Medidata Solutions, Inc. Form S-1/A
December 02, 2009
Table of Contents

As filed with the Securities and Exchange Commission on December 2, 2009

Registration No. 333-163235

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 1

to

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

Medidata Solutions, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of

7389 (Primary Standard Industrial

52-2319066 (I.R.S. Employer

incorporation or organization)

Classification Code Number)

Identification Number)

79 Fifth Avenue, 8th Floor

New York, New York 10003

(212) 918-1800

(Address, including zip code, and telephone number, including area code, of registrant s principal executive offices)

Tarek A. Sherif, Chief Executive Officer

79 Fifth Avenue, 8th Floor

New York, New York 10003

(212) 918-1800

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

With copies to:

Paul Jacobs, Esq. Christopher J. Austin, Esq.

Warren J. Nimetz, Esq. Ropes & Gray LLP

Fulbright & Jaworski L.L.P. One International Place

666 Fifth Avenue Boston, MA 02110-2624

New York, New York 10103 Telephone (617) 951-7000

Telephone (212) 318-3000 Fax (617) 951-7050

Fax (212) 318-3400

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

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

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

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

If 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.

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 " Accelerated filer " Non-accelerated filer x Smaller reporting company "
(Do not check if a smaller reporting company)

CALCULATION OF REGISTRATION FEE

Proposed Maximum

Title of Each Class of		Proposed	Aggregate	
	Amount to Be	Maximum Offering		Amount of
Securities to be Registered	Registered(1)	Price Per Unit(2)	Offering Price	Registration Fee(3)
Common Stock par value \$0.01 per share	5,750,000	\$17.36	\$99,820,000	\$5,569.96

- (1) Includes 750,000 shares that the underwriters have the option to purchase to cover over-allotments, if any.
- (2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(c) of the Securities Act of 1933, as amended, and is based upon the average of the high and low sales prices of our common stock as reported on The NASDAQ Global Market on November 24, 2009.
- (3) \$4,542.27 previously paid.

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

The information in this preliminary prospectus is not complete and may be changed. The selling stockholders may not sell these securities until the Registration Statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell the securities and the selling stockholders are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion, dated December 2, 2009

PROSPECTUS

5,000,000 Shares

Common Stock

The selling stockholders named in this prospectus, which include certain members of our board of directors and management, are offering all of the shares offered hereby and will receive all of the proceeds from this offering. We will not receive any proceeds from the offering. See Principal and Selling Stockholders.

Our common stock is listed on The NASDAQ Global Market under the symbol MDSO. On November 30, 2009, the closing price of our common stock as reported on The NASDAQ Global Market was \$16.95.

Investing in our common stock involves risks. See <u>Risk Factors</u> beginning on page 10.

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

	Per Share	Total
Public offering price	\$	\$
Underwriting discount	\$	\$
Proceeds, before expenses, to the selling stockholders	\$	\$

The underwriters have a 30-day option to purchase up to an additional 750,000 shares of common stock from certain selling stockholders to cover overallotments, if any.

The underwriters expect to deliver the shares on or about , 2009.

Citi Credit Suisse

Jefferies & Company

Needham & Company, LLC

Prospectus dated , 2009

Table of Contents

	Page
Prospectus Summary	1
Risk Factors	10
Cautionary Statement Regarding Forward Looking Statements	24
Industry Information	24
<u>Use of Proceeds</u>	25
Price Range of Common Stock	25
DIVIDEND POLICY	26
Capitalization	27
Selected Consolidated Financial Information	28
Unaudited Pro Forma Statement of Operations	32
Management s Discussiomend Analysis of Financial Condition and Results of Operations	37
Business	65
<u>Management</u>	79
Principal and Selling Stockholders	97
Certain Relationships and Related Transactions	100
Description of Capital Stock	102
Shares Eligible for Future Sale	106
<u>Underwriting</u>	108
Legal Matters	113
Experts	113
Where You Can Find More Information	113
Index to Financial Statements	F-1

You should rely only on the information contained in this prospectus or contained in any free writing prospectus filed with the Securities and Exchange Commission. Neither we, the selling stockholders nor the underwriters have authorized anyone to provide you with additional information or information different from that contained in this prospectus or in any free writing prospectus filed with the Securities and Exchange Commission. The selling stockholders are offering to sell, and seeking offers to buy, our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of our common stock.

Prospectus Summary

This summary highlights information contained elsewhere in this prospectus but might not contain all of the information that is important to you. Before investing in our common stock, you should read the entire prospectus carefully, including the Risk Factors section and our historical and pro forma condensed consolidated financial statements and the notes thereto included elsewhere in this prospectus.

Unless otherwise indicated, the information contained in this prospectus assumes that the underwriters option to purchase additional shares is not exercised.

Medidata Solutions, Inc.

Our Business

We are a leading global provider of hosted clinical development solutions that enhance the efficiency of our customers clinical development processes and optimize their research and development investments. Our customers include pharmaceutical, biotechnology and medical device companies, academic institutions, contract research organizations, or CROs, and other organizations engaged in clinical trials to bring innovative medical products to market and explore new indications for existing medical products. Our solutions allow our customers to achieve clinical results more efficiently and effectively by streamlining the design, planning and management of key aspects of the clinical development process, including protocol development, CRO negotiation, investigator contracting, the capture and management of clinical trial data and the analysis and reporting of that data on a worldwide basis. Our customers rely on our solutions to safely accelerate the clinical development process and maximize the commercial life of their products. Our diverse and expanding customer base currently includes 22 of the top 25 global pharmaceutical companies measured by revenue and many middle-market life sciences companies, as well as CROs through our ASP*ire* to Win program. In the nine months ended September 30, 2009, Amgen, AstraZeneca, Johnson & Johnson, Roche and Takeda Pharmaceutical were our largest customers measured by revenues.

Our principal offering, Medidata Rave, is a comprehensive platform that integrates electronic data capture, or EDC, with a clinical data management system, or CDMS, in a single solution that replaces traditional paper-based methods of capturing and managing clinical data. In addition, our on-demand, hosted technology platform facilitates rapid and cost-effective deployment of our solutions on a global basis. We have designed our Medidata Rave software to scale reliably and cost-effectively for clinical trials of all sizes and phases, including those involving substantial numbers of clinical sites and patients worldwide. We also offer applications that improve efficiencies in protocol development and trial planning, contracting and negotiation through Medidata Designer, Medidata Grants Manager and Medidata CRO Contractor.

We derive a majority of our revenues from Medidata Rave application services through multi-study arrangements for a pre-determined number of studies. We also offer our application services on a single-study basis that allows customers to use our solution for a limited number of studies or to evaluate it prior to committing to multi-study arrangements. We support our solutions with comprehensive service offerings, which include global consulting, implementation, technical support and training for customers and investigators. We invest heavily in training our customers, their investigators and other third parties to configure clinical trials independently. We believe this knowledge transfer accelerates customer adoption of our solutions.

For 2008, we generated \$105.7 million in revenues, a 67.9% increase over 2007 revenues of \$63.0 million. For the nine months ended September 30, 2009, we generated \$102.8 million in revenues, a 38.0% increase over the revenues of \$74.5 million in the comparable period of 2008. Our business model provides us with a recurring revenue stream that we believe delivers greater revenue visibility than perpetual software licensing models.

1

The Opportunity for Clinical Trial Solutions

The traditional process of capturing and analyzing data in clinical trials relies on pre-printed, paper case report forms to submit data from the clinical trial sites to the clinical trial sponsor. Each case report form is manually checked for accuracy at the clinical site and subsequently entered into a computerized CDMS. Inconsistent, questionable, or missing data items are identified and must be addressed by facsimile, mail or hand-delivered document exchange. Each change in data requires documentation. These paper-based processes result in significant complexity and cost. Key limitations include:

Delay in clinical development process. Manual data collection can delay interim and final data analysis, which may reduce the exclusive sales period available under patent protection.

Impaired data quality. Paper-based data collection and reporting are more susceptible to transcription and other errors.

Limited data visibility to effect real-time decision making. With manual data collection, sponsors cannot evaluate trial status until relatively late in the process.

Compared to traditional paper-based data collection, EDC technology provides substantial benefits at all stages of the clinical development process and has become widely accepted across the industry. However, we believe that most clinical trials are still conducted using the traditional paper-based format. We believe the total annual market opportunity for EDC solutions is in excess of \$1.4 billion.

Despite the increased efficiency provided by EDC, early generation solutions have typically faced the following challenges:

Integration. EDC solutions have had difficulty integrating complex, diverse and large volumes of data across multiple applications.

Investigator site requirements. EDC installations can impose specific software and hardware requirements on trial sponsors and their investigator sites.

Complex customization. EDC solutions often require custom programming to meet the requirements of diverse therapeutic areas across multiple phases.

Usability. The user interface of EDC solutions often does not accommodate the needs and preferences of the medical researchers, limiting the pace of adoption.

Workflow and security limitations. EDC solutions often have limited ability to manage multiple languages, multiple workflows and blinded data.

Scalability. EDC solutions often lack the ability to scale against multiple studies in a single database, requiring increased effort and expense.

The Medidata Solution

Our solutions allow users to accurately and efficiently design clinical trials and capture, manage and report clinical trial data through an easy-to-use, Internet-enabled platform. We believe our solutions provide our customers with the following benefits:

Accelerated time to market. Our on-demand platform and delivery model streamlines the clinical development process, enabling users to compress the time associated with designing and implementing clinical trials and entering, cleansing and analyzing data.

Improved quality and visibility of results. Medidata Rave allows users to enhance the quality and completeness of their data earlier in the process by providing real-time data cleansing and eliminating duplicative manual entry of data.

2

Comprehensive clinical development solution. We have designed our comprehensive solutions to provide support throughout the clinical development process, from protocol authoring to preparing data for regulatory analysis and submission. Medidata Rave can be integrated easily with auxiliary systems, making it the backbone for a complete end-to-end solution.

Enhanced investigator acceptance. We have designed the user interface of our application services to meet the needs of clinicians, with intuitive, consistent point-and-click navigation and a familiar clinical data entry approach.

Seamless execution of global trials. Medidata Rave provides a single data repository that can be used in multiple languages simultaneously, avoiding the need for the installation and maintenance of parallel versions of the system.

Lower cost of ownership. Our product architecture scales reliably and cost-effectively across clinical trials of all sizes. Our customers can run all clinical trials on a single instance, further reducing deployment cost per study.

Our Growth Strategy

Our strategy is to become the global standard for application service solutions for EDC and complementary technologies for the clinical development process. Key elements of our strategy include:

Expand our global customer base. We will continue to pursue new relationships with large global pharmaceutical and biotechnology companies, as well as to dedicate resources to small- and middle-market life sciences companies, as we believe the middle-market represents an under-penetrated opportunity for customer expansion.

Increase sales to our existing customers. We intend to drive adoption of our products and services within our existing customer base by facilitating the use of our application services in new trials and converting existing single-study customers into multi-study customers.

Enhance our suite of products and services. We intend to add new features to our existing offerings and add new offerings to maximize the efficiency of the clinical development process. We believe our clinical trials expertise will enable us to leverage our customers operational data to provide metrics-driven insights and advisory services to facilitate enhanced market penetration.

Expand indirect sales channel initiatives. We will continue to pursue strategic partnerships with CROs and healthcare information technology consultants to position our software solutions as the platform of choice for their outsourced clinical trial management services.

Risks Associated with Our Business

Our business is subject to a number of risks of which you should be aware before making an investment decision. Those risks are discussed in Risk Factors beginning on page 10.

Corporate Information

We were organized as a New York corporation in June 1999 and reincorporated in the State of Delaware in May 2000. Our principal executive offices are located at 79 Fifth Avenue, 8th Floor, New York, New York 10003, and our telephone number is (212) 918-1800. Our website is located at www.mdsol.com. Information contained on our website is not incorporated by reference into this prospectus, and you should not consider that information to be part of this prospectus.

All references in this prospectus to our company, Medidata, we, us and our refer to Medidata Solutions, Inc. and its consolidated subsidiarie and their predecessors.

3

This prospectus includes trademarks, trade names and servicemarks of Medidata Solutions, Inc. and its subsidiaries, including Medidata®, Medidata Designer®, Medidata CRO Contractor , Medidata Rav®, Medidata Grants Manager and ASP*ire* to Wi¶. This prospectus also refers to trademarks, trade names and servicemarks of other entities. All rights are reserved. The mention of such trademarks, trade names and servicemarks in this prospectus is made with due recognition of the rights of these entities and without any intent to misappropriate such names or marks. All other trademarks, trade names and servicemarks appearing in this prospectus are the property of their respective owners.

4

The Offering

Common stock offered by the selling stockholders 5,000,000 shares.

Option to purchase additional shares offered by the selling stockholders

The underwriters may purchase an additional 750,000 shares from the selling stockholders if the underwriters exercise in full their option to purchase additional shares.

Common stock to be outstanding after the offering(1) 22,753,868 shares.

Use of proceeds The selling stockholders, including certain members of our board of directors and

management, will receive all of the proceeds from this offering, and we will not receive any proceeds from the sale of shares in this offering. Any proceeds received by us in connection with the exercise of options to purchase shares of our common stock by the selling stockholders in connection with this offering will be used for general corporate purposes. See Use of Proceeds. For more information on the selling stockholders, see

Principal and Selling Stockholders.

Dividend policy We currently do not intend to pay dividends on our common stock.

Risk factors An investment in our common stock involves a high degree of risk. You should carefully

consider the risk factors set forth under Risk Factors beginning on page 10 and the other

information contained in this prospectus prior to making an investment decision

regarding our common stock.

NASDAQ Global Market symbol MDSO

(1) The number of shares of common stock to be outstanding after the offering is based on 22,663,868 shares of common stock outstanding as of September 30, 2009, plus an aggregate of 90,000 shares of common stock subject to outstanding options being exercised by certain selling stockholders for the purpose of selling shares in this offering.

