with respect to the Offer. See also "The Offer — Effect of the Offer on the Market for Shares; NASDAQ Listing; Registration Under the Exchange Act; Margin Regulations" for a discussion of the possibility that Shares will cease to be listed on the NASDAQ Global Market.

Dividends

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. etrials has never declared or paid any cash dividend on the Shares.

RATIO OF EARNINGS TO FIXED CHARGES

The following table sets forth the historical ratio of earnings to fixed charges for Merge Healthcare and etrials for the three months ended March 31, 2009, and the years ended December 31, 2008 and 2007, as well as the supplemental pro forma earnings to fixed charges ratios for the three months ended March 31, 2009 and the year ended December 31, 2008.

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.

	Three		
	Months		
	Ended	Year Ended	Year Ended
	March 31,	December	December
	2009	31, 2008	31, 2007
Merge Healthcare Historical (1)(2)	4.3	-	-
etrials Historical (3)(4)(5)	-	-	-
Pro Forma (6)	3.1	-	

⁽¹⁾ For the year ended December 31, 2008, earnings were insufficient to cover Merge Healthcare's fixed charges by \$23.7 million.

⁽²⁾ For the year ended December 31, 2007, earnings were insufficient to cover Merge Healthcare's fixed charges by \$171.8 million.

⁽³⁾

For the three months ended March 31, 2009, earnings were insufficient to cover etrials' fixed charges by \$1.0 million.

- (4) For the year ended December 31, 2008, earnings were insufficient to cover etrials' fixed charges by \$15.8 million.
- (5) For the year ended December 31, 2007, earnings were insufficient to cover etrials' fixed charges by \$6.2 million.
- (6) After giving effect to the pro forma adjustments, for the year ended December 31, 2008, earnings were insufficient to cover fixed charges by \$38.3 million.

27

THE MERGER

The Companies

etrials

etrials Worldwide, Inc. is a provider of eClinical (clinical trials) software technology and services to pharmaceutical, biotechnology, medical device, and contract research organizations, or CROs. etrials provides these customers with integrated software technology and services that it believes help reduce the time spent collecting clinical trials data, managing clinical trials performance and closing a study database, reduce overall clinical trial research costs, and enhance data quality. The software technology includes the three key eClinical software applications: electronic data capture ("EDC"), electronic patient diaries ("eDiaries"), and interactive voice and Web response software ("IVRS/IWRS"), all of which are designed to provide an automated and easy-to-use mechanism to collect data directly from clinical investigators and patients. Professional services and support are offered as part of an integrated or individual software-as-a-service ("SaaS") platform. etrials primary focus is on the costly and time-consuming clinical trial phase of drug development.

etrials, Inc., the operating subsidiary of the business, was incorporated in 1999 in the State of Delaware under the name Pharmacentric Technologies, Inc., for the purpose of managing certain assets acquired from Persimmon IT, Inc. In March 2000, Pharmacentric acquired Expidata. In May of 2000 the subsidiary's name was changed to etrials.com, Inc. and in June of 2001, the name was changed to etrials, Inc. In January 2003, Araccel Corporation merged into etrials, Inc. Araccel primarily provided eClinical electronic patient reported outcomes or ePRO solutions that capture, analyze, distribute, manage and report clinical trial data from patients. Prior to the merger with Araccel, etrials, Inc. was in the business of primarily providing EDC software and services for clinical trials.

CEA Acquisition Corporation ("CEA") was incorporated in Delaware in October 2003 as a blank check company, the objective of which was to effect a merger, capital stock exchange, asset acquisition or other similar business combination in the entertainment, media and communications industry. In February 2004, CEA consummated an initial public offering (the "Offering") and raised net proceeds of \$21,390,100. In February 2006, etrials Acquisition, Inc., a Delaware corporation and wholly owned subsidiary of CEA, consummated a merger with etrials in which etrials became CEA's wholly owned subsidiary. At that time CEA changed its name to etrials Worldwide, Inc.

etrials is a single source global provider of each of the three key clinical software technologies used to optimize the clinical trial process – EDC, interactive voice and Web response systems or IVRS/IWRS, and electronic patient diaries ("eDiaries") – along with professional services and support as part of an integrated or individual SaaS platform.

etrials' eClinical solutions include:

EDC . etrials' EDC is a Web-based, globally proven solution for collecting, managing, and analyzing real-time clinical trial information. etrials' EDC solution allows clinicians, researchers and business executives to drive data quality and make more informed decisions faster by more effectively managing and monitoring trial progress, site and clinical research associate performance, compliance, and data reconciliation virtually in real-time.

With etrials' configurable electronic case report forms ("eCRF"), study information is more accurate, timely and accessible, for better collaboration and communication. This application's dynamic business process engine supports multiple workflows and creates a means to review, complete, verify and report on data collected at the site, patient and overall study levels. The PowerReports component supports adaptive study designs with the ability to analyze statistics in real-time by creating advanced reports with study as it is entered and the trial progresses.

eDiaries. etrials' eDiaries consist of multiple device and modalities for the collection of electronic patient reported outcomes (ePRO) data. Depending on study budgets, requirements and geographic locations, sponsors can choose from four different device and form factors, a Web application or via phone system for their solution. etrials' eDiaries solutions can drive high compliance and quality data across different therapeutic areas, patient populations, and global locations, while ensuring that the study team gains optimal control, flexibility and reporting capabilities.

etrials' eDiaries minimize problems associated with paper-based collection such as patient compliance, transcription errors and limited data analysis. Information is stored on the local device (handheld, tablet, or smartphone) and the EDC central database through wired and wireless connectivity.

IVRS/IWRS. etrials' IVRS/IWRS solutions go well beyond traditional IVRS systems, providing a powerful trial and site monitoring and control tool. Real-time patient enrollment, dynamic randomization and comprehensive drug supply management systems are accessible via a single, convenient site logistics administration console.

The solution enables sponsors to easily manage site or stratum-based patient enrollment, the compliance of sites and subjects, and supply shipment status.

Merge Healthcare

Merge Healthcare Incorporated, a Delaware corporation, develops health information and imaging software solutions, and delivers related services. Merge Healthcare's solutions are designed to automate specific medical processes, such as transforming the tasks associated with film-based images and paper information into a computerized workflow. Merge Healthcare sells these solutions through two business units. The Merge Fusion business unit sells directly to hospitals, imaging centers and specialty clinics located in the U.S., sells directly and through distributors outside the U.S., and also distributes certain products through the Internet via its website. The Merge OEM business unit primarily sells to original equipment manufacturers, value added resellers and distributors located throughout the world. 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 April 2009, Merge Healthcare acquired certain assets of eko systems, inc. for its Surgical Management System capabilities.

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

- Software development toolkits and platforms, which give software developers resources to accelerate new product development;
- Diagnostic workstation software applications, which bring specialized reading and review tools to the clinician's desktop;
- RIS and related applications, which manage the business workflow of an imaging enterprise or radiology department;
 - PACS and related applications, which manage the medical image workflow of a healthcare enterprise;
- Surgical Management Systems, which automate the monitoring and recording of anesthesia and perfusion before, during and after a surgery;
- 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, project or hourly professional services or consultative engineering fees and pay-per-study managed services.

Medical imaging is based on a standard called Digital Imaging and Communications in Medicine ("DICOM"), which ensures that any image acquired from any DICOM-compliant modality can be displayed, moved and stored within a standard set of guidelines. For the past 20 years, Merge Healthcare has participated in this ever-expanding and evolving standard, and customers rely on Merge Healthcare for the latest DICOM updates found in its toolkits, as well as in other applications. DICOM has enabled the IT component of medical imaging to stay in step with the clinical technology. As such, medical imaging has had high innovation and has expanded from general radiology into cardiology, mammography, dentistry, endoscopy, surgery and other medical specialties, as well as new markets such as veterinary medicine. Merge Healthcare's participation with standards committees as well as the continuous development of products like its DICOM toolkits has enabled it to stay abreast of this innovation. Innovation in the industry will continue, as will ongoing adaptation of the technology globally.

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. Through the Merge OEM business unit, Merge Healthcare has participated in new digital imaging offerings such as veterinary, dental, clinical trials and pharmaceuticals.

Merge Healthcare's new addition of the Frontiers[™] product line in February of 2009 brings additional capabilities for surgical workflow, including: pre-operative screens and checklists, real time recording of monitoring and drug delivery devices, patient vital signs recording during and post surgery and the documentation required for billing.

Merge Healthcare has its software deployed in hospitals and clinics worldwide through its partner, direct end-user and eCommerce channels. 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 WorkstationTM, 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.

Offeror

Offeror, a Delaware corporation, is a wholly-owned subsidiary of Merge Healthcare. Offeror is newly formed, and was organized solely for the purpose of making the Offer and consummating the Merger. Offeror has engaged in no business activities to date and it has no material assets or liabilities of any kind, other than those incident to its formation and those incurred in connection with the Offer and the Merger.

Offeror's address is c/o Merge Healthcare Incorporated, Attention: Ann Mayberry-French, Vice President, General Counsel and Secretary, 6737 West Washington Street, Milwaukee, Wisconsin 53214-5650 and its telephone number is (414) 977-4000.

etrials' Reasons for the Merger

The etrials board of directors recommends that all holders of common stock accept the Offer and tender their shares pursuant to the Offer and, if applicable, approve the Merger and the Merger Agreement. This recommendation came

after the etrials board evaluated the Merger Agreement and the other transactions contemplated thereby, including the Offer and the Merger, and consulted with etrials' management and legal and financial advisors and considered a number of factors, including the following considerations and deliberations of the etrials board of directors:

Table of Contents

- Financial Condition and Prospects of etrials. The etrials board considered its knowledge and familiarity with etrials' business, financial condition and results of operations, as well as etrials' financial outlook and prospects if it were to remain an independent company in the current and anticipated economic environment. The etrials board discussed and deliberated at length concerning etrials' current financial outlook, including the risks associated with achieving and executing upon etrials' business plans, and etrials' cash resources. The etrials board considered etrials' projected revenues and operating expenses, the need to obtain operating capital in the future, the risk that such capital would not be available on favorable terms, or at all, and the impact of further efforts to reduce operating expenses on etrials' business. The etrials board also considered the competitive environment in which etrials operates and the potential impact on its current and potential customers of further cost reduction measures and/or the inability to raise additional capital.
- Competitive Environment. The etrials board considered the competitive environment in which etrials operates and the competitive challenges facing etrials if it remained as an independent company, including current economic and financial market conditions and competition with companies with greater scale and access to resources.
- Historical Trading Prices. With assistance from EGE, the etrials board reviewed the historical market prices, volatility and trading information with respect to the common stock, including the fact that the Offer Price represents a premium of approximately 138% and 100%, respectively, over the average closing price of the Shares on the NASDAQ Global Market for the 30 trading days prior to May 4, 2009, the last trading day prior to announcement of the original Bio-Imaging merger agreement, and May 28, 2009, the last trading day prior to approval of the Merger Agreement.
- Financial Condition and Prospects of Merge Healthcare. The etrials board discussed and deliberated at length, and considered the analysis of EGE of Merge Healthcare's business, financial condition and results of operations, including its seasoned management team, and greater financial resources and access to capital than etrials currently has.
- No Financing Condition. The etrials board of directors considered that neither the Offer nor the Merger is subject to a financing condition.
- Prior Acquisition History of Merge Healthcare. The etrials board considered Merge Healthcare's history of successful acquisitions and integration of acquired companies, and the belief of the etrials directors that the Offer and the Merger could be completed relatively quickly and in an orderly manner.
- •Cash and Stock Tender Offer. The etrials board considered the fact that the Offer and the Merger give etrials stockholders the ability to achieve liquidity for some of their Shares and, importantly, the ability of etrials stockholders to participate in any future appreciation in value of the combined company through the receipt of the Merge Healthcare Common Stock as part of the Offer Consideration and Merger Consideration. The etrials board also considered Merge Healthcare's size and financial position, and its ability to pay the cash portion of the Offer Price without the need for a financing condition.
- Fixed Offer/Merger Consideration. The etrials board considered that the Offer Consideration and the Merger Consideration is fixed, which will allow holders of common stock to participate in any appreciation in the value of Merge Healthcare Common Stock prior to the Effective Time.
- Certainty of Value. The Offer provides for a tender offer for all Shares held by etrials stockholders to be followed by the Merger for the same consideration, thereby enabling etrials stockholders, at the earliest possible time, to obtain the benefits of the transaction in exchange for their shares and eliminating any uncertainties in valuing the Merger Consideration to be received by etrials stockholders.

Table of Contents

- Results of Discussions with Third Parties. The etrials board, with the assistance of its advisors, discussed and considered the results of discussions that etrials' management and its advisors had with Merge Healthcare and other third parties, including Bio-Imaging, regarding a possible business combination or similar transaction with etrials and the ability of other bidders to make, and the likelihood that other bidders would make, an offer at a higher price. Based on those discussions and considerations, and etrials' extensive negotiations with both Merge Healthcare and Bio-Imaging, the etrials board believed that the Offer Price represented the highest price reasonably attainable.
- Opinion and Analyses of etrials' Financial Advisor. The opinion of EGE addressed to the etrials board, dated May 29, 2009, to the effect that, as of May 29, 2009, the per share consideration consisting of \$0.80 in cash and 0.3448 of a share of Merge Healthcare Common Stock to be received by the holders of common stock pursuant to the Merger Agreement was fair, from a financial point of view, to such holders, together with EGE's related financial analyses as presented to and discussed with the etrials board. The full text of the EGE opinion, which sets forth the assumptions made, matters considered, and limitations on and scope of the review undertaken, is attached to this document as Appendix C and is incorporated by reference. The etrials board was aware that EGE becomes entitled to the fees described in "The Merger Opinion of Emerging Growth Equities Ltd. Financial Advisor to etrials" upon rendering its opinion and upon the consummation of the Offer.
 - Transferability of Merge Healthcare Common Stock. The etrials board considered the liquidity and stability of the market for the shares of Merge Healthcare Common Stock to be issued to etrials stockholders in the Offer and the Merger, and that those shares will be registered with the SEC and will be freely tradable by etrials stockholders who are not affiliates of Merge Healthcare.
- Stockholder Support Agreement. The etrials board noted that the stockholders who executed the Stockholder Support Agreements, who together control approximately 33% of the voting rights of etrials' common stock, have agreed to tender their shares in the Offer pursuant to the Stockholder Support Agreements. The etrials board also noted that the Stockholder Support Agreements will terminate if the Merger Agreement is terminated in accordance with its terms.
- Public Announcement of the Offer and the Merger. The etrials board considered the anticipated beneficial effect of a public announcement of the Offer and execution of the Merger Agreement, including potential effects on etrials' sales, operating results and stock price, and etrials' ability to attract and retain key personnel.
- Merger Agreement Terms and Conditions. The etrials board reviewed, considered and discussed with etrials' management and etrials' legal and financial advisors the terms and conditions of the Merger Agreement, including the respective representations, warranties and covenants and termination rights of the parties. The matters considered included:
- The etrials board's view that the material terms of the Merger Agreement, taken as a whole, were as favorable as or more favorable than those found in comparable acquisition transactions.
- The availability of appraisal rights with respect to the Merger for etrials stockholders who properly exercise their rights under the DGCL.
- The etrials board's assessment of Merge Healthcare's financial strength and the fact that Merge Healthcare and Offeror's obligations under the Offer are not subject to any financing condition.

- The reasonable likelihood of the consummation of the transactions contemplated by the Merger Agreement.
- Merge Healthcare's history of completing acquisitions and the absence of significant regulatory approval requirements.
- The provisions in the Merger Agreement allowing etrials, subject to certain conditions therein as set forth in the Merger Agreement, to enter into a written agreement concerning a superior proposal (as defined in "Merger Agreement —No Solicitation of Other Offers by etrials").
- The provisions in the Merger Agreement allowing the etrials board, subject to certain conditions, to change its recommendation to etrials stockholders with respect to the Offer and Merger if required by the etrials board's fiduciary duties.
- The provisions in the Merger Agreement allowing etrials to terminate the Merger Agreement if the Offeror has not accepted Shares for payment prior to July 29, 2009.
- Availability of Appraisal Rights. The etrials board of directors considered that appraisal rights would be available to etrials stockholders under Delaware law.