As of September 30, 2009, we had 22,663,868 shares outstanding, excluding:

3,083,104 shares of common stock issuable upon the exercise of outstanding stock options to purchase our common stock at a weighted average exercise price of \$8.42 per share (including an aggregate of 90,000 shares of common stock that will be issued upon the exercise of options at a weighted average exercise price of \$0.55 per share by certain selling stockholders and sold by them in this offering);

1,781,768 shares of common stock reserved for future grants or awards from time to time under our 2009 Long-Term Incentive Plan; and

500,000 additional shares of common stock to be available for future grant under our 2009 Employee Stock Purchase Plan.

Except as otherwise indicated, information in this prospectus reflects or assumes no exercise of the underwriters overallotment option to purchase up to 750,000 additional shares of our common stock from certain selling stockholders.

Summary Consolidated Financial Information and Other Data

The summary consolidated statement of operations data presented for each of the years ended December 31, 2006, 2007 and 2008 and the summary consolidated balance sheet data as of December 31, 2007 and 2008 were derived from our audited consolidated financial statements (as revised, see Note 2, Restatement of Consolidated Financial Statements , to our consolidated financial statements), which are included elsewhere in this prospectus. The summary consolidated statement of operations data for the years ended December 31, 2004 and 2005 and the summary consolidated balance sheet data as of December 31, 2004, 2005 and 2006 were derived from our consolidated financial statements which are not included in this prospectus and have been subsequently revised in conjunction with the restatement of our consolidated financial statements as noted above. The summary consolidated statement of operations data presented for the nine months ended September 30, 2008 (as subsequently revised in conjunction with the restatement as noted above, see Note 2, Restatement of Consolidated Financial Statements , to our unaudited condensed consolidated interim financial statements) and 2009 and the summary consolidated balance sheet data as of September 30, 2009 were derived from our unaudited condensed consolidated interim financial statements included elsewhere in this prospectus. The results of operations for the nine months ended September 30, 2009 are not necessarily indicative of the results to be expected for the full year ending December 31, 2009.

On March 17, 2008, we acquired Fast Track Systems, Inc., or Fast Track, a provider of clinical trial planning solutions, including software, proprietary contracting data and professional services. The consolidated statement of operations data for the nine months ended September 30, 2008 and for subsequent periods includes the impact of the acquisition of Fast Track beginning on the date of acquisition. The consolidated statement of operations data for the prior periods do not include the impact of the acquisition of Fast Track. The information contained in this table should also be read in conjunction with Use of Proceeds, Capitalization, Selected Consolidated Financial Information, Unaudited Pro Forma Statement of Operations, Management s Discussion and Analysis of Financial Condition and Results of Operations and the consolidated financial statements and accompanying notes thereto, all included elsewhere in this prospectus.

Consolidated Statement of Operations Data

	2004	2005	ended Decem 2006 (in thousands	2007	2008(1) hare amounts	Septem 2008(1)	ths Ended aber 30, 2009
Revenues:							
Application services	\$ 3,226	\$ 13,069	\$ 25,406	\$ 44,592	\$ 73,820	\$ 52,029	\$ 74,145
Professional services	4,304	3,643	10,851	18,391	31,904	22,513	28,702
Total revenues	7,530	16,712	36,257	62,983	105,724	74,542	102,847
Costs of revenues:(2)	7,330	10,712	30,237	02,963	103,724	74,342	102,647
Application services(3)	1,074	2,059	7,288	13,170	19.647	14,590	17,521
Professional services	4,878	14,459	20,462	33,035	30,801	23,815	19,910
FTOTESSIONAL SCIVICES	4,070	14,439	20,402	33,033	30,601	23,613	19,910
Total cost of revenues Gross profit	5,952 1,578	16,518 194	27,750 8,507	46,205 16,778	50,448 55,276	38,405 36,137	37,431 65,416
Operating costs and expenses:(2)							
Research and development(4)	2,859	4,104	5,905	10,716	19,340	14,632	16,894
Selling and marketing(5)	3,829	7,599	12,768	15,484	24,190	17,654	20,167
General and administrative	4,068	4,574	8,335	13,361	27,474	20,047	22,672
Total operating costs and expenses	10,756	16,277	27,008	39,561	71,004	52,333	59,733
(Loss) income from operations	(9,178)	(16,083)	(18,501)	(22,783)	(15,728)	(16,196)	5,683
Interest and other expenses (income), net	31	38	195	364	1,624	1,182	1,638
(Loss) income before provision for income taxes	(9,209)	(16,121)	(18,696)	(23,147)	(17,352)	(17,378)	4,045
Provision for income taxes(6)	23	110	306	515	920	481	602
Net (loss) income	\$ (9,232)	\$ (16,231)	\$ (19,002)	\$ (23,662)	\$ (18,272)	\$ (17,859)	\$ 3,443

	2004	2005	nded Decen 2006 n thousands	2007	2008(1) share amou	Septer 2008(1)	nths Ended mber 30, 2009
(Loss) earnings per share:(7)							
Basic	\$ (1.57)	\$ (2.73)	\$ (3.10)	\$ (3.78)	\$ (2.76)	\$ (2.72)	\$ 0.26
Diluted	\$ (1.57)	\$ (2.73)	\$ (3.10)	\$ (3.78)	\$ (2.76)	\$ (2.72)	\$ 0.17
Weighted average common shares outstanding:(7)(8)							
Basic	6,056	6,135	6,297	6,385	6,794	6,712	12,318
Diluted	6,056	6,135	6,297	6,385	6,794	6,712	19,693
		Voor F	nded Decen	ahon 21			nths Ended nber 30,
	2004	2005	2006	2007	2008(1)	2008(1)	2009
	2004	2003		2007 (in thousan	` '	2000(1)	2009
Stock-based compensation expense and depreciation and amortization of in	ntangible accets	included in		`	,	and avnance	e ie oe
follows:							
Stock-based compensation							
Cost of revenues	\$	\$ 178	\$ 108	\$ 172	\$ 291	\$ 210	\$ 280
Research and development		27	89	183	503	334	397
Sales and marketing		69	304	448	640	470	844
General and administrative		118	218	491	1,763	1,221	1,907
Total stock-based compensation	\$	\$ 392	\$ 719	\$ 1,294	\$ 3,197	\$ 2,235	\$ 3,428
<u>Depreciation</u>							
Cost of revenues	\$	\$ 563	\$ 1,237	\$ 3,605	\$ 5,941	\$ 4,459	\$ 5,034
Research and development		136	289	463	650	494	592
Sales and marketing		91	202	243	383	289	360
General and administrative	347	104	228	305	461	348	454
Total depreciation	347	894	1,956	4,616	7,435	5,590	6,440
Amortization of intangible assets(4)							
Cost of revenues					1,191	826	1,262
Sales and marketing					79	54	108
Total amortization of intangible assets					1,270	880	1,370
Total depreciation and amortization of intangible assets	\$ 347	\$ 894	\$ 1,956	\$ 4,616	\$ 8,705	\$ 6,470	\$ 7,810

Consolidated Balance Sheet Data

		A	s of December	31,		As of September 30,
	2004	2005	2006	2007	2008	2009
Cash and cash equivalents(8)	\$ 7,595	\$ 6,450	\$ 7,016	\$ 7,746	\$ 9,784	\$ 86,900
Total current assets	13,149	13,352	19,073	29,556	44,565	112,945
Restricted cash	306	305	305	387	545	532
Total assets	14,824	16,540	25,121	44,479	75,190	140,457
Total deferred revenue	11,253	24,617	42,337	75,635	101,621	104,239
Total capital lease obligations	289	507	2,281	8,527	7,060	4,588
Total long-term debt(9)	1,500	4,000	3,514	10,781	14,366	
Convertible redeemable preferred stock(10)	11,252	11,751	12,249	12,747	13,245	
Convertible preferred stock(10)	24	24	24	24	24	
Stockholders (deficit) equity(8)	(13,706)	(30,638)	(49,189)	(77,888)	(76,400)	16,876

Notes to Summary Consolidated Financial Information and Other Data

- (1) On March 17, 2008, we acquired Fast Track, a provider of clinical trial planning solutions. Our results of operations for the nine months ended September 30, 2008 and for subsequent periods include the operations of Fast Track since the date of acquisition. Please refer to Unaudited Pro Forma Statement of Operations for the pro forma effects of our acquisition of Fast Track.
- (2) Prior to January 1, 2006, we accounted for our stock-based compensation plans using the intrinsic value method prescribed by Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees, or APB No. 25, and related interpretations. Under APB No. 25, compensation expense of fixed stock options is based on the difference, if any, on the date of the grant between the fair value of our stock and the exercise price of the option. Compensation expense is recognized on a straight-line basis over the requisite service period.

On January 1, 2006, we adopted the provisions of Statement of Financial Accounting Standards, or SFAS, No. 123(R), *Share-Based Payment*, (currently under Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, 718, *Compensation Stock Compensation*), requiring us to recognize expense related to the fair value of our stock-based compensation awards. We elected the modified prospective transition method as permitted by SFAS No. 123(R). Under this transition method, stock-based compensation expense for the fiscal year ended December 31, 2006, includes compensation expense for all stock based compensation awards granted prior to, but not yet vested, as of January 1, 2006, based on the grant date fair value estimated in accordance with the original provisions of SFAS No. 123, *Accounting for Stock-Based Compensation*, and compensation expense for all stock based compensation awards granted subsequent to January 1, 2006, based on the grant date fair value estimated in accordance with the provisions of SFAS No. 123(R).

- (3) In 2006, it was claimed by a third party that certain applications offered to our customers potentially infringed on intellectual property rights held by that third party. As a result of negotiations with the third party, we entered into a license and settlement agreement in June 2007, pursuant to which we licensed the intellectual property held by the third party for use in our future sales to customers and settled all past infringement claims. We paid a settlement amount of \$2.2 million to the third party in 2007. Such amount was recorded in cost of revenues under application services for the year ended December 31, 2006 and in accrued expenses on the consolidated balance sheet as of December 31, 2006. See Note 10, Commitments and Contingencies, to our unaudited condensed consolidated interim financial statements included elsewhere in this prospectus for more information regarding legal matters.
- (4) We determined that technological feasibility had not been established for certain in-process research and development projects acquired from Fast Track. These projects were written off, resulting in \$0.7 million of

8

additional research and development expenses included in the consolidated statement of operations data for the nine months ended September 30, 2008 and for the year ended December 31, 2008. This write-off is not included in amortization of intangible assets in our consolidated statement of operations.

- (5) In 2006, a former employee made a claim seeking compensation of approximately \$1.6 million in relation to a wrongful dismissal lawsuit. Subsequently, the claim was reduced to approximately \$1.4 million as of December 31, 2008. We recorded approximately \$0.6 million in sales and marketing expenses during the year ended December 31, 2006 related to this matter. The court rendered its decision on January 15, 2009, which awarded approximately \$0.1 million to the plaintiff. The plaintiff filed a notice of appeal in September 2009, which remains pending. We will continue to vigorously defend this claim until it is resolved.
- (6) For the years ended December 31, 2004 to 2008 and for the nine months ended September 30, 2009, we did not realize an income tax benefit for available net operating loss carryforwards. As of December 31, 2008, we had approximately \$83.7 million of federal operating loss carryforwards available to offset future taxable income expiring from 2019 through 2028. We also had net operating loss carryforwards for state income tax purposes of approximately \$106.0 million available to offset future state taxable income expiring from 2009 to 2028.
- (7) Basic and diluted net loss per share amounts and basic and diluted weighted average common shares outstanding have been adjusted to reflect a two-for-one stock split effective on August 3, 2004.
- (8) In June 2009, we completed an initial public offering, or IPO, issuing 6.3 million shares of common stock at a public offering price of \$14.00 per share. As a result of the offering, we received net proceeds of \$75.2 million, after deducting underwriting discounts and commissions of \$6.2 million and offering expenses of \$6.8 million. In addition, the underwriters exercised in full their over-allotment option to purchase an additional 0.9 million shares of common stock from certain selling stockholders. We did not receive any proceeds from the sale of shares by the selling stockholders.
- (9) In July 2009, we used a portion of our net proceeds from the IPO to prepay the entire outstanding indebtedness of the term loan under the senior secured credit facility. The total payoff amount of \$14.7 million included the outstanding principal balance of \$14.3 million, as well as accrued interest and termination fees of \$0.4 million. Also in July 2009, we executed a standby letter of credit under our credit agreement in connection with the office lease of approximately \$0.2 million, which resulted in a reduction of the available amount under the revolving line of credit. As of September 30, 2009, approximately \$9.8 million of the revolving line of credit under our senior secured credit facility was still available for future borrowings.
- (10) As a result of the IPO, all outstanding convertible preferred stock was automatically converted into 9.0 million shares of common stock. In addition, we paid out all accumulated accrued dividends of \$2.3 million to preferred stockholders at conversion.

9

RISK FACTORS

An investment in our common stock involves a high degree of risk. Before making an investment in our common stock, you should carefully consider the following risks, as well as the other information contained in this prospectus, including our consolidated financial statements and the notes thereto and Management's Discussion and Analysis of Financial Condition and Results of Operations. The risks described below are those which we believe are the material risks we face. Any of the risk factors described below or additional risks and uncertainties not presently known to us, or that we currently deem immaterial, could have a material adverse effect on our business, financial condition and results of operations. As a result, the trading price of our common stock could decline and you may lose a part or all of your investment.

Risks Related to Our Business

We have incurred significant operating losses during our limited operating history and may not be profitable in the future.