The etrials board also considered a number of uncertainties and risks in its deliberations concerning the transactions contemplated by the Merger Agreement, including the Offer and the Merger, including the following:

- Prohibition on Solicitation of Other Offers. The restrictions in the Merger Agreement on solicitation generally, which prohibit etrials from soliciting any acquisition proposal or offer for a merger or business combination with any other party, including a proposal that might be advantageous to etrials stockholders when compared to the terms and conditions of the Offer and the Merger, and further prohibit etrials from entering into discussions regarding unsolicited proposals unless certain requirements are met.
- Termination Fee. The restrictions that the Merger Agreement imposes on actively soliciting competing bids, and the insistence by Merge Healthcare as a condition to its offer that etrials would be obligated to pay a termination fee equal to \$500,000, plus certain out-of-pocket expenses up to \$250,000, under certain circumstances, and the potential effect of such termination fee in deterring other potential acquirers from proposing alternative transactions.
- Failure to Close. The conditions to Merge Healthcare's and Offeror's obligation to accept the tendered Shares in the Offer and consummate the Merger, and the possibility that such conditions may not be satisfied. The fact that, if the Merger is not completed, etrials' officers and other employees will have expended extensive time and effort attempting to complete the transaction and will have experienced significant distractions from their work during the pendency of the transaction. The fact that, if the Merger is not completed, the market's perception of etrials' continuing business could potentially result in a loss of customers and employees.
- Pre-Closing Covenants. Under the terms of the Merger Agreement, etrials agreed that it will carry on in the ordinary course of business consistent with past practice and, subject to specified exceptions, that etrials will not take a number of actions related to the conduct of its business without the prior consent of Merge Healthcare.
- Taxation. The fact that the structure of the Offer and the Merger would probably result in the transaction's not qualifying as a reorganization under Section 368(a) of the Internal Revenue Code of 1986, as amended, and, therefore, that etrials stockholders participating in the transaction would recognize any gain or loss in connection with the transaction.

Table of Contents

- Fixed Offer/Merger Consideration. The Consideration is fixed and that the value of the Consideration will decrease if there is any decrease in the value of Merge Healthcare Common Stock prior to the Effective Time.
- Risks Related to Merge Healthcare Stock. The risks of owning Merge Healthcare stock, as described in Merge Healthcare's SEC filings, including risks related to potential delisting of its stock from NASDAQ.

The foregoing discussion of information and factors considered by the etrials board is not intended to be exhaustive, but is believed to include all of the material factors considered by the etrials board. In view of the variety of factors considered in connection with its evaluation of the Offer and the Merger, the etrials board did not find it practicable to, and did not, quantify or otherwise assign relative weights to the specific factors considered in reaching its determinations and recommendations. In addition, individual members of the etrials board may have given different weights to different factors. In arriving at their respective recommendations, the members of the etrials board were aware of the interests of executive officers and directors of etrials as described under "The Merger — Interests of etrials Management and Board of Directors."

It should be noted that this explanation of the reasoning of the etrials board of directors and certain information presented in this section, is forward-looking in nature and, therefore, that information should be read in light of the factors discussed in the section titled "Forward-Looking Statements" in this Prospectus, beginning on page ii.

Background and Recommendation of the etrials Board of Directors

etrials offers a broad range of clinical trial technology and services, including electronic data capture, handheld devices, and interactive voice and Web response software, designed to speed and improve the process of collecting data in clinical trials performed for drug and medical device development. etrials provides pharmaceutical, biotechnology, medical device companies and contract research organizations with integrated software technology and services designed to significantly reduce the time spent collecting clinical trials data and managing clinical trials performance, using an automated and easy-to-use mechanism to collect data directly from clinical investigators and patients. etrials believes that its automated data collection software enables its customers to reduce overall clinical trial research costs, enhance data quality and reduce the time it takes to close a study database.

etrials' principal sources of cash have been revenues from software application-hosting and related services as well as proceeds from the issuance of various debt instruments and the sale of equity securities. At March 31, 2009, etrials had an accumulated deficit of approximately \$46.7 million, including a net loss of approximately \$15.8 million for the year ended December 31, 2008 and of approximately \$1.0 million for the three months ended March 31, 2009. etrials believes its existing cash, cash equivalents, short-term investments, and cash provided by operating activities and etrials' debt facilities will be sufficient to meet its working capital and capital expenditure needs through 2009. Net service revenues decreased 17.5% for the year ended December 31, 2008, primarily as a result of the timing of new project starts during 2008. Although etrials experienced significant growth in awards throughout 2008, customers delayed starting a substantial portion of those studies. This, along with the fact that etrials experienced \$3.9 million in cancellations throughout 2008, had an unfavorable impact on 2008 revenue. Overall cancellations increased by 44.4% in 2008. Net service revenues decreased 2.2% to \$3.6 million for the three months ended March 31, 2009 as compared to the three months ended March 31, 2008. The decrease in net revenue is primarily the result of a 32.3% decline in active studies during the first quarter of 2009. During the quarter ended March 31, 2009, etrials experienced cancellations of \$5.0 million and ended the quarter with \$3.3 million of studies on hold. The cancellations and studies on hold in 2008 and the first quarter of 2009 were a direct reflection of the economic times and the fact that customers are opting to cancel studies sooner than was the case in the past, especially if they do not show promising results early in the study. As a result, total available backlog decreased 26.3% to \$18.5 million at March 31, 2009 compared to \$25.1 million at December 31, 2008. Of the \$18.5 million backlog, \$2.5 million was scheduled to start later than six months, or after September 30, 2009. Approximately 47% and 46% of etrials' total

available backlog as of March 31, 2009 and December 31, 2008, respectively, consisted of fully executed contracts.

In September 2008, Robert Brill, etrials' Chairman, had discussions with Greg Berlacher of Emerging Growth Equities, Ltd. ("EGE"), an investment banking firm, to discuss etrials' business and potential strategic opportunities. On October 6, 2008, because of the general economic, financial and business circumstances discussed in the preceding paragraph, etrials engaged EGE to evaluate strategic alternatives to enhance stockholder value, including possible acquisitions available to etrials. etrials hired EGE based on its experience as a financial advisor in mergers and acquisitions as well as its familiarity with the eClinical sector, including etrials. Shortly after its engagement, EGE began its detailed due diligence on etrials and the eClinical market. EGE also reviewed potential acquisition candidates and joint venture candidates, as well as candidates for other strategic transactions, including a sale of etrials. Given etrials' existing customer base, limited infrastructure and low capital resources, EGE focused on potential strategic candidate companies with the infrastructure and capital to absorb and continue etrials' technology and service offerings and its existing customers. This approach produced a focused list of strategic candidates. etrials issued a press release announcing its engagement of EGE, which resulted in EGE receiving numerous inquiries from third parties. EGE followed up with all inquiries.

During EGE's efforts, numerous possible strategic candidates never moved forward with an indication of interest. etrials believes that this lack of interest was primarily attributable to the slowdown nationally and globally in pharmaceutical research and development, which led to studies being cancelled or delayed. As a result, potential strategic partners were hesitant to pursue mergers, acquisitions and other strategic partnerships because of the impact these study cancellations and delays were having on eClinical companies, including etrials.

In November 2008, etrials hired Denis Connaghan as its Chief Executive Officer as part of its management reorganization that began in July 2008 with the resignation of its former chief executive officer. Mr. Connaghan replaced etrials' interim chief executive officer and also became a director of etrials. Mr. Connaghan was hired to guide etrials as it evaluated and reviewed in a general manner various strategic merger and acquisition alternatives. With Mr. Connaghan's hiring, EGE instituted a weekly call with etrials' board of directors to keep them apprised of its efforts on etrials' behalf. During these weekly calls, EGE reviewed the results of its due diligence, its discussion, if any, with possible strategic candidates and possible strategic alternatives.

In January 2009, etrials received a letter, dated January 7, 2009, from Merge Healthcare citing its interest in a possible transaction with etrials and setting forth possible terms of a transaction, all of which were subject to, among other things, due diligence by Merge Healthcare. Mr. Connaghan, Donald Russell, an etrials director, and Jay Seid of EGE, met with representatives of Merge Healthcare to discuss a possible transaction on general terms. Merge Healthcare, however, refused to agree to a confidentiality agreement with a standstill provision, and etrials and Merge Healthcare ceased contact at that time.

In January 2009, EGE contacted Ted Kaminer, the Chief Financial Officer of Bio-Imaging Technologies, Inc., to determine whether it had any interest in discussing a potential strategic transaction with etrials. Immediately following the conversation, representatives of EGE informed Mr. Connaghan that Mark Weinstein, Bio-Imaging's Chief Executive Officer, and Mr. Kaminer would be interested in meeting to further discuss a potential acquisition of etrials. EGE representatives immediately communicated with Messrs. Weinstein and Kaminer and indicated that etrials was prepared to sign a confidentially agreement and schedule a meeting to discuss a transaction. EGE delivered a draft confidentiality agreement, including a standstill provision, to Mr. Kaminer of Bio-Imaging on January 13, 2009, which Bio-Imaging signed on January 16, 2009.