We began providing EDC services in 2001. We have recognized operating losses in each year from 1999 through 2008, and our cumulative operating loss since 1999 totaled approximately \$86.3 million at December 31, 2008. We may make significant future expenditures related to the development and expansion of our business. In addition, following the completion of our initial public offering, or IPO, in June 2009, we continue to incur significant legal, accounting and other expenses that we did not incur as a private company. As a result of these increased expenditures, we will have to generate and sustain increased revenue to achieve future profitability. While our revenues have grown in recent periods, this growth may not be sufficient to offset the increase in our expenses and may not be sustainable. We may incur significant losses in the future for a number of reasons, including the other risks described in this prospectus. Accordingly, we cannot give you any assurance regarding our future profitability. Further, if we incur operating losses or experience unanticipated working capital requirements in the future, we may be required to seek additional financing. Such financing may not be available to us when needed, or available on acceptable terms, and may result in dilution to our existing stockholders.

Our quarterly operating results fluctuate and may continue to fluctuate in the future, and if we fail to meet the expectations of analysts or investors, our stock price and the value of your investment could decline substantially.

Our quarterly and annual revenues and operating results have varied in the past and may vary significantly in the future depending on factors such as:

budgeting cycles of our customers;
the length of our sales cycle;
increased competition;
our ability to develop innovative products;
the timing of new product releases by us or our competitors;
market acceptance of our products;
changes in our and our competitors pricing policies;

10

the financial condition of our current and potential customers;
changes in the regulatory environment;
changes in operating expenses and personnel changes;
our ability to hire and retain qualified personnel;
the effect of potential acquisitions and consequent integration;

changes in our business strategy; and

general economic factors, including factors relating to the disruptions in the world credit and equity markets and the related impact on our customers access to capital.

In addition, a significant portion of our operating expense is relatively fixed and planned expenditures are based in part on expectations regarding future revenues. Accordingly, unexpected revenue shortfalls may decrease our gross margins and could cause significant changes in our operating results from quarter to quarter. As a result, in future quarters our operating results could fall below the expectations of securities analysts or investors, in which event our stock price would likely decrease.

We derive a significant percentage of our revenues from a concentrated group of customers and the loss of one or more major customers could materially and adversely affect our business, results of operations or financial condition.

Our top five customers accounted for approximately 48%, 46% and 47% of our revenues in 2007, 2008 and the nine months ended September 30, 2009, respectively. For 2007, two customers, Amgen and Johnson & Johnson, accounted for approximately 13% and 12% of our total revenues, respectively. In 2008, two customers, AstraZeneca and Johnson & Johnson, accounted for approximately 11% and 10% of our total revenues, respectively. For the first nine months of 2009, Takeda Pharmaceutical and AstraZeneca each accounted for approximately 10% of our total revenues. No other customer accounted for 10% or more of our total revenues during any of these periods. The loss of any of our major customers could have a material adverse effect on our results of operations and financial condition. We may not be able to maintain our customer relationships, and our customers may delay performance under or fail to renew their agreements with us, which could adversely affect our business, results of operations or financial condition. Any reduction in the amount of revenues that we derive from these customers, without an offsetting increase in new sales to other customers, could have a material adverse effect on our operating results. A significant change in the liquidity or financial position of any of these customers could also have a material adverse effect on the collectability of our accounts receivables, our liquidity and our future operating results.

If our customers cancel their contracts or terminate or delay their clinical trials, we may lose or delay revenues and our business may be harmed.

Certain of our customer contracts are subject to cancellation by our customers at any time with limited notice. Customers engaged in clinical trials may terminate or delay a clinical trial for various reasons, including the failure of the tested product to satisfy safety or efficacy requirements, unexpected or undesired clinical results, decisions to de-emphasize a particular product or forego a particular clinical trial, decisions to downsize clinical development programs, insufficient patient enrollment or investigator recruitment and production problems resulting in shortages of required clinical supplies. In the case of our hosted solutions, any termination or delay in the clinical trials would likely result in a consequential delay or termination in those customers—service contracts. We have experienced terminations and delays of our customer service contracts in the past (although no such past terminations have had a significant impact on our results of operations) and we expect to experience additional terminations and delays in the future. The termination of a single-study arrangement could result in decreased revenues and the delay of our customers—clinical trials could result in delayed professional services revenues, which could materially harm our business.

We currently have material weaknesses in our internal controls over financial reporting relating to our revenue recognition and expense cut-off procedures, which we have not yet fully remediated. If we fail to remedy our material weaknesses or otherwise fail to maintain effective internal controls over our financial reporting, the accuracy and timing of our financial reporting may be adversely affected.

In connection with the audit of our consolidated financial statements for the years ended December 31, 2007 and 2006, we, together with our independent registered public accounting firm, identified a number of material

11

weaknesses in our internal controls over financial reporting, as defined in rules established by the American Institute of Certified Public Accountants, or AICPA. A material weakness is a deficiency, or a combination of deficiencies, in internal controls over financial reporting, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements would not be prevented or detected on a timely basis.

The material weaknesses were attributable to deficiencies in our revenue recognition related to ineffective review of contract terms and their impact on timing of revenue recognition, ineffective cut-off procedures, the extensive use of manual procedures and inadequate staffing, as well as ineffective expense cut-off procedures, which resulted in the recording of audit adjustments. While we have initiated a remediation plan to address these issues, we have had only limited operating experience with the remedial measures that have been implemented to date and cannot provide any assurance that these measures or any future measures will adequately remediate the material weaknesses. As of December 31, 2008 these issues were not fully remediated and there continued to be material weaknesses. See Management s Discussion and Analysis of Financial Condition and Results of Operations Internal Controls over Financial Reporting. Other material weaknesses or significant deficiencies in our internal controls over financial reporting may be identified in the future. If we fail to remediate the material weaknesses, or fail to implement required new or improved controls, or encounter difficulties in their implementation, it could harm our operating results, cause us to fail to meet our SEC reporting obligations on a timely basis, or result in inaccurate financial reporting or material misstatements in our annual or interim financial statements.

Our failure to fully remediate the material weaknesses that continued to exist as of December 31, 2008 or the identification of additional material weaknesses could also prohibit us from complying with the provisions of Section 404 of the Sarbanes-Oxley Act of 2002, which will apply to us in connection with the filing of our annual report on Form 10-K for 2010 and requires annual management assessments of the effectiveness of our internal controls over financial reporting as well as a report by our independent registered public accounting firm regarding the effectiveness of such internal controls. If we are unable to comply with Section 404 or otherwise are unable to produce timely and accurate financial statements, our business reputation and stock price may be adversely affected and we may be unable to maintain compliance with the listing requirements of The NASDAQ Global Market.

Restatements of our consolidated financial statements or other accounting-related problems could harm our business or otherwise have an adverse effect on us.

We have restated our consolidated financial statements for the years ended December 31, 2005, 2006, 2007 and 2008, as described in Note 2, Restatement of Consolidated Financial Statements, to our audited consolidated financial statements included elsewhere in this prospectus. This restatement was the result of previously identified revenue recognition control deficiencies that constituted material weaknesses. Any future restatements or other accounting-related problems could harm our business, financial condition, results of operations and cash flows, cause us to fail to meet our SEC reporting obligations on a timely basis, result in inaccurate financial reporting or material misstatements in our annual or interim financial statements, or adversely affect our stock price and we may be unable to maintain compliance with the listing requirements of The NASDAQ Global Market. Any of these matters may harm our business reputation and contribute to negative publicity and difficulties in attracting and retaining key clients, management personnel and employees.

Our sales cycles for multi-study arrangements can take in excess of nine months from initial contact to contract execution, and require significant employee time and financial resources with no assurances that we will realize sales or revenues.

The sales cycle for multi-study arrangements can take in excess of nine months from initial customer contact to contract execution. During this period, we may expend substantial time, effort and financial resources without realizing any revenues with respect to the potential sale. In addition, it may be difficult for us to rapidly increase our revenues through additional sales in any period, as license revenues and, when applicable, related services revenues from new customers are recognized over the applicable license term, typically one to five years.

12

Substantially all of our computer and communications hardware is located at a single facility, the failure of which would harm our business and results of operations.

Substantially all of the computer hardware necessary to operate our hosting service, which is used by the majority of our customers, is located at our hosting facility in Houston, Texas. Our systems and operations could suffer damage or interruption from human error, fire, flood, power loss, telecommunications failure, break-ins, terrorist attacks, acts of war and similar events, and we do not presently have hosting systems in multiple locations. The occurrence of a natural disaster, an act of terrorism or other unanticipated problems at our hosting facility could result in lengthy interruptions in our service. Although we maintain back-up facilities and disaster recovery services in the event of a system failure, these may be insufficient or fail. Any failure or breach of security of our systems could damage our reputation and cause us to lose customers, which would harm our business and results of operations. Our business may be harmed if our customers and potential customers believe our service is unreliable.

Defects or errors in our software could harm our reputation, result in significant cost to us and impair our ability to market our solutions.

The software applications underlying our hosted products and services, including Medidata Rave, are inherently complex and may contain defects or errors, some of which may be material. Errors may result from our own technology or from the interface of our software with legacy systems and data which we did not develop. The risk of errors is particularly significant when a new product is first introduced or when new versions or enhancements of existing products are released.

We have from time to time found defects in our software. Although these past defects have not resulted in any litigation against us to date, we have invested significant capital, technical, managerial and other resources to investigate and correct these past defects and we have needed to divert these resources from other development efforts. In addition, material performance problems or defects in our software may arise in the future. Material defects in our software could result in a reduction in sales, delay in market acceptance of our software or credits or refunds to our customers. In addition, such defects may lead to the loss of existing customers and difficulty in attracting new customers, diversion of development resources or harm to our reputation.

Correction of defects or errors could prove to be impossible or impractical. The costs incurred in correcting any defects or errors or in responding to resulting claims or liability may be substantial and could adversely affect our operating results.

If we are not able to reliably meet our data storage and management requirements, or if we experience any failure or interruption in the delivery of our services over the Internet, customer satisfaction and our reputation could be harmed and customer contracts may be terminated.

As part of our current business model, we store and manage hundreds of terabytes of data for our customers, resulting in substantial information technology infrastructure and ongoing technological challenges, which we expect to continue to increase over time. If we do not reliably meet these data storage and management requirements, or if we experience any failure or interruption in the delivery of our services over the Internet, customer satisfaction and our reputation could be harmed and lead to reduced revenues and increased expenses. Our hosting services are subject to service level agreements and, in the event that we fail to meet guaranteed service or performance levels, we could be subject to customer credits or termination of these customer contracts. If the cost of meeting these data storage and management requirements increases, our results of operations could be harmed.

13

and

In March 2008 we acquired Fast Track, a provider of clinical trial planning solutions, and we may expand our business further through new acquisitions in the future. Any such acquisitions could disrupt our business, harm our financial condition and dilute current stockholders ownership interests in our company.

We intend to pursue potential acquisitions of, and investments in, businesses, technologies, or products complementary to our business and periodically engage in discussions regarding such possible acquisitions. For example, in March 2008, we acquired Fast Track.

Acquisitions, including the Fast Track acquisition, involve numerous risks, including some or all of the following:

difficulties in identifying and acquiring complementary products, technologies or businesses;
substantial cash expenditures;
incurrence of debt and contingent liabilities, some of which we may not identify at the time of acquisition;
difficulties in assimilating the operations and personnel of the acquired companies;
diversion of management s attention away from other business concerns;
risk associated with entering markets in which we have limited or no direct experience;

potential loss of key employees, customers and strategic alliances from either our current business or the target company s business;

delays in customer purchases due to uncertainty and the inability to maintain relationships with customers of the acquired businesses. If we fail to properly evaluate acquisitions or investments, we may not achieve the anticipated benefits of such acquisitions, we may incur costs in excess of what we anticipate, and management resources and attention may be diverted from other necessary or valuable activities. Any acquisition, including the Fast Track acquisition, may not result in short-term or long-term benefits to us. The failure to evaluate and execute acquisitions or investments successfully or otherwise adequately address these risks could materially harm our business and financial results. We may incorrectly judge the value or worth of an acquired company or business. In addition, our future success will depend in part on our ability to manage the growth anticipated with these acquisitions.

Furthermore, the development or expansion of our business or any acquired business or companies may require a substantial capital investment by us. We may not have these necessary funds or they might not be available to us on acceptable terms or at all. We may also seek to raise funds for an acquisition by issuing equity securities or convertible debt, as a result of which our existing stockholders may be diluted or the market price of our stock may be adversely affected.

Our revenues derived from international operations are subject to risk, including risks relating to unfavorable economic, political, legal, regulatory, tax, labor and trade conditions in the foreign countries in which we operate, that could have a material adverse effect on our results of operations.

Approximately 33%, 32% and 33% of our revenues in each of the years ended December 31, 2007 and 2008, and in the nine months ended September 30, 2009, respectively, were derived from international operations. We expect that international customers will continue to account for a substantial percentage of our revenues.

International operations are subject to inherent risks. These risks include:

the economic conditions in these various foreign countries and their trading partners, including conditions resulting from the disruptions in the world credit and equity markets;

political instability;

14

longer payment cycles;
greater difficulty in accounts receivable collection and enforcement of agreements;
compliance with foreign laws;
changes in regulatory requirements;
fewer legal protections for intellectual property and contract rights;
tariffs or other trade barriers;
difficulties in obtaining export licenses;
staffing and managing foreign operations;
exposure to currency exchange and interest rate fluctuations;
transportation delays;
potentially adverse tax consequences; and

recently proposed changes to taxation of offshore earnings.

Moreover, with regard to our international operations, we frequently enter into transactions in currencies other than the U.S. dollar and we incur operating expenses in currencies other than the U.S. dollar. For the years ended December 31, 2007 and 2008 and the nine months ended September 30, 2009, approximately 5.8%, 7.7% and 8.5%, respectively, of our sales were denominated in foreign currencies. This creates a foreign currency exchange risk for us that could have a material adverse effect on our business, results of operations and financial condition.

We rely on third parties for our help desk support and technology partnerships, and our business may suffer if these relationships do not continue.