On February 4, 2009, etrials and Bio-Imaging met in New York City and engaged in preliminary discussions regarding a potential strategic transaction between etrials and Bio-Imaging. Messrs. Connaghan and Weinstein each gave an overview of their respective companies. The parties discussed, at a very high level, how the two companies could combine in a way that would be compelling for each.

Over the next few days, Mr. Weinstein had telephone calls with Messrs. Berlacher and Seid of EGE to request additional financial and operational information regarding etrials in order for Bio-Imaging to assess its interest in pursuing a potential strategic transaction of etrials. Messrs. Berlacher and Seid continued to explore with Messrs. Connaghan and Trepanier other potential strategic scenarios with any third parties that had expressed interest in etrials, although none had presented any specific transaction structure or details.

Table of Contents

At a meeting of the etrials board of directors on February 25, 2009 at etrials' offices, Greg Berlacher, Jill Meyer and Jay Seid of EGE, who were participating by telephone, presented the board with an update on its work and contacts regarding potential strategic transactions. The board reviewed potential alternatives in various scenarios in a general manner because no specific transaction details had been suggested by any interested party. Donald R. Reynolds of etrials' counsel, Wyrick Robbins Yates & Ponton LLP, also attended this meeting and advised the etrials board of directors during its deliberations. The etrials board of directors, however, did not reach any conclusion on any of these scenarios.

A second meeting between etrials and Bio-Imaging was held in New York City on March 18, 2009. The meeting was designed to enable Bio-Imaging to speak directly to management of etrials about its operations. The parties reviewed and discussed the operations of etrials and Michael Mickens, etrials' Vice President of Sales and Client Services, gave a report on etrials' sales. Following this meeting, EGE prepared a preliminary financial review of the potential business combination based on the publicly available analyst's estimates for Bio-Imaging contained in the then latest analyst report issued by EGE. The analysis was conducted at a very high level due to the lack of forward-looking information available for Bio-Imaging. The analysis was based on a combination of the two companies and projected operating revenue through 2010, assuming anticipated cost savings resulting from the combination of the companies.

On March 31 2009, Mr. Kaminer of Bio-Imaging called Mr. Berlacher of EGE to propose a potential strategic transaction between Bio-Imaging and etrials. The proposal did not specify a particular structure for the acquisition, but did set an exchange ratio of 0.2 shares of Bio-Imaging common stock for each share of etrials' stock.

At a telephonic meeting on April 1, 2009, the etrials board of directors met to review the strategic proposal from Bio-Imaging. Greg Berlacher, Jay Seid, Jill Steier and Josh Fine of EGE reviewed with the etrials board of directors its analysis of Bio-Imaging and the proposal. EGE included in its summary various financial comparisons between Bio-Imaging and etrials, including historical performances of each company and estimated financial information based on a combined company. Mr. Seid also summarized EGE's discussions with Bio-Imaging's financial advisors concerning Bio-Imaging's operations. The etrials board of directors reviewed and discussed the forecasted numbers and analyses provided by EGE. The etrials board of directors also considered potential synergies of the combined company, the strategic and competitive implications, the form and amount of the proposed consideration, and potential alternatives to the proposal. The etrials board of directors also discussed the likely costs and timing of an acquisition of etrials by Bio-Imaging. Based on its review, the etrials board of directors instructed EGE to make a counteroffer seeking a higher acquisition price. At this meeting, Mr. Reynolds reviewed the duties and responsibilities of directors to disclose any conflicts of interest with respect to the proposed transaction and none were noted.

The etrials board of directors met again telephonically on April 3, 2009. At this meeting, Mr. Connaghan reviewed management's analyses of various scenarios for etrials continuing as an independent entity, whether as a public company or as a private company. He reviewed etrials' need to conserve cash and that remaining independent was a possibility but it would likely severely limit etrials' ability to grow due to a lack of capital resources, with the result that etrials might become a niche player in the marketplace. Mr. Connaghan also explained that remaining independent would not likely provide any significant liquidity for etrials' investors. The etrials board of directors considered the different scenarios of operating etrials as an independent entity, specific future cost estimates for etrials, and other matters related to the strategic outlook of etrials. Mr. Reynolds advised the board on strategic alternatives, including different business organizational structures and potential timelines of a reorganization of etrials. The directors agreed to reconvene the following week to discuss all of these issues further.

Through April 6, 2009, Messrs. Berlacher and Seid had numerous additional conversations with Mr. Kaminer of Bio-Imaging and discussed in detail the requested increased consideration and, in general terms and without any

commitment or decision, the various forms of a possible transaction. Messrs. Weinstein and Kaminer resisted increasing the stock consideration because of their belief that Bio-Imaging stock was undervalued and the potential dilution to Bio-Imaging's existing stockholders. EGE discussed the negotiations with Mr. Connaghan daily during this period. On April 6, 2009, Bio-Imaging, in a telephone conversation with Messrs. Berlacher and Seid of EGE, revised its offer to 0.2 shares of Bio-Imaging common stock and \$0.15 in cash.

36

On April 7, 2009, the etrials board of directors convened a special meeting via telephone that Messrs. Berlacher and Seid of EGE and Mr. Reynolds of Wyrick Robbins also attended. Mr. Connaghan and Mr. Berlacher each updated the etrials board of directors on their discussions with Bio-Imaging about the proposed transaction. Messrs. Connaghan and Berlacher summarized Bio-Imaging's position on the increased transaction consideration, now consisting of Bio-Imaging stock and cash. The directors discussed in detail Bio-Imaging's offer and the transaction process from a legal perspective. The directors then unanimously approved the appointment of a Mergers and Acquisitions Committee consisting of Messrs. Brill, Russell and Connaghan to negotiate the general terms and provisions of the proposed transaction with Bio-Imaging. These individuals were elected due to their positions as Chairman (Mr. Brill) and President and Chief Executive Officer (Mr. Connaghan) of etrials, as well as being the directors most involved to date in the process.

Shortly afterward, etrials and Bio-Imaging began their due diligence reviews of each other. etrials posted its diligence materials to a virtual data room, and the parties held diligence meetings on April 16, 20, 21 and 27, 2009 at which company records were reviewed.

From April 20 through May 4, 2009, etrials and Bio-Imaging negotiated the final terms of a merger agreement with the assistance of their respective legal and financial advisors. These negotiations centered on two main points: the type of consideration to be paid, which ultimately was set at the combination of cash, Bio-Imaging common stock and Bio-Imaging preferred stock because Bio-Imaging did not have enough authorized common stock to issue all of the stock consideration in shares of its common stock; and the structure of the transaction, which ultimately was set as a tender offer and subsequent merger rather than a merger alone, due to shorter time expected to complete a tender offer than a straight merger.

The etrials board of directors met on May 1, 2009 for the purpose of reviewing the terms of the proposed Bio-Imaging merger agreement. Also in attendance were Messrs. Berlacher and Seid of EGE, etrials' financial advisor, and Mr. Reynolds of Wyrick Robbins. Mr. Reynolds reviewed the terms of the Bio-Imaging merger agreement and the relevant corporate legal approvals necessary to consummate the Bio-Imaging offer and merger, noting that no regulatory approvals were necessary. Mr. Seid reviewed with the etrials board of directors his firm's analyses of etrials, Bio-Imaging and the proposed transaction. At the conclusion of the review of EGE's analyses, Mr. Seid indicated to the etrials board of directors that EGE was prepared to deliver an opinion that the consideration to be received by etrials stockholders in the Merger is fair, from a financial point of view. The etrials board of directors engaged in detailed discussion of the proposed transaction, and unanimously approved proceeding to finalize the Bio-Imaging merger agreement, but agreed to reconvene on Monday, May 4, 2009 to continue its deliberations on the transaction.

The etrials board of directors then reconvened after the stock market had closed on Monday, May 4, 2009 because the consideration was a fixed ratio of cash and Bio-Imaging stock and the etrials board of directors wanted a set value that the consideration would represent on which to make its decision. In attendance again were Messrs. Berlacher, Seid and Reynolds. After an update on negotiations over the weekend on final technical terms of the merger agreement by Mr. Reynolds, Mr. Seid presented EGE's fairness opinion and his firm's analyses. After further deliberation, the etrials board of directors determined that the Bio-Imaging merger agreement and the transactions contemplated thereby were fair to, advisable and in the best interests of etrials' stockholders and each other relevant corporate constituency and unanimously voted to approve the terms of the Bio-Imaging merger agreement.

etrials and Bio-Imaging signed their merger agreement on May 4, 2009 and issued a joint press release before the opening of the markets on May 5, 2009, announcing the proposed merger and the related transactions.