We currently outsource our help desk support functions, which involve important direct interactions with users of our products. In the event that our vendor becomes unable or unwilling to provide these services to us, we are not equipped to provide the necessary range of help desk support and service functions to our customers. We also work with companies such as Integrated Clinical Systems, Inc., Business Objects SA (SAP AG), invivodata, Inc. and SAS Institute Inc. to allow our EDC platform to interface with their products. If we are unable to develop and maintain effective relationships with a wide variety of technology partners, if companies adopt more restrictive policies with respect to, or impose unfavorable terms and conditions on, access to their products, we may not be able to continue to provide our customers with a high degree of interoperability with their existing information technology and business infrastructure, which could reduce our sales and adversely affect our business, operating results and financial condition.

We have been, and may continue to be, subject to claims that we or our technologies infringe upon the intellectual property or other proprietary rights of a third party. Any such claims may require us to incur significant costs, to enter into royalty or licensing agreements or

to develop or license substitute technology.

We have been, and may in the future be, subject to claims that our technologies infringe upon the intellectual property or other proprietary rights of a third party. For instance, in June 2007, we entered into a license and settlement agreement with a third party in connection with allegations that our Rave Remote product infringed a U.S. patent claimed to be owned by the third party. Under the license and settlement agreement, we agreed to make a lump-sum payment to the third party of \$2.2 million to settle the claim and obtained a royalty bearing license to utilize the patent at issue with respect to Rave Remote and comparable systems and services.

On June 18, 2009, the third party initiated a lawsuit against us in the United States District Court for the District of Maryland claiming breach of contract. The complaint includes allegations that we have failed to pay unspecified royalties relating to sales of Medidata products. We filed an answer in July 2009, denying all material allegations and asserting affirmative defenses. We also asserted counterclaims for a declaratory judgment that no royalties are owed with respect to sales of our products, as well as a counterclaim for the third party s breach of the license and settlement agreement. The parties are now engaged in the discovery process. Although we will continue to defend these claims vigorously, neither the outcome of the litigation nor the amount and range of potential damages or exposure associated with the litigation can be assessed at this time. In addition, two of our ASP*ire* to Win partners have requested us to indemnify them pursuant to their partner agreements with us in connection with patent infringement lawsuits filed by the same third party. We have agreed to defend and indemnify one of these partners with respect to the allegations, claims, and defenses relating to its use of Medidata Rave. We generally provide in our customer agreements that we will indemnify our customers against third-party infringement claims relating to our technology provided to the customer, which could obligate us to fund significant amounts.

The vendors who provide us with technology that we incorporate in our product offerings also could become subject to various infringement claims. The technologies used in our product offerings may infringe patents held by others or they may do so in the future. Any future claim of infringement could cause us to incur substantial costs defending against the claim, even if the claim is without merit, and could distract our management from our business. Moreover, any settlement or adverse judgment resulting from the claim could require us to pay substantial amounts or obtain a license to continue to use the technology that is the subject of the claim, or otherwise restrict or prohibit our use of the technology. Any required licenses may not be available to us on acceptable terms, if at all. If we do not obtain any required licenses, we could encounter delays in product introductions if we attempt to design around the technology at issue or attempt to find another provider of suitable alternative technology to permit us to continue offering the applicable software solution. Infringement claims asserted against us or against our customers or other third parties that we are required or otherwise agree to indemnify may have a material adverse effect on our business, results of operations or financial condition.

We may be unable to adequately enforce or defend our ownership and use of our intellectual property and other proprietary rights.

Our success is heavily dependent upon our intellectual property and other proprietary rights. We rely upon a combination of trademark, trade secret, copyright, patent and unfair competition laws, as well as license and access agreements and other contractual provisions, to protect our intellectual property and other proprietary rights. In addition, we attempt to protect our intellectual property and proprietary information by requiring certain of our employees and consultants to enter into confidentiality, non-competition and assignment of inventions agreements. The steps we take to protect these rights may not be adequate to prevent misappropriation of our technology by third parties or may not be adequate under the laws of some foreign countries, which may not protect our intellectual property rights to the same extent as do the laws of the United States.

Our attempts to protect our intellectual property may be challenged by others or invalidated through administrative process or litigation, and agreement terms that address non-competition are difficult to enforce in many jurisdictions and may not be enforceable in any particular case. Moreover, the degree of future protection of our intellectual property and proprietary rights is uncertain for products that are currently in the early stages of development because we cannot predict which of these products will ultimately reach the commercial market or whether the commercial versions of these products will incorporate proprietary technologies. In addition, there remains the possibility that others will reverse engineer—our products in order to determine their method of operation and introduce competing products or that others will develop competing technology independently.

If we resort to legal proceedings to enforce our intellectual property rights or to determine the validity and scope of the intellectual property or other proprietary rights of others, the proceedings could be burdensome and expensive, even if we were to prevail. The failure to adequately protect our intellectual property and other proprietary rights may have a material adverse effect on our business, results of operations or financial condition.

16

We could incur substantial costs resulting from product liability claims relating to our products or services or our customers—use of our products or services.

Any failure or errors in a customer s clinical trial caused or allegedly caused by our products or services could result in a claim for substantial damages against us by our customers or the clinical trial participants, regardless of our responsibility for the failure. Although we are generally entitled to indemnification under our customer contracts against claims brought against us by third parties arising out of our customers—use of our products, we might find ourselves entangled in lawsuits against us that, even if unsuccessful, may divert our resources and energy and adversely affect our business. Further, in the event we seek indemnification from a customer, a court may not enforce our indemnification right if the customer challenges it or the customer may not be able to fund any amounts for indemnification owed to us. In addition, our existing general liability insurance coverage may not continue to be available on reasonable terms or may not be available in amounts sufficient to cover one or more large claims, or the insurer may disclaim coverage as to any future claim.

Our failure to properly protect any personal medical information we possess or are deemed to possess in connection with the conduct of clinical trials could subject us to significant liability.

Our customers use our software solutions to collect, manage and report information in connection with the conduct of clinical trials. This information may be considered personal medical information of the clinical trial participants or patients. Regulation related to the use and disclosure of personal medical information continues to expand in scope and complexity. Increased focus on individuals—rights to confidentiality of their personal information, including personal medical information, could lead to an increase of existing and future legislative or regulatory initiatives giving direct legal remedies to individuals, including rights to damages, against entities deemed responsible for not adequately securing such personal information. In addition, courts may look to regulatory standards in identifying or applying a common law theory of liability, whether or not that law affords a private right of action. Since we receive and process personal information of clinical trial participants and patients from customers utilizing our hosted solutions, there is a risk that we could be liable if there were a breach of any obligation to a protected person under contract, standard of practice or regulatory requirement. If we fail to protect personal information that is in our possession or deemed to be in our possession properly, we could be subjected to significant liability and our reputation would be harmed.

Current and future litigation against us, which may arise in the ordinary course of our business, could be costly and time consuming to defend.

We are from time to time subject to legal proceedings and claims that arise in the ordinary course of business, such as claims brought by our customers in connection with commercial disputes and employment claims made by our current or former employees. For example, we are currently party to a lawsuit in Belgium brought by a former employee seeking approximately \$1.4 million. The court rendered its decision on January 15, 2009, which awarded approximately \$0.1 million to the plaintiff. The plaintiff filed a notice of appeal in September 2009, which remains pending. We will continue to vigorously defend this claim until it is resolved. In addition, in June 2007, we entered into a license and settlement agreement with a third party in connection with allegations that our Rave Remote product infringed a U.S. patent claimed to be owned by the third party. Under the license and settlement agreement, we agreed to make a lump-sum payment to the third party of \$2.2 million to settle the claim and obtained a royalty bearing license to utilize the patent at issue with respect to Rave Remote and comparable systems and services. On June 18, 2009, the third party initiated a lawsuit against us in the United States District Court for the District of Maryland claiming breach of contract. The complaint includes allegations that we have failed to pay unspecified royalties relating to sales of Medidata products. We filed an answer in July 2009, denying all material allegations and asserting affirmative defenses. We also asserted counterclaims for a declaratory judgment that no royalties are owed with respect to sales of our products, as well as a counterclaim for the third party s breach of the license and settlement agreement. The parties are now engaged in the discovery process. Although we will continue to defend the claims vigorously, neither the outcome of the litigation nor the amount and range of potential damages or exposure associated with the litigation can be assessed at this time.

17

Litigation may result in substantial costs and may divert management s attention and resources, which may seriously harm our business, overall financial condition and operating results. Insurance may not cover such claims, may not be sufficient for one or more such claims and may not continue to be available on terms acceptable to us. A claim brought against us that is uninsured or underinsured could result in unanticipated costs, thereby reducing our operating results and leading analysts or potential investors to reduce their expectations of our performance, resulting in a reduction in the trading price of our stock.

The U.S. government s determination to award a contract has been challenged at the Government Accountability Office, or GAO, by an unsuccessful bidder. If such a challenge is successful, the contract may be terminated.

The laws and regulations governing the procurement of goods and services by the U.S. government provide procedures by which unsuccessful bidders may challenge the award of a government contract. During the third quarter of 2009, the U.S. Department of Interior on behalf of the U.S. National Institute of Health s National Cancer Institute, or NCI, awarded us a government contract to make the Medidata Rave EDC management and reporting system available for use throughout the NCI Clinical Research Enterprise. The NCI contract award to us is presently the subject of a bid protest pending before the GAO. If this protest is successful, the government may determine to re-evaluate proposals and make a new award decision. If we are not selected for award after such a re-evaluation, the government might terminate for convenience the work requirements in our contract that have not yet been performed. At this time, we are unable to predict whether the protest will be upheld or what actions the agency would take in response to a decision by the GAO to uphold the protest, nor can we determine whether or not such decision would be material to us.

Risks Related to Our Industry

We face significant competition, which could cause us to lose business or achieve lower margins.

The market for our clinical trial solutions is intensely competitive and characterized by rapidly changing technologies, evolving industry standards and frequent new product and service introductions and enhancements that may render existing products and services obsolete. Accordingly, our market share and margins are subject to sudden declines. Some of our competitors have longer operating histories, greater financial, technical, marketing and other resources and greater name recognition than we do. These competitors may respond more quickly than we can to new and emerging technologies and changing customer and regulatory requirements, or devote greater resources to the development, promotion and sale of their solutions. We anticipate that new competitors will enter our market in the future, as barriers to entry are relatively low in our industry. Increased competition is likely to result in pricing pressures, which could negatively impact our sales, gross margins or market share. In addition, current and potential competitors have established, and may in the future establish, relationships with vendors of complementary products, technologies or services to increase the penetration of their products in the marketplace. Even if our products and services are more effective than the products or service offerings of our competitors, current or potential customers might accept competitive products and services in lieu of purchasing our software products, services and hosted solutions. Our failure to compete effectively could materially adversely affect our business, financial condition or results of operations.

We depend entirely on the clinical trial market, and a downturn in this market could cause our revenues to decrease.

Our business depends entirely on the clinical trials conducted or sponsored by pharmaceutical, biotechnology and medical device companies, CROs and other entities. Our revenues may decline as a result of conditions affecting these industries, including general economic downturns, increased consolidation, decreased competition or fewer products under development. Other developments that may affect these industries and harm our operating results include product liability claims, changes in government regulation, changes in governmental price controls or third-party reimbursement practices and changes in medical practices. Disruptions

18

in the world credit and equity markets and the current global recession may also result in a global downturn in spending on research and development and clinical trials and may impact our customers—access to capital and their ability to pay for our solutions. Any decrease in research and development expenditures or in the size, scope or frequency of clinical trials could materially adversely affect our business, results of operations or financial condition.

Extensive governmental regulation of the clinical trial process and our products and services could require significant compliance costs and have a material adverse effect on the demand for our solutions.

The clinical trial process is subject to extensive and strict regulation by the U.S. Food and Drug Administration and other regulatory authorities worldwide. Our software products, services and hosted solutions are also subject to state, federal and foreign regulations. Demand for our solutions is largely a function of such government regulation, which is generally increasing at the state and federal levels in the United States and elsewhere, and subject to change at any time. Changes in the level of regulation, including a relaxation in regulatory requirements or the introduction of simplified drug approval procedures, could have a material adverse effect on the demand for our solutions. For example, proposals to place caps on drug prices could limit the profitability of existing or planned drug development programs, making investment in new drugs and therapies less attractive to pharmaceutical companies. Similarly, the requirements in the United States, the European Union and elsewhere to create a detailed registry of all clinical trials could have an impact on customers—willingness to perform certain clinical studies. Likewise, a proposal for government-funded universal health care could subject expenditures for health care to governmental budget constraints and limits on spending. In addition, the uncertainty surrounding the possible adoption and impact on health care of any Good Clinical Practice reforms could cause our customers to delay planned research and development until some of these uncertainties are resolved. Until the new legislative agenda is finalized and enacted, it is not possible to determine the impact of any such changes.

Modifying our software products and services to comply with changes in regulations or regulatory guidance could require us to incur substantial costs. Further, changing regulatory requirements may render our solutions obsolete or make new products or services more costly or time consuming than we currently anticipate. Failure by us, our customers, or our competitors to comply with applicable regulations could result in increased regulatory scrutiny and enforcement. If our solutions fail to comply with government regulations or guidelines, we could incur significant liability or be forced to cease offering our applicable products or services. If our solutions fail to allow our customers to comply with applicable regulations or guidelines, customers may be unwilling to use our solutions and any such non-compliance could result in the termination of or additional costs arising from contracts with our customers.

Consolidation among our customers could cause us to lose customers, decrease the market for our products and result in a reduction of our revenues.