On May 5, 2009, etrials received an unsolicited proposal with respect to a potential acquisition of etrials from Merge Healthcare. The etrials board of directors, in consultation with EGE and Wyrick Robbins, subsequently determined

that the unsolicited proposal constituted an acquisition proposal, as defined in the Bio-Imaging merger agreement, that could be a superior proposal, as so defined (these definitions are identical to those in the Merger Agreement, as described below in "Merger Agreement —No Solicitation of Other Offers by etrials"), requiring disclosure to Bio-Imaging. etrials notified Bio-Imaging of its determination on May 6, 2009. The etrials directors also confirmed to each other that none of them had any conflicts of interest with respect to a transaction with Merge Healthcare.

From May 6 to May 15, 2009, representatives of EGE and Wyrick Robbins, on behalf of etrials, negotiated with representatives of Merge Healthcare on the terms of a merger agreement among etrials, Merge Healthcare and a to-be-formed subsidiary of Merge Healthcare. The parties also entered into a confidentiality agreement, containing a standstill provision, identical to the one etrials entered into with Bio-Imaging. They conducted due diligence on one another, including Merge Healthcare having access to etrials virtual data room, and meetings on May 13 and 14, 2009. The resulting proposal provided for a tender offer and merger transaction identical to the Bio-Imaging offer except for the consideration offered, which was \$0.60 in cash and 0.2584 shares of Merge Healthcare Common Stock, which fraction was valued at \$0.60, based on a volume-weighted average of Merge Healthcare's stock price over the 15 trading days ended May 14, 2009, for a total cash value of \$1.20 per Share. From the outset of the negotiations, etrials insisted to Merge Healthcare that the merger agreement with Merge Healthcare had to be substantively identical to that with Bio-Imaging. On May 15, 2009, Merge Healthcare delivered a proposed merger agreement to etrials, which was identical to the Bio-Imaging merger agreement except as to the consideration offered, the inclusion of references to the termination of the Bio-Imaging merger agreement and the payment of termination fees and expenses thereunder, factual differences in Merge Healthcare's representations, the removal of stockholder approval of an amendment to the certificate of incorporation to increase the authorized shares of Bio-Imaging common stock because Merge Healthcare currently has sufficient authorized common stock to effect its proposed tender and merger, and some minor technical revisions. At the same time, Merge Healthcare also delivered a proposed stockholder support agreement to be entered into by etrials' directors and executive officers and the same stockholders who entered into the stockholder support agreement with Bio-Imaging, which was substantially identical to the Bio-Imaging stockholder support agreement.

On May 15, 2009, the etrials board of directors met to evaluate the Merge Healthcare proposal and the Merge Healthcare merger agreement. After consultation with Wyrick Robbins and EGE, the etrials board of directors unanimously determined in good faith that the Merge Healthcare proposal, including the Merge Healthcare merger agreement, was a superior proposal.

On the afternoon of May 15, 2009, etrials gave written notice to Bio-Imaging of the Merge Healthcare offer. In compliance with the Bio-Imaging merger agreement, etrials could not exercise its right to terminate the Bio-Imaging merger agreement until Wednesday, May 20, 2009. Therefore, the notice indicated that the etrials board of directors intended to, on May 20, exercise its right to terminate the Bio-Imaging merger agreement in order to concurrently enter into the Merge Healthcare merger agreement if it was a superior proposal at that time. Also on May 15, 2009, etrials and Bio-Imaging entered into an amendment to their merger agreement to clarify certain of its provisions.

On the evening of May 18, 2009, Bio-Imaging delivered to etrials a proposed amendment to its merger agreement to increase the cash portion of its offer from \$0.15 to \$0.62.

The etrials board of directors met telephonically on May 19, 2009 for the purpose of reviewing the terms of the increased Bio-Imaging offer. Also in attendance were Mr. Seid of EGE, etrials' financial advisor, and Mr. Reynolds and other representatives of Wyrick Robbins. The etrials board of directors reviewed the terms of increased Bio-Imaging offer and the Merge Healthcare offer in detail, including the relative strategic merits of each, the impact of current market volatility and the different periods the proposals used to value the stock consideration, the liquidity of each and other relevant matters. Mr. Seid reviewed with the etrials board of directors the increased Bio-Imaging offer and delivered to the etrials board of directors his firm's verbal opinion, subsequently expressed in writing, that the increased consideration to be received by the etrials stockholders in the proposed merger with Bio-Imaging was fair, from a financial point of view. The etrials board of directors determined that the terms of increased Bio-Imaging offer. After its deliberation, the etrials board of directors determined that the terms of increased Bio-Imaging offer were fair to, advisable and in the best interests of etrials' stockholders and each other relevant corporate constituency and unanimously voted to approve the terms of the increased Bio-Imaging offer. The etrials board of directors also unanimously authorized management of etrials to notify Merge Healthcare that its offer was no

longer a superior proposal. Following the etrials board of directors meeting, etrials and Bio-Imaging executed an amendment to the Bio-Imaging merger agreement and thereafter etrials sent a written notice to Merge Healthcare that its offer was no longer a superior proposal.

On the evening of May 19, 2009, etrials and Bio-Imaging entered into an amendment to their merger agreement to increase the purchase price. They issued a joint press release before the opening of the markets on May 20, 2009, announcing the execution of the amendment to the Bio-Imaging merger agreement.

On the evening of May 20, 2009, etrials received a letter from Merge Healthcare offering to increase the stock portion of its offer to be 0.3451 shares of Merge Healthcare Common Stock, which was valued at \$0.88, based on a volume weighted average of Merge Healthcare's stock price over the 20 trading days ended May 20, 2009. Merge Healthcare also agreed that its merger agreement would not be revised other than to reflect the increased consideration offered.

On May 21, 2009, the etrials board of directors met telephonically for the purpose of reviewing the terms of the increased Merge Healthcare offer. Also in attendance were Messrs. Berlacher and Seid of EGE and Mr. Reynolds and other representatives of Wyrick Robbins. The etrials board of directors reviewed the terms of the increased Merge Healthcare offer and the terms of the amended Bio-Imaging merger agreement in detail, including the relative strategic merits of each, the impact of current market volatility, the historical prices of Bio-Imaging stock and Merge Healthcare stock and other relevant matters. Mr. Reynolds reviewed with the etrials board of directors its fiduciary duties. Mr. Seid reviewed with the etrials board of directors the increased Merge Healthcare offer. The etrials board of directors the increased Merge Healthcare offer and the amended Bio-Imaging merger agreement, but agreed to reconvene on Friday, May 22, 2009 to continue its deliberations. etrials gave notice to Bio-Imaging of the increased Merge Healthcare proposal, as required by their merger agreement, and requested both Bio-Imaging and Merge Healthcare to consider increasing their offers further. Neither did at that time.

On the afternoon of May 22, 2009, the etrials board of directors met telephonically to continue its deliberations of the increased Merge Healthcare offer. Also in attendance were Messrs. Berlacher and Seid of EGE and Mr. Reynolds and other representatives of Wyrick Robbins. The etrials board of directors reviewed the relative strategic merits of the increased Merge Healthcare offer and the amended Bio-Imaging merger agreement, the trading volume and prices of Bio-Imaging stock and Merge Healthcare stock for that day and other relevant matters. Mr. Reynolds reviewed with the etrials board of directors its fiduciary duties. After detailed discussion, the etrials board of directors determined that the increased Merge Healthcare offer was not a superior proposal, and the Company informed both Bio-Imaging and Merge Healthcare as such.

On May 27, 2009, etrials received a letter and a draft merger agreement from Merge Healthcare whereby Merge Healthcare increased the value of its offer to be \$0.80 in cash and 0.3348 shares of Merge Healthcare Common Stock (which is the Consideration in both the Offer and the Merger). On the afternoon of May 27, 2009, the etrials board of directors met telephonically to continue its deliberations of the increased Merge Healthcare offer. Also in attendance were Messrs. Berlacher and Seid of EGE and Mr. Reynolds and other representatives of Wyrick Robbins. The etrials board reviewed the terms of the increased Merge Healthcare offer, including historical prices of Bio-Imaging stock and Merge Healthcare stock and other relevant matters. After consultation with Wyrick Robbins and EGE, the etrials board of directors unanimously determined in good faith that the increased Merge Healthcare offer, including the revised Merge Healthcare merger agreement (which is the Merger Agreement), was a superior proposal.

On the afternoon of May 27, 2009, etrials gave written notice to Bio-Imaging of the increased Merge Healthcare offer. In compliance with the Bio-Imaging merger agreement, etrials could not exercise its right to terminate the Bio-Imaging merger agreement until Saturday, May 30, 2009. Therefore, the notice indicated that the etrials board of directors intended to, on May 30, exercise its right to terminate the Bio-Imaging merger agreement in order to concurrently enter into the Merge Healthcare merger agreement if it was a superior proposal at that time.

On the evening of May 28, 2009, Bio-Imaging delivered to etrials a proposed amendment to the Bio-Imaging merger agreement to increase the preferred stock portion of the Bio-Imaging offer from 0.076 shares to 0.113 shares.

The etrials board of directors met telephonically on the morning of May 29, 2009 for the purpose of reviewing the terms of the increased Bio-Imaging offer. Also in attendance were Messrs. Berlacher and Seid and other representatives of EGE, etrials' financial advisor, and Mr. Reynolds and other representatives of Wyrick Robbins. The etrials board of directors reviewed the terms of the increased Bio-Imaging offer in detail and compared the terms of the Bio-Imaging increased offer, including the liquidity of the preferred stock portion, to those of the Offer and other relevant matters. Mr. Seid reviewed with the etrials board of directors the increased Bio-Imaging offer and his firm's analyses of etrials, Merge Healthcare and the proposed transaction, which are summarized below in "Opinion of Emerging Growth Equities Ltd. Financial Advisor to etrials" and consisted of an analysis of selected publicly traded comparable companies, an analysis of trading volume of etrials and Merge Healthcare, an analysis of selected merger and acquisition transactions by comparable companies and a premium paid analysis. Mr. Seid then delivered to the etrials board of directors his firm's verbal opinion, subsequently expressed in writing (which is attached as Appendix C hereto), that the consideration to be received by the etrials stockholders from Merge Healthcare in the Merger is fair, from a financial point of view. The etrials board of directors engaged in detailed discussion of the increased Bio-Imaging offer. After its deliberation, the etrials board of directors determined that, even in light of the increased Bio-Imaging offer, the Merge Healthcare offer was a superior proposal. The etrials board then determined that the Offer and the Merger were fair to, advisable and in the best interests of etrials' stockholders and each other relevant corporate constituency and unanimously voted to approve the terms of the Offer and the Merger. The etrials board of directors also unanimously authorized management of etrials to notify Bio-Imaging that its increased offer was not a superior proposal.

Bio-Imaging did not make another offer prior to midnight on May 29, 2009. As a result, etrials, Merge Healthcare and Merger Sub executed the Merger Agreement.

As of the date of this Prospectus, the etrials board of directors unanimously recommends that etrials stockholders accept the Offer and tender their shares to Offeror pursuant to the Offer, and, if applicable, vote in favor of the Merger.

Opinion of Emerging Growth Equities Ltd. Financial Advisor to etrials

etrials retained EGE to act as its financial advisor and investment banker, and, if requested, to render to the etrials board of directors an opinion as to the fairness, from a financial point of view, to the holders of the Shares of the per Share consideration to be paid in the Offer and the Merger. At the May 29, 2009 meeting of the etrials board of directors, EGE delivered to the etrials board of directors an oral presentation and a subsequent written opinion to the effect that, as of the date and based upon and subject to the qualifications set forth in the written opinion, the aggregate consideration of \$0.80 in cash and 0.3448 shares of Merge Healthcare Common Stock per Share was fair, from a financial point of view, to holders of the Shares. The written opinion was approved by the fairness opinion committee of EGE. No limitations were imposed by the etrials board of directors upon EGE with respect to the investigations it made or procedures it followed in rendering its opinion.

The full text of the EGE written opinion dated May 30, 2009, which sets forth, among other things, the assumptions made, procedures followed, matters considered and limitations on the scope of the review undertaken by EGE in rendering its opinion, is attached as Appendix C and is incorporated in its entirety herein by reference. etrials' stockholders are urged to, and should, carefully read the EGE opinion in its entirety. The EGE opinion addresses only the fairness, from a financial point of view and as of the date of the opinion, to holders of Shares of the aggregate per Share consideration to be paid in the Offer and the Merger. The EGE opinion was directed to the etrials board of directors and was not intended to be, and does not constitute, a recommendation as to whether any of the etrials'

stockholders should tender their Shares in connection with the Offer or how any of the etrials' stockholders should vote with respect to the Merger or any other matter.

40

The summary of EGE's opinion described below is qualified in its entirety by reference to the full text of the opinion, and you are encouraged to read the opinion carefully in its entirety. EGE's opinion does not in any manner address etrials' underlying business decision to enter into the Merger Agreement, the structure or tax consequences of the proposed Merger or the availability or advisability of any alternatives to the proposed Merger. EGE's opinion is addressed to the etrials board of directors and is limited to the fairness, from a financial point of view, of the consideration to be received by the etrials' stockholders in connection with the proposed Merger as provided for in the Merger Agreement. EGE expresses no opinion with respect to any other reasons, legal, business or otherwise, that may support the etrials' stockholders decision to approve or consummate the proposed Merger. EGE's opinion does not constitute a recommendation that etrials approve and consummate the proposed Merger, nor does it constitute a recommendation to any stockholder of etrials as to whether to approve the proposed Merger.

In connection with EGE's review of the proposed Merger and the preparation of its opinion, EGE has, among other things:

- •reviewed and analyzed the financial terms of the proposed Merger as stated in the final version of the Merger Agreement proposed to be executed by etrials;
- •reviewed and analyzed historical publicly available business information and financial results of etrials, including such information and results contained in etrials' Annual Report filed on Form 10-K for the year ended December 31, 2008 and contained in etrials' Quarterly Report filed on Form 10-Q for the quarter ended March 31, 2009;
- reviewed and analyzed certain other operating and financial information of etrials provided by etrials' management, including etrials' projections as to the future operating and financial performance of etrials for calendar years 2009 through 2010;
- discussed with senior executives of etrials certain information relating to the aforementioned items, including the strategic, financial and operational benefits anticipated from the proposed Merger and various other matters which EGE deemed relevant to its opinion;
 - reviewed and analyzed historical market prices and trading volumes for the Shares;
- reviewed and analyzed publicly available information (including research reports) regarding selected publicly-traded companies EGE deemed comparable to etrials;
- reviewed and analyzed historical publicly available business information and financial results of Merge Healthcare, including such information and results contained in Merge Healthcare's Annual Report filed on Form 10-K for the year ended December 31, 2008 and contained in Merge Healthcare's Quarterly Report filed on Form 10-Q for the quarter ended March 31, 2009;
 - reviewed and analyzed historical market prices and trading volumes for Merge Healthcare's common stock;
- •reviewed and analyzed publicly available information (including research reports) regarding selected publicly-traded companies EGE deemed comparable to Merge Healthcare;
- reviewed and analyzed publicly available information regarding selected business combinations EGE deemed comparable to the proposed Merger;
- •reviewed and analyzed certain other information EGE deemed relevant for purposes of its opinion with respect to the e-clinical market; and

• performed such other analyses and reviewed such other information as EGE deemed appropriate, including trends prevailing in relevant industries and financial markets.

In rendering its opinion, EGE assumed and relied upon the accuracy and completeness of the financial and other information supplied or otherwise made available to it etrials or any other party, without independent verification, and has further relied upon the assurances of management of etrials that they are not aware of any facts that would make such information inaccurate or misleading. In arriving at its opinion, EGE neither performed nor obtained any evaluation or appraisal of the assets or liabilities of etrials, and EGE did not perform or obtain any evaluation or appraisal of etrials' physical properties and facilities or sales, marketing or service organizations.

With respect to the financial projections provided to or otherwise reviewed by or discussed with EGE, EGE assumed that they have been reasonably prepared in good faith on bases reflecting the best currently available estimates and judgments of the management of etrials as to the future operating and financial performance of etrials, and EGE relied upon each party to advise it promptly if any information previously provided became inaccurate or was required to be updated during the period of its review. In addition to EGE's review and analyses of the specific information set forth above, its opinion reflects and gives effect to its assessment of general economic, monetary, market and industry conditions existing and disclosed to EGE as of the date of its opinion as they may affect the business and prospects of etrials.

For purposes of formulating EGE's opinion, etrials agreed that EGE could assume the following:

- the proposed Merger would be consummated in all respects in accordance with the terms of the Merger Agreement, without waiver, modification or amendment of any term, condition or agreement contained therein; and
- in the course of obtaining the necessary regulatory or third party consents and approvals for the proposed Merger, no limitations, restrictions or conditions would be imposed on etrials or the proposed Merger.

Although subsequent developments or material changes in any of the information or circumstances reviewed or considered by EGE may affect its opinion, EGE does not have any obligation to update, revise or reaffirm its opinion to account for any such developments or changes.