Our customer base could decline because of industry consolidation, and we may not be able to expand sales of our products and services to new customers. Consolidation in the pharmaceutical, biotechnology and medical device industries and among CROs has accelerated in recent years, and we expect this trend to continue. In addition, new companies or organizations that result from such consolidation may decide that our products and services are no longer needed because of their own internal processes or the use of alternative systems. As these entities consolidate, competition to provide products and services to industry participants will become more intense and the importance of establishing relationships with large industry participants will become greater. These industry participants may try to use their market power to negotiate price reductions for our products and services. Also, if consolidation of larger current customers occurs, the combined organization may represent a larger percentage of business for us and, as a result, we are likely to rely more significantly on the combined organization s revenues to continue to achieve growth.

19

Risks Related to Our Common Stock and this Offering

The price of our common stock may fluctuate significantly, and you could lose all or part of your investment.

Shares of our common stock were sold in our IPO in June 2009 at a price of \$14.00 per share, and our common stock has subsequently traded as high as \$19.73 and as low as \$14.53. However, an active, liquid and orderly market for our common stock on The NASDAQ Global Market or otherwise may not be sustained, which could depress the trading price of our common stock. The trading price of our common stock may be subject to wide fluctuations in response to various factors, some of which are beyond our control, including

our quarterly or annual earnings or those of other companies in our industry;

announcements by us or our competitors of significant contracts or acquisitions;

changes in accounting standards, policies, guidance, interpretations or principles;

general economic and stock market conditions, including the disruptions in the world credit and equity markets;

the failure of securities analysts to cover our common stock or changes in financial estimates by analysts;

future sales of our common stock; and

the other factors described in these Risk Factors.

In recent years, the stock market in general, and the market for Internet-related companies in particular, has experienced extreme price and volume fluctuations. This volatility has had a significant impact on the market price of securities issued by many companies, including companies in our industry. The price of our common stock could fluctuate based upon factors that have little to do with our performance, and these fluctuations could materially reduce our stock price.

In the past, some companies, including companies in our industry, have had volatile market prices for their securities and have had securities class action suits filed against them. The filing of a lawsuit against us, regardless of the outcome, could have a material adverse effect on our business, financial condition and results of operations, as it could result in substantial legal costs and a diversion of our management s attention and resources.

Our actual operating results may differ significantly from guidance provided by our management.

From time to time, we may release guidance in our quarterly earnings releases, quarterly earnings conference call, or otherwise, regarding our future performance that represent our management s estimates as of the date of release. This guidance, which includes forward-looking statements, is based on projections prepared by our management. These projections are not prepared with a view toward compliance with published guidelines of the American Institute of Certified Public Accountants, and neither our registered public accountants nor any other independent expert or outside party compiles or examines the projections and, accordingly, no such person expresses any opinion or any other form of assurance with respect thereto.

Projections are based upon a number of assumptions and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic and competitive uncertainties and contingencies, many of which are beyond our control and are based upon specific assumptions with respect to future business decisions, some of which will change. We generally state possible outcomes as high and low ranges, which are intended to provide a sensitivity analysis as variables are changed but are not intended to represent that actual results could not fall outside of the suggested ranges. The principal reason that we release guidance is to provide a basis for our management to discuss our

business outlook with analysts and investors. We do not accept any responsibility for any projections or reports published by any such persons.

20

Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions of the guidance furnished by us will not materialize or will vary significantly from actual results. Accordingly, our guidance is only an estimate of what management believes is realizable as of the date of release. Actual results will vary from our guidance and the variations may be material. In light of the foregoing, investors are urged not to rely upon, or otherwise consider, our guidance in making an investment decision in respect of our common stock. Any failure to successfully implement our operating strategy could result in the actual operating results being different from our guidance, and such differences may be adverse and material.

Future sales of shares of our common stock by stockholders could depress the market price of our common stock.

Based on shares outstanding as of September 30, 2009, upon the completion of this offering we will have 22,753,868 shares of our common stock outstanding, assuming no exercise of outstanding options other than those options exercised by certain selling stockholders for the purpose of selling shares in this offering. Of these shares, the common stock sold in our IPO and the common stock held by non-affiliates for more than six months is, and the shares sold in this offering will be, freely tradable, except for any shares purchased by our affiliates as defined in Rule 144 under the Securities Act of 1933. The holders of 6,107,636 shares of common stock have signed lock-up agreements under which they have agreed not to sell, transfer or dispose of, directly or indirectly, any shares of our common stock or any securities into or exercisable or exchangeable for shares of our common stock without the prior written consent of the underwriters for a period of 90 days after the date of this prospectus. Another 3,486,430 shares will not be subject to the new 90-day restricted period but remain subject to the 180-day restricted period in connection with our IPO, which ends on December 21, 2009. After the expiration of the lock-up period, these shares may be sold in the public market, subject to prior registration or qualification for an exemption from registration, including, in the case of shares held by affiliates, compliance with the volume restrictions of Rule 144. To the extent that any of these stockholders sell, or indicate an intent to sell, substantial amounts of our common stock in the public market after the contractual lock-ups and other legal restrictions on resale discussed in this prospectus lapse, the trading price of our common stock could decline significantly.

In addition, on July 7, 2009, we filed a registration statement on Form S-8 under the Securities Act covering shares of common stock to be issued pursuant to our Amended and Restated 2000 Stock Option Plan, our 2009 Long-Term Incentive Plan, our 2009 Employee Stock Purchase Plan and the Fast Track Systems Inc. 1999 Incentive Stock Plan. The registration statement covered approximately 2,687,246, 2,329,405, 500,000 and 45,246 shares of our common stock, respectively, for the Amended and Restated 2000 Stock Option Plan, the 2009 Long-Term Incentive Plan, the 2009 Employee Stock Purchase Plan and he Fast Track Systems Inc. 1999 Incentive Stock Plan, respectively. The shares of common stock covered by the registration statement on Form S-8 are available for sale in the open market immediately subject to complying with Rule 144 volume limitations applicable to affiliates, with applicable lock-up agreements, and with the vesting requirements and restrictions on transfer affecting any shares that are subject to restricted stock awards. If a large number of these shares are sold in the public market, the sales could reduce the trading price of our common stock. See Shares Eligible for Future Sale for a more detailed description of sales that may occur in the future.

Provisions of Delaware law and our organizational documents may discourage takeovers and business combinations that our stockholders may consider in their best interests, which could negatively affect our stock price.

Provisions of Delaware law and our fourth amended and restated certificate of incorporation and amended and restated bylaws may have the effect of delaying or preventing a change in control of our company or deterring tender offers for our common stock that other stockholders may consider in their best interests.

Our fourth amended and restated certificate of incorporation authorizes us to issue up to 5,000,000 shares of preferred stock in one or more different series with terms to be fixed by our board of directors. Stockholder approval is not necessary to issue preferred stock in this manner. Issuance of these shares of preferred stock could have the effect of making it more difficult and more expensive for a person or group to acquire control of us, and could effectively be used as an anti-takeover device. Currently there are no shares of our preferred stock issued or outstanding.

21

Our bylaws provide for an advance notice procedure for stockholders to nominate director candidates for election or to bring business before an annual meeting of stockholders, including proposed nominations of persons for election to our board of directors, and require that special meetings of stockholders be called only by our chairman of the board, chief executive officer, president or the board pursuant to a resolution adopted by a majority of the board.

The anti-takeover provisions of Delaware law and provisions in our organizational documents may prevent our stockholders from receiving the benefit from any premium to the market price of our common stock offered by a bidder in a takeover context. Even in the absence of a takeover attempt, the existence of these provisions may adversely affect the prevailing market price of our common stock if they are viewed as discouraging takeover attempts in the future.

As a public company, we incur significant administrative workload and expenses.

As a public company with common stock listed on The NASDAQ Global Market, we must comply with various laws, regulations and requirements, including certain provisions of the Sarbanes-Oxley Act of 2002, as well as rules implemented by the SEC and The NASDAQ Stock Market, which we were not required to comply with prior to becoming a public company. Complying with these statutes, regulations and requirements, including our public company reporting requirements, continues to occupy a significant amount of the time of our board of directors and management and involves significant accounting, legal and other expenses. We have hired, and anticipate that we will continue to hire, additional accounting personnel to handle these responsibilities, which will increase our operating costs. Furthermore, these laws, regulations and requirements could make it more difficult or more costly for us to obtain certain types of insurance, including director and officer liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers.

New laws and regulations as well as changes to existing laws and regulations affecting public companies, including the provisions of the Sarbanes-Oxley Act of 2002 and rules adopted by the SEC and by The NASDAQ Stock Market, would likely result in increased costs to us as we respond to their requirements. We are investing resources to comply with evolving laws and regulations, and this investment may result in increased general and administrative expenses and a diversion of management s time and attention from revenue-generating activities to compliance activities.

We will be exposed to risks relating to evaluations of internal controls required by Section 404 of the Sarbanes-Oxley Act of 2002.

We are in the process of evaluating our internal controls systems to allow management to report on, and our independent registered public accounting firm to audit, our internal controls over financial reporting. We will be performing the system and process evaluation and testing (and any necessary remediation) required to comply with the management certification and auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002. We will be required to comply with Section 404 in connection with the filing of our annual report on Form 10-K for our fiscal year ending December 31, 2010. However, we cannot be certain as to the timing of completion of our evaluation, testing and remediation actions or the impact of the same on our operations.

Furthermore, upon completion of this process, we may identify control deficiencies of varying degrees of severity under applicable SEC and Public Company Accounting Oversight Board rules and regulations that remain unremediated. As a public company, we are required to report, among other things, control deficiencies that constitute a material weakness or changes in internal controls that do, or are reasonably likely to, materially affect internal controls over financial reporting. See Risk Factors Risks Related to Our Business We currently have material weaknesses in our internal controls over financial reporting relating to our revenue

22

recognition and expense cut-off procedures, which we have not fully remediated. If we fail to remedy our material weaknesses or otherwise fail to maintain effective internal controls over our financial reporting, the accuracy and timing of our financial reporting may be adversely affected. We have hired, and anticipate that we will continue to hire, additional accounting personnel in order to comply with the rules and regulations applicable to us as a public company. If we fail to implement the requirements of Section 404 in a timely manner, we might be subject to sanctions or investigation by regulatory authorities such as the SEC or The NASDAQ Stock Market. Additionally, failure to comply with Section 404 or the report by us of a material weakness may cause investors to lose confidence in our financial statements and our stock price may be adversely affected. If we fail to remedy any material weakness, our financial statements may be inaccurate, we may face restricted access to the capital markets, and our stock price may decline.

We do not currently intend to pay dividends on our common stock and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We have never declared or paid any cash dividends on our common stock and do not currently intend to do so for the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth. In addition, covenants in our outstanding senior secured credit facility restrict our ability to pay dividends. Therefore, you are not likely to receive any dividends on your common stock for the foreseeable future and the success of an investment in shares of our common stock will depend upon any future appreciation in its value. Shares of our common stock may depreciate in value or may not appreciate in value.

23

CAUTIONARY STATEMENT

REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that reflect our current estimates, expectations and projections about our future results, performance, prospects and opportunities. Forward-looking statements include, among other things, the information concerning our possible future results of operations, business and growth strategies, financing plans, expectations that regulatory developments or other matters will not have a material adverse effect on our business or financial condition, our competitive position and the effects of competition, the projected growth of the industry in which we operate, the benefits and synergies to be obtained from our completed and any future acquisitions, and statements of management s goals and objectives, and other similar expressions concerning matters that are not historical facts. Words such as may, should, could, would, predicts, potential, continue, expects, anticipates, future, intends, plans, believes, similar expressions, as well as statements in the future tense, identify forward-looking statements.

estim

Forward-looking statements should not be read as a guarantee of future performance or results, and will not necessarily be accurate indications of the times at, or by which, such performance or results will be achieved. Forward-looking information is based on information available at the time and/or management s good faith belief with respect to future events, and is subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in the statements. Important factors that could cause such differences include, but are not limited to the factors discussed under the headings Risk Factors, Management s Discussion and Analysis of Financial Condition and Results of Operations and Business.

In light of these risks, uncertainties and assumptions, our actual results of operations and execution of our business strategy could differ materially from those expressed in, or implied by, the forward-looking statements, and you should not place undue reliance upon them. In addition, past financial and/or operating performance is not necessarily a reliable indicator of future performance and you should not use our historical performance to anticipate results or future period trends. We can give no assurances that any of the events anticipated by the forward-looking statements will occur or, if any of them do, what impact they will have on our results of operations and financial condition.

Forward-looking statements speak only as of the date the statements are made. We assume no obligation to update forward-looking statements to reflect actual results, changes in assumptions or changes in other factors affecting forward-looking information except to the extent required by applicable securities laws. If we do update one or more forward-looking statements, no inference should be drawn that we will make additional updates with respect thereto or with respect to other forward-looking statements. All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements included in this prospectus.

INDUSTRY INFORMATION

Information contained in this prospectus concerning our industry and the markets in which we operate, including our general expectations and market position, market opportunity and market share, is based on information from independent industry analysis, third-party sources (including industry publications, surveys and forecasts and our internal research) and management estimates. Management estimates are derived from publicly available information released by independent industry analysts and third-party sources, as well as data from our internal research, and are based on assumptions made by us derived from such data and our knowledge of such industry and markets, which we believe to be reasonable. Any projections and estimates of our future performance and the future performance of the industries in which we operate are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in Risk Factors and elsewhere in this prospectus, and may constitute forward-looking statements. See Cautionary Statement Regarding Forward-Looking Statements. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

24

USE OF PROCEEDS

The selling stockholders, including certain members of our board of directors and management, will receive all of the proceeds from this offering, and we will not receive any proceeds from the sale of shares in this offering. See Principal and Selling Stockholders. Any proceeds received by us in connection with the exercise of options to purchase shares of our common stock by certain selling stockholders in connection with this offering will be used for general corporate purposes.