Analysis of Selected Publicly Traded Comparable Companies

EGE reviewed and compared certain financial, operating and stock market information related to etrials with other publicly held e-clinical companies (the "Comparable Companies"). EGE identified five companies that it deemed comparable to etrials. These companies were deemed by EGE to be comparable to etrials because they each operate in the e-clinical marketplace, including imaging and clinical trial support services. The Comparable Companies utilized were: Phase Forward Inc. (PFWD), eResearch Technologies, Inc. (ERES), Bio-Imaging Technologies, Inc. d/b/a BioClinica (BITI), OmniComm Systems Inc. (OMCM), and Datatrak International, Inc. (DATA).

Using publicly available information, EGE analyzed certain financial, trading and valuation statistics for the Comparable Companies. EGE analyzed enterprise values (calculated as equity value, plus debt, less cash) and equity values, in each case as multiples of last twelve months ("LTM") revenues. This analysis yielded the following multiples:

	Low	High	Median	etrials
Enterprise Value as a Multiple of LTM Actual Revenues	0.1x	2.7x	1.4x	0.1x
Equity Value as a Multiple of LTM Actual Revenues	0.5x	3.5x	1.7x	0.7x

Using publicly available information (as of May 28, 2009), EGE analyzed year-over-year quarterly revenue results beginning in the first quarter 2008 (Q1 2008 compared to Q1 2007) through the first quarter 2009 (Q1 2009 compared to Q1 2008) for each of the Comparable Companies as compared to etrials. This analysis is displayed in the following table:

Table of Contents

Company				200	8				2009	
	Q'1		Q'2		Q'3		Q'4		Q'1	
PFWD	36	%	36	%	39	%	29	%	28	%
ERES	60	%	43	%	42	%	4	%	-29	%
BITI	27	%	67	%	46	%	42	%	21	%
OMCM	23	%	52	%	94	%	103	%	140	%
DATA	-41	%	-27	%	12	%	15	%	0	%
ETRIALS	-9	%	-38	%	-24	%	-33	%	-28	%

This analysis indicates that etrials has had continuous year-over-year quarterly declines in revenue compared with the Comparable Companies that all displayed positive growth during the same periods (except for ERES from Q1 2009 compared to Q1 2008 and DATA Q1,Q2 2008 compared to Q1,Q2 2007).

Using publicly available information, EGE analyzed Operating Margins for each of the Comparable Companies as compared to etrials. The analysis is displayed as set forth below:

Company				200	8				2009	
	Q'1		Q'2		Q'3		Q'4		Q'1	
PFWD	12	%	10	%	10	%	7	%	11	%
ERES	25	%	30	%	31	%	29	%	14	%
BITI	9	%	11	%	10	%	15	%	8	%
OMCM	-207	%	-100	%	-113	%	-82	%	-40	%
DATA*	-107	%	-99	%	-66	%	-5	%	-38	%
ETRIALS**	-57	%	-57	%	-57	%	-41	%	-25	%

*DATA Q2 2008 severance expense and impairment loss has been excluded from margin calculations. Q4 2008 margins include the forgiveness of a \$3.0 million debt obligation.

**etrials Q3 & Q4 amortization of intangible assets and goodwill impairment has been excluded from margin calculation because the magnitude of the amortized amounts would distort the comparison to the Comparable Companies.

This analysis indicated that with the exception of DATA, the Comparable Companies generally had positive and/or increasing margins during the time periods specified. etrials, due to its continuing and increasing losses, has continuing negative margins that do not reflect significant improvement.

Analysis of Trading Volume of etrials and Merge Healthcare

Using publicly available information, EGE reviewed an analysis of the daily trading volume for the seven-month period ended April 28, 2009 for both the Shares and the Merge Healthcare Common Stock. This analysis shows the relative liquidity of both companies' shares over the specified time period. EGE feels that the current stockholders of etrials will retain added value upon closing of the Merger and receiving Merge Healthcare shares due to the increased liquidity associated with the Merge Healthcare shares, compared to the relative illiquidity Shares.

43

Table of Contents

EGE also reviewed the historical stock price and trading volume data for the Shares and compared its historical trading patterns to the trading patterns of certain market indices (Dow Jones Industrial Average and NASDAQ Composite Index) and of the Comparable Companies. EGE noted that the Shares generally performed similarly to the index of Comparable Companies but underperformed the broader market indices.

As noted above, none of the Comparable Companies are identical or directly comparable to etrials. Accordingly, EGE considered the multiples for such Comparable Companies, taken as a whole, to be more relevant than the multiples of any single Comparable Company. Further, an analysis of publicly traded comparable companies is not mathematical; rather, it involves complex consideration and judgments concerning differences in financial and operating characteristics of the Comparable Companies and other factors that could affect the public trading of the Comparable Comparable Companies.

In its analysis, EGE considered that the overall lower valuation metrics of etrials relative to the Comparable Companies is likely a result of etrials' significant historical losses, decline in revenue, smaller relative size and capitalization and the limited liquidity of its stock as compared to most of the Comparable Companies.

Analysis of Selected Merger and Acquisition Transactions by Comparable Companies

Using publicly available information, EGE reviewed and compared the purchase prices and implied transaction value multiples paid in the following six selected merger and acquisition transactions of other publicly held e-clinical providers (the "Comparable Transactions"). The Comparable Transactions were:

Acquirer	Target	Date
Phase Forward, Inc. (PFWD)	Waban Software	4/22/09
Tripos International	Pharsight (PHST)	9/9/08
Phase Forward, Inc. (PFWD)	Clarix LLC	9/5/08
Parexel International Corp. (PRXL)	ClinPhone (CINHF)	8/14/08
Bio-Imaging Technologies (BITI)	Phoenix Data Systems	3/24/08
eResearch Technology, Inc. (ERES)	ECG division of Covance (CVD)	11/28/07

Based on the information disclosed in each of the Comparable Transactions, EGE calculated and compared transaction values as multiples of LTM revenues and compared such multiples with those implied by the Merger. All multiples were based on financial information available at the closing date of the relevant transaction. The analysis yielded the following multiples:

Transaction Value of Multiples	Low	High	Average	etrials
Transaction Value as Multiple:				
LTM Revenues	1.9x	6.42	x 3.0x	1.3x

EGE also reviewed the Comparable Transactions in light of the broad-based decline in the stock market during the twelve months ended April 30, 2009. During this time period the average decline of the stock price in the Comparable Companies was 45%. While the LTM Revenue multiple associated with the Offer Consideration is below the low range for the Comparable Transactions, etrials differs from the listed targets in that etrials has incurred substantial operating losses. In addition, etrials has had a recent history of declining revenues compared with the targets in the Comparable Transactions whose revenues were either steady-state or growing. Accordingly, EGE does not believe that multiples of LTM revenues are the most appropriate methodology to utilize in an analysis of the Merger.

Premium Paid Analysis

EGE reviewed current and historical market prices and trading data concerning the Shares for specified periods prior to the announcement of the proposed Merger on June 1, 2009. EGE utilized the Premium Paid Analysis, a market valuation approach, for the purposes of comparing the consideration to be paid in the proposed Merger to the average closing price of the Shares over varying time periods prior to May 28, 2009. For the purpose of the Premium Paid Analysis, EGE used the price of the Shares as of May 4, 2009, the day prior to the announcement of the initial offer from Bio-Imaging. On May 28, 2009 the Shares closed at \$1.31 per share and the Merge Healthcare Common Stock closed at \$3.04 per share. Accordingly the Offer Consideration represents an implied premium of 30% over the closing price of the Shares on May 28, 2009. For calculation purposes, EGE assumed the Offer Consideration equates to \$1.70 per Share (which is calculated using the 20-day volume-weighted average price of \$2.61 for Merge Healthcare proposal.

EGE also reviewed the Offer Consideration and volume-weighted average price ("VWAP") for the Shares and the Merge Healthcare Common Stock for various time periods ending on May 28, 2009, as set forth below, and calculated the implied premium as of such date EGE informed the etrials board of directors that the Offer Consideration per share represented a premium to the Shares price per share as of May 28, 2009 and during each time period set forth above.