PRICE RANGE OF COMMON STOCK

Our common stock has been listed on The NASDAQ Global Market under the symbol MDSO since the completion of our IPO in June 2009. Before then, there was no public market for our common stock. The following table sets forth, for the periods indicated, the high and low sales prices of our common stock as reported by The NASDAQ Global Market:

	High	Low
Second Quarter 2009 (beginning June 25, 2009)	\$ 19.00	\$ 16.00
Third Quarter 2009	19.73	14.53
Fourth Quarter 2009 (through November 30, 2009)	17.97	14.82

On November 30, 2009, the closing price as reported on The NASDAQ Global Market of our common stock was \$16.95 per share. As of September 30, 2009, we had 284 holders of record of our common stock.

25

DIVIDEND POLICY

We paid accumulated accrued dividends on our convertible redeemable preferred stock of approximately \$2.3 million in cash immediately prior to the conversion of all our redeemable preferred stock into shares of our common stock upon completion of the IPO. Except for these dividends, we have never declared or paid any cash dividends on our capital stock. We currently expect to retain any future earnings for use in the operation and expansion of our business and do not anticipate paying any cash dividends on our common stock. Any future determination to pay dividends on our common stock will be at the discretion of our board of directors and will depend on our financial condition, results of operations, capital requirements and other factors that our board of directors considers relevant.

26

CAPITALIZATION

The following table sets forth our consolidated cash and cash equivalents and capitalization as of September 30, 2009.

on an actual basis; and

on an as adjusted basis to reflect the estimated offering expenses of approximately \$520,000 payable by us and the proceeds of \$49,050 received by us in connection with the exercise of options to purchase an aggregate of 90,000 shares of our common stock by the selling stockholders and sold by them in connection with this offering.

	As of Septer	nber 30, 2009
	•	As Adjusted ds, except per amount)
Cash and cash equivalents	\$ 86,900	\$ 86,429
Capital lease obligations, including current portion Stockholders equity:	\$ 4,588	\$ 4,588
Common stock, \$0.01 par value, 100,000 shares authorized, 22,664 shares issued and outstanding; 22,754		
issued and outstanding, as adjusted	227	228
Additional paid-in capital	111,942	111,990
Accumulated other comprehensive loss	(198)	(198)
Accumulated deficit	(95,095)	(95,615)
Total stockholders equity	16,876	16,405
Total capitalization	\$ 21,464	\$ 20,993

The outstanding share information set forth above is as of September 30, 2009 and excludes:

3,083,104 shares of common stock issuable upon the exercise of outstanding stock options to purchase our common stock at a weighted average exercise price of \$8.42 per share (including an aggregate of 90,000 shares of common stock that will be issued upon the exercise of options at a weighted average exercise price of \$0.55 per share by certain selling stockholders and sold by them in this offering);

1,781,768 shares of common stock reserved for future grants or awards from time to time under our 2009 Long-Term Incentive Plan; and

500,000 additional shares of common stock to be available for future grant under our 2009 Employee Stock Purchase Plan.

SELECTED CONSOLIDATED FINANCIAL INFORMATION

Our selected consolidated financial information presented for each of the years ended December 31, 2006, 2007 and 2008 and as of December 31, 2007 and 2008 was derived from our audited consolidated financial statements (as revised, see Note 2, Restatement of Consolidated Financial Statements , to our consolidated financial statements), which are included elsewhere in this prospectus. Our selected financial information presented for each of the years ended December 31, 2004 and 2005 and as of December 31, 2004, 2005 and 2006 was derived from our consolidated financial statements, which are not included in this prospectus and have been subsequently revised in conjunction with the restatement of our consolidated financial statements as noted above. Our selected consolidated financial information presented for the nine months ended September 30, 2008 (as subsequently revised in conjunction with the restatement as noted above, see Note 2, Restatement of Consolidated Financial Statements , to our unaudited condensed consolidated interim financial statements) and 2009 and as of September 30, 2009 were derived from our unaudited condensed consolidated interim financial statements included elsewhere in this prospectus. The results of operations for the nine months ended September 30, 2009 are not necessarily indicative of the results to be expected for the full year ending December 31, 2009.

The information contained in this table should also be read in conjunction with Use of Proceeds, Capitalization, Unaudited Pro Forma Statement of Operations, Management's Discussion and Analysis of Financial Condition and Results of Operations, and the consolidated financial statements and accompanying notes thereto included elsewhere in this prospectus.

Consolidated Statement of Operations Data

	2004	2005	ended Decem 2006	2007	2008(1) share amour	Septem 2008(1)	ths Ended aber 30, 2009
Revenues:		(1)	ii tiiousuiius,	слеере рег	siui e unioui	163)	
Application services	\$ 3,226	\$ 13,069	\$ 25,406	\$ 44,592	\$ 73,820	\$ 52,029	\$ 74,145
Professional services	4,304	3,643	10,851	18,391	31,904	22,513	28,702
Total revenues	7,530	16,712	36,257	62,983	105,724	74,542	102,847
Costs of revenues:(2)							
Application services(3)	1,074	2,059	7,288	13,170	19,647	14,590	17,521
Professional services	4,878	14,459	20,462	33,035	30,801	23,815	19,910
Total cost of revenues	5,952	16,518	27,750	46,205	50,448	38,405	37,431
Gross profit	1,578	194	8,507	16,778	55,276	36,137	65,416
Operating costs and expenses:(2)	ĺ		,	,	ĺ	,	ĺ
Research and development(4)	2,859	4,104	5,905	10,716	19,340	14.632	16,894
Selling and marketing(5)	3,829	7,599	12,768	15,484	24,190	17,654	20,167
General and administrative	4,068	4,574	8,335	13,361	27,474	20,047	22,672
Tetal constitution and annual	10.756	16 277	27.000	20.561	71.004	50 222	50.722
Total operating costs and expenses	10,756	16,277	27,008	39,561	71,004	52,333	59,733
(Loss) income from operations	(9,178)	(16,083)	(18,501)	(22,783)	(15,728)	(16,196)	5,683
Interest and other expenses (income), net	31	38	195	364	1,624	1,182	1,638
(Loss) income before provision for income taxes	(9,209)	(16,121)	(18,696)	(23,147)	(17,352)	(17,378)	4,045
Provision for income taxes(6)	23	110	306	515	920	481	602
Net (loss) income	\$ (9.232)	\$ (16.231)	\$ (19,002)	\$ (23,662)	\$ (18,272)	\$ (17.859)	\$ 3,443
	+ (>,===)	+ (10,200)	+ (-2,002)	+ (==,===)	+ (10,212)	+ (=,,==,)	7 2,112
(Loss) earnings per share:(7)							
Basic	\$ (1.57)	\$ (2.73)	\$ (3.10)	\$ (3.78)	\$ (2.76)	\$ (2.72)	\$ 0.26
Diluted	\$ (1.57)	\$ (2.73)	\$ (3.10)	\$ (3.78)	\$ (2.76)	\$ (2.72)	\$ 0.17
Weighted average common shares outstanding:(7)(8)							
Basic	6,056	6,135	6,297	6,385	6,794	6,712	12,318

Diluted

6,056

6,135

6,297

6,712

6,794

19,693

28

	2004		005		nded Dec 2006	(in	2007 thousand	ds)	008(1)	Nine Mo Septer 2008(1)	mber	30, 2009
Stock-based compensation expense and depreciation and amfollows:	ortization of	fintang	gible ass	ets inc	luded in o	cost of	revenues	and op	erating cos	sts and expense	es are	as
Stock-based compensation expense												
Cost of revenues	\$	\$	178	\$	108	\$	172	\$	291	\$ 210	\$	280
Research and development			27		89		183		503	334		397
Sales and marketing			69		304		448		640	470		844
General and administrative			118		218		491		1,763	1,221		1,907
Total stock-based compensation	\$	\$	392	\$	719	\$	1,294	\$	3,197	\$ 2,235	\$	3,428
<u>Depreciation</u>												
Cost of revenues	\$	\$	563	\$	1,237	\$	3,605	\$	5,941	\$ 4,459	\$	5,034
Research and development			136		289		463		650	494		592
Sales and marketing			91		202		243		383	289		360
General and administrative	347		104		228		305		461	348		454
Total depreciation	347		894		1,956		4,616		7,435	5,590		6,440
Amortization of intangible assets(4)												
Cost of revenues									1,191	826		1,262
Sales and marketing									79	54		108
Total amortization of intangible assets									1,270	880		1,370
Total depreciation and amortization of intangible assets	\$ 347	\$	894	\$	1,956	\$	4,616	\$	8,705	\$ 6,470	\$	7,810

Consolidated Balance Sheet Data

		As	s of December	31,		As of September 30,
	2004	2005	2006	2007	2008	2009
			(in tl	nousands)		
Cash and cash equivalents(8)	\$ 7,595	\$ 6,450	\$ 7,016	\$ 7,746	\$ 9,784	\$ 86,900
Total current assets	13,149	13,352	19,073	29,556	44,565	112,945
Restricted cash	306	305	305	387	545	532
Total assets	14,824	16,540	25,121	44,479	75,190	140,457
Total deferred revenue	11,253	24,617	42,337	75,635	101,621	104,239
Total capital lease obligations	289	507	2,281	8,527	7,060	4,588
Total long-term debt(9)	1,500	4,000	3,514	10,781	14,366	
Convertible redeemable preferred stock(10)	11,252	11,751	12,249	12,747	13,245	
Convertible preferred stock(10)	24	24	24	24	24	
Stockholders (deficit) equity(8)	(13,706)	(30,638)	(49,189)	(77,888)	(76,400)	16,876

Notes to Selected Consolidated Financial Information:

- (1) On March 17, 2008, we acquired Fast Track, a provider of clinical trial planning solutions. Our results of operations for the nine months ended September 30, 2008 and for subsequent periods include the operations of Fast Track since the date of acquisition. Please refer to Unaudited Pro Forma Statement of Operations for the proforma effects of our acquisition of Fast Track.
- (2) Prior to January 1, 2006, we accounted for our stock-based compensation plans using the intrinsic value method prescribed by APB No. 25 and related interpretations. Under APB No. 25, compensation expense of fixed stock options is based on the difference, if any, on the date

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

of the grant between the fair value of our

29

stock and the exercise price of the option. Compensation expense is recognized on a straight-line basis over the requisite service period. On January 1, 2006, we adopted the provisions of SFAS No. 123(R), *Share-Based Payment*, (currently under ASC 718, *Compensation Stock Compensation*), requiring us to recognize expense related to the fair value of our stock-based compensation awards. We elected the modified prospective transition method as permitted by SFAS No. 123(R). Under this transition method, stock-based compensation expense for the fiscal year ended December 31, 2006, includes compensation expense for all stock based compensation awards granted prior to, but not yet vested, as of January 1, 2006, based on the grant date fair value estimated in accordance with the original provisions of SFAS No. 123, *Accounting for Stock-Based Compensation*, and compensation expense for all stock based compensation awards granted subsequent to January 1, 2006, based on the grant date fair value estimated in accordance with the provisions of SFAS No. 123(R).

- (3) In 2006, it was claimed by a third party that certain applications offered to our customers potentially infringed on intellectual property rights held by that third party. As a result of negotiations with the third party, we entered into a license and settlement agreement in June 2007, pursuant to which we licensed the intellectual property held by the third party for use in our future sales to customers and settled all past infringement claims. We paid a settlement amount of \$2.2 million to the third party in 2007. Such amount was recorded in cost of revenues under application services for the year ended December 31, 2006 and in accrued expenses on the consolidated balance sheet as of December 31, 2006. See Note 10, Commitments and Contingencies, to our unaudited condensed consolidated interim financial statements included elsewhere in this prospectus for more information regarding legal matters.
- (4) We determined that technological feasibility had not been established for certain in-process research and development projects acquired from Fast Track. These projects were written off, resulting in \$0.7 million of additional research and development expenses included in the consolidated statement of operations data for the nine months ended September 30, 2008 and for the year ended December 31, 2008. This write-off is not included in amortization of intangible assets in the consolidated statement of operations.
- (5) In 2006, a former employee made a claim seeking compensation of approximately \$1.6 million in relation to a wrongful dismissal lawsuit. Subsequently, the claim was reduced to approximately \$1.4 million as of December 31, 2008. We recorded approximately \$0.6 million in sales and marketing expenses during the year ended December 31, 2006 related to this matter. The court rendered its decision on January 15, 2009, which awarded approximately \$0.1 million to the plaintiff. The plaintiff filed a notice of appeal in September 2009, which remains pending. We will continue to vigorously defend this claim until it is resolved.
- (6) For the years ended December 31, 2004 to 2008 and for the nine months ended September 30, 2009, we did not realize an income tax benefit for available net operating loss carryforwards. As of December 31, 2008, we had approximately \$83.7 million of federal net operating loss carryforwards available to offset future taxable income expiring from 2019 through 2028. We also had net operating loss carryforwards for state income tax purposes of approximately \$106.0 million available to offset future state taxable income expiring from 2009 to 2028.
- (7) Basic and diluted net loss per share amounts and basic and diluted weighted average common shares outstanding have been adjusted to reflect a two-for-one stock split effective on August 3, 2004.
- (8) In June 2009, we completed an initial public offering, or IPO, issuing 6.3 million shares of common stock at a public offering price of \$14.00 per share. As a result of the offering, we received net proceeds of \$75.2 million, after deducting underwriting discounts and commissions of \$6.2 million and offering expenses of \$6.8 million. In addition, the underwriters exercised in full their over-allotment option to purchase an additional 0.9 million shares of common stock from certain selling stockholders. We did not receive any proceeds from the sale of shares by the selling stockholders.

30

- (9) In July 2009, we used a portion of our net proceeds from the IPO to prepay the entire outstanding indebtedness of the term loan under the senior secured credit facility. The total payoff amount of \$14.7 million included the outstanding principal balance of \$14.3 million, as well as accrued interest and termination fees of \$0.4 million. Also in July 2009, we executed a standby letter of credit under our credit agreement in connection with the office lease of approximately \$0.2 million, which resulted in a reduction of the available amount under the revolving line of credit. As of September 30, 2009, approximately \$9.8 million of the revolving line of credit under our senior secured credit facility was still available for future borrowings.
- (10) As a result of the IPO, all outstanding convertible preferred stock was automatically converted into 9.0 million shares of common stock. In addition, we paid out all accumulated accrued dividends of \$2.3 million to preferred stockholders at conversion.

31

UNAUDITED PRO FORMA STATEMENT OF OPERATIONS

On March 17, 2008, we acquired Fast Track for a purchase price of approximately \$18.1 million. The following unaudited pro forma statement of operations for the year ended December 31, 2008 gives pro forma effect to the acquisition of Fast Track as if it had occurred on January 1, 2008.

The unaudited pro forma statement of operations is based on estimates and assumptions. These estimates and assumptions have been made solely for purposes of developing this pro forma information. Unaudited pro forma financial information is presented for illustrative purposes only and is not necessarily indicative of the operating results that would have been achieved if the acquisition of Fast Track had been consummated as of the date indicated, nor is it necessarily indicative of the results of future operations. The pro forma financial information does not give effect to any cost savings or restructuring and integration costs that may result from the integration of Fast Track s business.

In connection with our purchase of Fast Track, we issued 864,440 shares of our common stock in exchange for all of Fast Track s existing preferred stock and common stock as well as 25,242 shares of common stock reserved for the exercise of outstanding vested employee stock options, 20,004 shares of common stock reserved for the exercise of outstanding unvested employee stock options and 444 shares of common stock reserved for the exercise of outstanding warrants.

The Fast Track purchase price has been allocated based on the fair market value of the acquired assets and liabilities. See Note 1 to the Notes to Unaudited Pro Forma Statement of Operations.

32

PRO FORMA STATEMENT OF OPERATIONS

FOR THE YEAR ENDED DECEMBER 31, 2008

(AMOUNTS IN THOUSANDS, EXCEPT SHARE AND PER SHARE AMOUNTS)

	Medidata Solutions, Inc. January 1 to December 31, 2008 (Historical)*		S Ja to N	st Track ystems, Inc. nuary 1 March 17, 2008 istorical)	Pro Forma Adjustments for Fast , Track Acquisition				ro Forma Combined	
Revenues:										
Application services	\$	73,820	\$	1,370	\$	(118)	2(b)	\$	75,072	
Professional services		31,904							31,904	
Total revenues		105,724		1,370		(118)			106,976	
Cost of revenues:						` ′				
Application services		19,647		256		351	2(c)		20,254	
Professional services		30,801							30,801	
Total cost of revenues		50,448		256		351			51,055	
Gross profit		55,276		1,114		(469)			55,921	
Operating costs and expenses:		,		,		()			,-	
Research and development		19,340		225					19,565	
Sales and marketing		24,190		364		30	2(c)		24,584	
General and administrative		27,474		959					28,433	
Total operating costs and expenses		71,004		1,548		30			72,582	
Operating loss		(15,728)		(434)		(499)			(16,661)	
Interest and other expenses (income), net		1,624		(9)					1,615	
Loss before income taxes		(17,352)		(425)		(499)			(18,276)	
Provision for income taxes		920		11			2(d)		931	
							. ,			
Net loss		(18,272)		(436)		(499)			(19,207)	
Preferred stock dividends and accretion		498		81		(81)	2(e)		498	
Treation stock dividends and accionon		170		01		(01)	2(0)		170	
Net loss available to common stockholders	\$	(18,770)	\$	(517)	\$	(418)		\$	(19,705)	
THE 1055 AVAIIAUTE TO COMMINION STOCKHOUGES	Ф	(10,770)	Ф	(317)	Ф	(410)		Φ	(19,703)	
Basic and diluted net loss per share	\$	(2.76)						\$	(2.83)	
Weighted average basic and diluted common shares		< = 00 == :							< 0 - 0 - 5 - 5	
outstanding		6,793,596						(6,973,589	2(f)

^{*} As restated, see Note 2, Restatement of Consolidated Financial Statements , to our consolidated financial statements for the years ended December 31, 2006, 2007 and 2008, which are included elsewhere in this prospectus.

See notes to unaudited pro forma statement of operations.

33

NOTES TO UNAUDITED PRO FORMA STATEMENT OF OPERATIONS

FOR THE YEAR ENDED DECEMBER 31, 2008

(AMOUNTS IN THOUSANDS, EXCEPT SHARE AND PER SHARE AMOUNTS)

(1) ACQUISITION OF FAST TRACK

The purchase price of Fast Track was based on a negotiated fair market value of Fast Track as of the acquisition date. The fair market value of our common stock issued to Fast Track shareholders of \$19.66 was based on a valuation of our common stock performed by Financial Strategies Consulting Group LLC, or FSCG, an independent third-party valuation specialist, as of March 2008. FSCG used the market-comparable approach and the income approach to estimate our aggregate enterprise value at the valuation date (See Management s Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies Stock-Based Compensation Significant Factors, Assumptions and Methodologies Used in Determining the Fair Value of our Capital Stock). The determination of fair market value of our common stock requires us to make judgments that are complex and inherently subjective.

The following table sets forth the components of the purchase price:

Fair market value of common stock issued (864,440 shares)

Fair market value of stock options and warrants exchanged (25,242 and 444 shares underlying the options and warrants,	
respectively)	459
Transaction costs	625

\$ 16,995

Total purchase price \$18,079

The issuance of 864,440 shares of our common stock in exchange for all Fast Track s existing preferred stock and common stock held by Fast Track employees and stockholders was based on the estimated fair market value of our common stock of \$19.66 on the date of the acquisition.

The fair market value of the 25,242 shares of fully vested exchanged stock options and 20,004 shares of unvested exchanged stock options issued in connection with the acquisition was estimated using the Black-Scholes pricing model utilizing the following weighted-average assumptions:

Risk-free interest rate	2.61%
Expected life	2.4 years
Expected volatility	59%
·	

Expected dividend yield

As a result of the valuation, the fair market value of \$370 associated with the 20,004 shares of unvested exchanged stock options will be recorded into stock-based compensation expense over the stock option vesting term, which is approximately one year subsequent to the acquisition.

The fair market value of the 444 shares of exchanged warrants was also estimated using the Black-Scholes pricing model and was not material.

The allocation of the purchase price paid in connection with our acquisition of Fast Track among the assets acquired and liabilities assumed is based on their fair market value. The following table provides the allocation of the purchase price based upon Fast Track s unaudited balance sheet as of March 17, 2008, the date of the acquisition:

Assets acquired	
Cash and cash equivalents and other current assets	\$ 1,827
Restricted cash	158
Furniture, fixture and equipment	232
Intangible assets	8,200
Goodwill	9,799
Total assets acquired	\$ 20,216
Liabilities assumed	
Accounts payable and accrued expenses	(798)
Deferred revenue	(1,338)
Other long-term liabilities	(1)
Net assets acquired	\$ 18,079

We have provided for deferred tax assets of \$3,470 for the difference between the currently estimated book and tax basis of the net assets acquired. Based on our lack of a history of profits and uncertainty in regards to future profitability, we determined that it was more likely than not that such tax benefit would not be realized and therefore a valuation allowance of \$3,470 was established to fully offset such net deferred tax assets. In addition, we did not recognize a deferred tax asset relating to the future tax distribution that will arise when the Fast Track employee exchanged options are exercised. When such exercises occur and a tax deduction is ultimately realized, we will recognize such benefit as an adjustment to income tax expense in accordance with ASC 805, *Business Combinations*, which was adopted by us on January 1, 2009.

(2) PRO FORMA FAST TRACK ACQUISITION ADJUSTMENTS

(a) Adjustment to calculate goodwill and other intangible assets and to allocate the purchase price to the fair value of Fast Track net assets acquired:

Common stock issued (see Note 1)	\$ 16,995
Common stock reserved for stock options and warrants exchanged (see Note 1)	459
Transaction costs	625
Total purchase price	\$ 18,079
Purchase price is allocated as follows:	
Goodwill	\$ 9,799
Intangible assets	8,200
Net assets assumed	80
Total purchase price	\$ 18,079

(b)

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

We estimated the fair value of the legal performance obligation associated with acquired deferred revenue in accordance with Emerging Issues Task Force Issue No. 01-3, *Accounting in a Business Combination for Deferred Revenue of an Acquiree*. We concluded that the value of the legal performance obligation represents the direct costs to fulfill such obligation plus an expected profit margin. Our valuation of the acquired deferred revenue resulted in a 38% write-down of the deferred revenue balance as of the date of the acquisition. The performance obligation associated with the acquired deferred revenue has a duration of one year, thus this write-down has been reflected on a

35

pro forma basis as of January 1, 2008, resulting an adjustment to application services revenues of \$118 (net of historical impact of \$664) in the pro forma statement of operations for the year ended December 31, 2008.

(c) Adjustment to historical amortization of intangible assets expense to reflect the incremental expense associated with the purchase price allocation and estimated useful lives:

	Purchase Allocation	Estimated Useful Lives (Years)	Decei	Ended mber 31,
Technology	\$ 2,400	5.00	\$	480
Database	1,900	5.00		380
Customer relationships	1,600	5.00		110
Customer contracts	1,600	3.00		681
Research and development	700	None		
	\$ 8,200			1,651
Historical expense				1,270
Incremental pro forma expense for the year ended December 31, 2008			\$	381
Cost of revenues-application services			\$	351
Sales and marketing				30
Total			\$	381

Of the \$8,200 of acquired intangibles, \$700 was assigned to in-process research and development projects. Subsequent to the date of the acquisition, we determined that technological feasibility had not been established for any of these projects, and as a result, these projects were written off. This write-off is included as research and development expense in Medidata s historical results of operations for the year ended December 31, 2008.

The acquired technology and database will be amortized on a straight-line basis over the estimated useful life of five years. The customer relationships and customer contracts will be amortized using an accelerated method which reflects the pattern in which the economic benefits derived from the related intangible assets are consumed or utilized. Amortization of customer relationships and customer contracts over their remaining useful lives as of December 31, 2008 is as follows:

Years ending December 31,		
2009	\$	967
2010		599
2011		517
2012		448
2013		80
	\$ 2	2,611

⁽d) Pro forma provision for income taxes represents only foreign, state and local income taxes imposed on a pro forma combined company basis, as we do not expect to pay U.S. income taxes on our net loss. We have not reflected a tax benefit on such loss as it is not assured that a tax benefit would be realized.

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

- (e) Pro forma adjustments for preferred stock dividends and accretion represent the elimination of Fast Track s historical preferred stock dividends, as all of Fast Track s preferred stock was exchanged for Medidata s common stock in connection with the acquisition.
- (f) Pro forma combined weighted average basic and diluted common shares outstanding were based on Medidata s historical weighted average basic and diluted common shares outstanding with the pro forma effect of the issuance of 864,440 shares of common stock in connection with the acquisition of Fast Track as if it had occurred on January 1, 2008.

36

MANAGEMENT S DISCUSSION AND ANALYSIS OF

FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following is a discussion and analysis of our financial condition and results of operations. You should read this discussion and analysis together with our consolidated financial statements and notes to those consolidated financial statements included elsewhere in this prospectus. This discussion contains forward-looking statements that are based on management s current expectations, estimates and projections about our business and operations. Our actual results may differ from those currently anticipated and expressed in such forward-looking statements as a result of a number of factors, including those described under the caption Risk Factors and elsewhere in this prospectus.

Overview

We are a leading global provider of hosted clinical development solutions that enhance the efficiency of our customers clinical development processes and optimize their research and development investments. Our solutions allow our customers to achieve clinical results more efficiently and effectively by streamlining the design, planning and management of key aspects of the clinical development process, including protocol development, contract research organization, or CRO, negotiation, investigator contracting, the capture and management of clinical trial data and the analysis and reporting of that data on a worldwide basis.

The demand for electronic clinical solutions, such as those provided by us, has been driven by the increasing complexity and cost associated with paper-based trials and inefficiencies with early generation electronic data capture, or EDC, solutions. Paper-based trials may delay the clinical development process, impair data quality and prevent real-time decision making, while traditional EDC solutions have faced challenges with integration, site requirements, customization and scalability.

We have grown our revenues significantly since inception by expanding our customer base, increasing penetration with existing customers, enhancing our products and services and growing our indirect channel. In order to achieve and sustain our growth objectives, we have and will continue to invest in key areas, including: new personnel, particularly in direct domestic and international sales activities; resources to support our product development, including product functionality and platform; marketing programs to build brand awareness; and infrastructure to support growth.

We derive a majority of our application services revenues through multi-study arrangements for a pre-determined number of studies. We also offer our application services on a single-study basis that allows customers to use our solution for a limited number of studies or to evaluate it prior to committing to multi-study arrangements. We invest heavily in training our Medidata Rave customers, their investigators and other third parties to configure clinical trials independently. We believe this knowledge transfer accelerates customer adoption of our solutions.

We use a number of metrics to evaluate and manage our business. These metrics include customer growth, customer retention rate, revenues from lost customers, geographic contribution, and backlog.

Our customer base has grown from 33 at January 1, 2006 to 157 at September 30, 2009. Our relationships with some of these customers include multiple divisions and business units at various domestic and international locations. We generate revenues from sales to new customers as well as sales and renewals from our existing customers. Our global direct sales organization represents our primary source of sales, with an increasing number of sales generated through our CRO relationships. Our customer retention rate was 81.8%, 92.0%, 87.0% and 93.2% in 2006, 2007, 2008 and the nine months ended September 30, 2009, respectively. We calculate customer retention based upon the number of customers that existed both at the beginning and end of the relevant period. Revenues from lost customers accounted for 3.3%, 1.0%, 2.9% and 0.5% of total prior year revenues in 2006, 2007, 2008 and the nine months ended September 30, 2009, respectively. To calculate the impact of customers

lost during the period, we consider the revenues recognized from lost customers during the most recent prior fiscal year as a percentage of total company revenues from the same period. We believe revenues from lost customers coupled with customer retention rate give the best sense of volume and scale of customer loss and retention. Our presentation of customer retention and revenues from lost customers may differ from other companies in our industry.