Date/Date Range	VV	ials VAP at ay 4, 2009	He VV	erge althcare VAP at ny 28, 09	plied ansaction ce	Implied Premium	
10 trading days	\$	0.73	\$	2.98	\$ 1.83	151	%
20 trading days	\$	0.72	\$	2.67	\$ 1.72	139	%
30 trading days	\$	0.70	\$	2.60	\$ 1.70	142	%
60 trading	\$	0.73	\$	2.47	\$ 1.65	126	%
YTD	\$	0.69	\$	2.23	\$ 1.59	127	%

Miscellaneous

The summary set forth above does not contain a complete description of the analyses performed by EGE, but does summarize the material analyses performed by EGE in rendering its opinion. The preparation of a fairness opinion is a complex process and is not necessarily susceptible to partial analysis or summary description. EGE believes that its analyses and the summary set forth above must be considered as a whole, and that selecting portions of its analyses or of the summary, without considering the analyses as a whole or all of the factors included in its analyses, would create an incomplete view of the processes underlying the analyses set forth in the EGE opinion. In arriving at its opinion, EGE considered the results of all of its analyses and did not attribute any particular weight to any factor or analysis. Instead, EGE made its determination as to fairness on the basis of its experience and financial judgment after considering the results of all of its analyses. The fact that any specific analysis has been referred to in the summary above is not meant to indicate that this analysis was given greater weight than any other analysis. No company or transaction used in the above analyses as a comparison is directly comparable to etrials or the transactions contemplated by the Merger Agreement, and an evaluation of the results of those analyses is not entirely mathematical. Rather, the analyses involve complex considerations and judgments concerning financial and operating characteristics and other factors that could affect the companies or transactions analyzed, public trading or other values of the companies or business segments analyzed.

EGE performed its analyses solely for purposes of providing its opinion to the etrials board of directors. In performing its analyses, EGE made numerous assumptions with respect to industry performance, general business and economic conditions and other matters. Certain of the analyses performed by EGE are based upon forecasts of future results furnished to EGE by etrials' management, which are not necessarily indicative of actual future results and may be significantly more or less favorable than actual future results. These forecasts are inherently subject to uncertainty because, among other things, they are based upon numerous factors or events beyond the control of the parties or their respective advisors. EGE does not assume responsibility if future results are materially different from forecasted results. Each of the analyses conducted by EGE was carried out to provide a different perspective on the proposed Merger. EGE did not form a conclusion as to whether any individual analysis, considered in isolation, supported or failed to support an opinion as to the fairness to the etrials stockholders, from a financial point of view, of the consideration to be received. EGE did not place any specific reliance or weight on any individual analysis, but instead concluded that its analyses, taken as a whole, supported its determination.

EGE's opinion was one of many factors taken into consideration by the etrials board of directors in making the determination to approve the Merger Agreement and recommend that the stockholders tender their Shares in connection with the Offer. The type and amount of consideration payable in the proposed Merger was determined through negotiation between etrials and Merge Healthcare, and the decision to enter into the proposed Merger was solely that of the etrials board of directors. The above summary does not purport to be a complete description of the analyses performed by EGE in connection with the opinion and is qualified in its entirety by reference to the written opinion of EGE attached as Appendix C hereto.

EGE has relied upon and assumed, without assuming liability or responsibility for independent verification, the accuracy and completeness of all information that was publicly available or was furnished, or otherwise made available, to it or discussed with or reviewed by it. EGE has further relied upon the assurances of the management of etrials that the financial information provided has been prepared on a reasonable basis in accordance with industry practice and that they are not aware of any information or facts that would make any information provided to EGE incomplete or misleading. Without limiting the generality of the foregoing, for the purpose of its opinion, EGE has assumed that, with respect to financial forecasts, estimates and other forward-looking information reviewed by it, that such information has been reasonably prepared based on assumptions reflecting the best currently available estimates and judgments of the management of etrials as to the expected future results of operations and financial condition of etrials to which such financial forecasts, estimates and other forward-looking information relate. EGE expresses no

opinion as to any such financial forecasts, estimates or forward-looking information or the assumptions on which they were based. With the consent of etrials, EGE has relied on advice of the outside counsel and the independent accountants to etrials, and on the assumptions of the management of etrials, as to all accounting, legal, tax and financial reporting matters with respect to etrials, Merge Healthcare and the Merger Agreement.

EGE assumed that the Offer and the Merger would be completed on the terms set forth in the Merger Agreement reviewed by EGE, without amendments and with full satisfaction of all covenants and conditions without any waiver. EGE expressed no opinion regarding whether the necessary approvals or other conditions to the consummation of the merger will be obtained or satisfied.

EGE did not assume responsibility for performing, and did not perform, any appraisals or valuations of specific assets or liabilities of etrials. EGE expresses no opinion regarding the liquidation value or solvency of any entity. EGE did not undertake any independent analysis of any outstanding, pending or threatened litigation, regulatory action, any potential delisting of the Shares or the shares of Merge Healthcare from the NASDAQ Global Market, possible unasserted claims or other contingent liabilities to which etrials, or any of its respective affiliates, are a party or may be subject. At the direction of etrials, and with its consent, EGE's opinion made no assumption concerning, and therefore did not consider, the potential effects of litigation, claims, investigations, or possible assertions of claims, or the outcomes or damages arising out of any such matters.

EGE's opinion was necessarily based on the information available to it and the facts and circumstances as they existed and were subject to evaluation as of the date of the opinion. Events occurring after the date of the opinion could materially affect the assumptions used by EGE in preparing its opinion. EGE expresses no opinion as to the prices at which the Shares have traded or may trade following announcement of the transaction or at any time after the date of the opinion. EGE has not undertaken and is not obligated to affirm or revise its opinion or otherwise comment on any events occurring after the date it was rendered.

EGE was not requested to opine as to, and the opinion does not address, the basic business decision to proceed with or effect the Offer, the Merger or the transactions contemplated by the Merger Agreement, the pre-signing process conducted by etrials, the merits of the transaction compared to any alternative business strategy or transaction that may be available to etrials, Merge Healthcare's ability to fund the consideration, any other terms contemplated by the Merger Agreement or the fairness of the amount or nature of the compensation to etrials' officers, directors or employees, or any class of such persons, relative to the compensation to be received by holders of the Shares. EGE did not express any opinion as to whether any alternative transaction might produce consideration for the etrials stockholders in excess of the consideration. The fairness opinion does not address the fairness of the amount or nature of the compensation to any of etrials' officers, directors or employees, or class of such persons, relative to the compensation to any of etrials' officers, directors or employees, or class of such persons, relative to the compensation to any of etrials' officers, directors or employees, or class of such persons, relative to the compensation to any of etrials' officers, directors or employees, or class of such persons, relative to the compensation to any of etrials' officers, directors or employees, or class of such persons, relative to the compensation to any of etrials' officers, directors or employees, or class of such persons, relative to the compensation to the public stockholders of etrials.

EGE is an investment banking firm that is regularly engaged as a financial advisor in connection with mergers and acquisitions, underwritings and secondary distributions of securities and private placements. The etrials board of directors selected EGE to render its fairness opinion in connection with the transactions contemplated by the Merger Agreement on the basis of its experience and reputation in acting as a financial advisor in connection with tender offers, and mergers and acquisitions. In the ordinary course of EGE's brokerage business, EGE or its affiliates may have long or short positions, for its own account or for those of its clients, in the securities of etrials and Merge Healthcare. EGE also regularly provides research coverage on public companies, with a focus on high-growth small capitalization companies in several industries, including the medical technology and healthcare. EGE has instituted customary processes to prevent its analysts from knowing of any investment banking services being provided to any company for which EGE might provide analyst coverage.

EGE acted as financial advisor and investment banker to etrials in connection with the Offer and the Merger. For its financial advisory services, etrials pays EGE a cash fee of \$5,000 per month, the aggregate of which will be credited against any success fee payable upon the completion of the Offer and also of the Merger. The success fee will range form 2.375% to 3.50% of the transaction value. Based on the Merger Consideration and assuming the Offer and the Merger are completed with 100% of the Shares being acquired by Merge Healthcare, etrials estimates that the success fee payable to EGE will be approximately \$600,000. EGE also received fees of \$400,000 from etrials for providing its opinion regarding the Merge Healthcare offer and its prior opinions regarding the Bio-Imaging offers. The opinion fees were not contingent upon the consummation of the Offer or the Merger. etrials expects to pay EGE approximately \$17,500 in out-of-pocket expenses associated with EGE's services as financial advisor and investment banker. etrials

has also agreed to indemnify EGE against certain liabilities in connection with its services and to reimburse it for certain expenses in connection with its services. In the ordinary course of its business, EGE and its affiliates may actively trade securities of etrials for its own account or the accounts of its customers and, accordingly, EGE may at any time hold a long or short position in such securities. Other than as set forth above, EGE has not had any material relationship with etrials (nor are any understood or contemplated) during the prior two years.