We manage our business as one reportable segment. Historically, we have generated most of our revenues from sales to customers located in the United States. However, revenues generated from customers located in Europe and Asia (including Australia) represent a significant portion of overall revenues. Revenues generated from customers located in Europe represented approximately 15%, 20%, 21% and 21% of total revenues in 2006, 2007, 2008 and the nine months ended September 30, 2009, respectively. Revenues generated from customers in Asia represented approximately 12%, 13%, 10% and 12% of total revenues in 2006, 2007, 2008 and the nine months ended September 30, 2009, respectively. We expect sales from customers in Europe and Asia to continue to represent a significant portion of total sales as we continue to serve existing and new customers in these markets.

Our backlog is primarily associated with application services and represents the total future contract value of outstanding, multi-study and single-study arrangements, billed and unbilled, at a point in time. Thus, our backlog includes deferred revenue. Revenue generated in any given period is a function of revenue recognized from the beginning of period backlog, contract renewals, and new customer contracts. For this reason, backlog at the beginning of any period is not necessarily indicative of long-term future performance. We monitor as an annual metric the amount of revenues expected to be recognized from backlog over the current fiscal year, or full year backlog. As of January 1, 2009, we had full year backlog of approximately \$116.7 million. We also track, quarterly, the remaining amount of revenue to be recognized from backlog in the current year, or remaining backlog, which as of September 30, 2009 was approximately \$33.1 million. Our presentation of backlog may differ from other companies in our industry.

We consider the global adoption of EDC solutions to be essential to our future growth. Our future growth will also depend on our ability to sustain the high levels of customer satisfaction and our ability to increase sales to existing customers. In addition, the market for our products is often characterized by rapid technological change and evolving regulatory standards. Our future growth is dependent on the successful development and introduction of new products and enhancements. To address these challenges, we will continue to expand our direct and indirect sales channels in domestic and international markets, pursue research and development as well as acquisition opportunities to expand and enhance our product offerings, expand our marketing efforts, and drive customer adoption through our knowledge transfer professional services offerings. Our success in these areas will depend upon our abilities to execute on our operational plans, interpret and respond to customer and regulatory requirements, and retain key staff.

Restatement of Consolidated Financial Statements

Subsequent to the issuance of our 2008 consolidated financial statements, we reviewed our practice regarding the timing of revenue recognition. Specifically, we examined our treatment of certain customer arrangements in which application services and professional services were sold in the same single-study or multi-study arrangement.

Application services include software licenses that provide the customer with a right to use the software, as well as hosting and other support services, to be provided over a specific term. Professional services include various offerings that customers have the ability to utilize on an as-needed basis.

Historically, when application services and professional services were sold in the same single-study or multi-study arrangement, we allocated arrangement consideration to professional services based on fair value and recognized such professional services revenues as services were performed. The remaining arrangement

38

consideration was allocated to application services and recognized as revenue ratably over the term of the arrangement, beginning with the commencement of the arrangement term, which correlates with the activation of the hosting services, assuming all other revenue recognition criteria were met. This accounting practice assumed that application services had been delivered upon the activation of the hosting services, and that professional services were delivered at various times subsequent to the activation of the hosting services, during the term of the arrangement.

However, given that we have a continuing obligation to provide hosting services throughout the arrangement term, we are not able to determine fair value for hosting services, and since professional services are performed at various times during the term of an arrangement, we determined that recognition of application services and professional services as a combined single unit of accounting is appropriate. As a result, when application services and professional services are sold in the same single-study or multi-study arrangement, the related revenues are recognized ratably beginning with the commencement of the arrangement term, assuming all other revenue recognition criteria are met. The restatement resulted in the deferral to future periods of \$52.0 million of revenues previously recognized through December 31, 2008.

For arrangements where revenue is recognized over the relevant contract period, we continue to capitalize the related paid sales commissions and recognize these commissions as expense as we recognize the related revenue. As a result of our restatement of revenues, we adjusted the timing of commission expense to correlate with our restated revenues in each restated period. Sales commission expense is captured as a component of sales and marketing in our operating costs and expenses.

In addition, we made a correction to the condensed consolidated statement of cash flows for the nine months ended September 30, 2008 to appropriately reflect all costs accrued associated with our initial public offering, or IPO.

As a result of the above, we have restated our consolidated balance sheets as of December 31, 2005, 2006, 2007 and 2008 and the related consolidated statements of operations, stockholders deficit and cash flows for the years then ended, and our condensed consolidated statements of operations, stockholders deficit and cash flows for the nine months ended September 30, 2008. The restatement did not impact any period prior to 2005. For a further description of the restatement, please see Note 2, Restatement of Consolidated Financial Statements, to our consolidated financial statements for the years ended December 31, 2006, 2007 and 2008 and for the nine months ended September 30, 2009, which are included elsewhere in this prospectus.

Acquisition of Fast Track Systems, Inc.

On March 17, 2008, we acquired Fast Track Systems, Inc., or Fast Track, a provider of clinical trial planning solutions. With this acquisition, we extended our ability to serve customers throughout the clinical research process with solutions that improve efficiencies in protocol development and trial planning, contracting and negotiation. We paid total consideration of approximately \$18.1 million, which consisted of the issuance of 864,440 shares of common stock in exchange for all Fast Track s existing preferred stock and common stock as well as 444 and 25,242 shares of common stock reserved for the exercise of outstanding warrants and vested employee stock options, respectively.

The results of operations or other discussions below for the years ended December 31, 2006 and 2007 do not give effect to the impact of this acquisition. Our results of operations for the nine months ended September 30, 2008 and for subsequent periods include the operations of Fast Track since the date of acquisition. The unaudited pro forma statement of operations for the year ended December 31, 2008 provides the pro forma effect to the acquisition of Fast Track as if it had occurred on January 1, 2008.

Sources of Revenues

We derive revenues from application services and professional services. Application services consist of multi-study or single-study arrangements, which give our customers the right to use our software solutions,

39

hosting and site support, as well as clinical trial planning software solutions we acquired from Fast Track. Professional services consist of assisting our customers and partners with the design, workflow, implementation and management of their clinical trials.

Our application services are principally provided for both multi-study arrangements, which grant customers the right to manage up to a predetermined number of clinical trials for a term generally ranging from three to five years, as well as single-study arrangements that allow customers to use application services for an individual study or to evaluate our application services prior to committing to multi-study arrangements. Many of our customers have migrated from single-study arrangements to multi-study arrangements and multi-study arrangements represent the majority of our application services revenues.

Our professional services provide our customers with reliable, repeatable and cost-effective implementation and training in the use of our application services. Professional services revenues have represented a significant portion of overall revenues to date. We expect professional services revenues to decline as a percentage of total revenues as our customers and partners become more adept at the management and configuration of their clinical trials as part of our knowledge transfer efforts.

Cost of Revenues

Cost of revenues consists primarily of costs related to hosting, maintaining and supporting our application suite and delivering our professional services and support. These costs include salaries, benefits, bonuses and stock-based compensation for our data center and professional services staff. Cost of revenues also includes outside service provider costs, data center and networking expenses and allocated overhead. We allocate overhead such as depreciation expense, rent and utilities to all departments based on relative headcount. As such, a portion of general overhead expenses are reflected in cost of revenues. The costs associated with providing professional services are recognized as such costs are incurred and are significantly higher as a percentage of revenue than the costs associated with delivering our application services due to the labor costs associated with providing professional services. Over the long term, we believe that cost of revenues as a percentage of total revenues will decrease.

Operating Costs and Expenses

Research and Development. Research and development expenses consist primarily of personnel and related expenses for our research and development staff, including salaries, benefits, bonuses and stock-based compensation, the cost of certain third-party service providers and allocated overhead. We have focused our research and development efforts on expanding the functionality and ease of use of our applications. We expect research and development costs to increase in absolute dollars in the future as we intend to release new features and functionality designed to maximize the efficiency and effectiveness of the clinical development process for our customers. Over the long term, we believe that research and development expenses as a percentage of total revenues will remain relatively constant.

Sales and Marketing. Sales and marketing expenses consist primarily of personnel and related expenses for our sales and marketing staff, including salaries, benefits, bonuses and stock-based compensation, commissions, travel costs, and marketing and promotional events, corporate communications, advertising, other brand building and product marketing expenses and allocated overhead. Our sales and marketing expenses have increased in absolute dollars primarily due to our ongoing substantial investments in customer acquisition. We expect sales and marketing expenses to increase in absolute dollars. Over the long term, we believe that sales and marketing expenses will decline slightly as a percentage of total revenues.

General and Administrative. General and administrative expenses consist primarily of personnel and related expenses for executive, legal, quality assurance, finance and human resources, including salaries, benefits, bonuses and stock-based compensation, professional fees, insurance premiums, allocated overhead and

40

other corporate expenses, including certain one-time costs in anticipation of becoming a public company. During 2008, we strengthened our management and corporate infrastructure, particularly in our finance department, and implemented financial reporting, compliance and other infrastructure associated with being a public company. On an ongoing basis, we expect general and administrative expenses to increase in absolute dollars as we continue to add administrative personnel and incur additional professional fees and other expenses resulting from continued growth and the compliance requirements of operating as a public company. Over the long term, we believe that general and administrative expenses as a percentage of total revenues will decrease.

Income Tax Expense

Income tax expense primarily consists of foreign income taxes imposed on our foreign subsidiaries in the United Kingdom and Japan. We have U.S. federal and state net operating loss carryforwards available to offset future taxable income which do not fully expire until 2028. As a result, we do not recognize income tax expense for U.S. federal and state income tax purposes. In addition, we do not realize an income tax benefit for available net operating loss carryforwards due to the future utilization limitations under the Internal Revenue Code and the likelihood that our future taxable income may be insufficient to utilize these tax benefits. We do not expect our provision for U.S. federal and state income taxes will change in the near future; however, we expect our income tax expense to increase in absolute dollars as our income from international operations continues to grow.

Internal Controls over Financial Reporting

In connection with the audit of our consolidated financial statements for the years ended December 31, 2006 and 2007, we, together with our independent registered public accounting firm, identified material weaknesses in our internal controls over financial reporting attributable to deficiencies in our revenue recognition and expense cut-off procedures. Our material weaknesses resulted from inadequate controls, policies and procedures, as well as inadequate staffing of accounting positions, especially in regard to revenue recognition. More specifically, our control deficiencies related to:

Revenue recognition

Inadequate review of contract provisions, such as start and end dates, early renewal provisions or optional renewal periods, and their impact on the timing of revenue recognition;

Lack of standardized contracts or the ability to account for contracts that contain non-standardized terms;

Lack of a centralized contract management system to maintain control over the population of contracts;

Lack of adequate cut-off procedures;

Inadequate documentation of revenue recognition conclusions; and

Reliance on extensive manual processes.

Expense cut-off

Lack of formal cut-off procedures, including procedures to properly accrue for invoices representing goods or services obtained by us for which invoices have not yet been received, at the end of each period to ensure that all expenses are recorded in the proper period.

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

Subsequent to the issuance of our 2008 consolidated financial statements, we reviewed our practice regarding the timing of revenue recognition. Specifically, we examined our treatment of certain customer arrangements in which application services and professional services were sold in the same single-study or multi-study arrangement. As a result of this review, we restated our consolidated financial statements for the years ended December 31, 2005, 2006, 2007 and 2008. For additional information, see Note 2, Restatement of

41

Consolidated Financial Statements, to our audited consolidated financial statements included elsewhere in this prospectus. This restatement was the result of the previously identified revenue recognition control deficiencies that constituted material weaknesses described above. While we have initiated a plan to remediate our material weaknesses and commenced a number of specific remedial activities during 2008, our material weaknesses were not fully remediated as of December 31, 2008.

The actions we have taken to date include hiring a new director of revenue accounting and additional technical accounting personnel, designing a comprehensive revenue recognition policy, and establishing a methodology for accruing missing invoices and expense reports. We performed additional analyses and implemented other procedures designed to ensure that our annual and interim consolidated financial statements included herein were prepared in accordance with accounting principles generally accepted in the United States of America. These measures included, among other things, accounting reviews by senior finance staff, certain manual procedures, including the centralized review of key contracts and transactions; and the utilization of outside professionals to supplement our staff in assisting us in meeting the objectives otherwise fulfilled by an effective control environment. As a result, we believe our annual and interim consolidated financial statements fairly present, in all material respects, our financial position, results of operations and cash flows for all periods presented. While we believe that our remediation plan will address the identified material weaknesses, we have not yet completed all of the steps required for remediation and our testing procedures have not yet been completed.

The process of improving our internal controls has required and will continue to require us to expend resources to design, implement and maintain a system of internal controls that is adequate to satisfy our reporting obligations as a public company. We are subject to the requirements of Section 404 of the Sarbanes-Oxley Act of 2002, which will apply to us in connection with the filing of our annual report on Form 10-K for 2010 and requires annual management assessments of the effectiveness of our internal controls over financial reporting as well as a report by our independent registered public accounting firm regarding the effectiveness of such internal controls. The remediation efforts we began in 2008 may not be successful in meeting this standard. Material weaknesses and other deficiencies in our internal controls or future restatements could cause investors to lose confidence in our financial reporting, particularly as a result of inaccurate financial reporting, and also cause our stock price to decline. Material weaknesses in our internal controls or future restatements may impede our ability to produce timely and accurate financial statements, which could cause us to fail to file our periodic reports timely, result in inaccurate financial reporting or restatements of our financial statements, subject our stock to delisting and materially harm our business reputation and our stock price. We will continue to evaluate the effectiveness of our disclosure controls and procedures and internal controls over financial reporting on an ongoing basis.

We currently estimate that we will be able to report the completion of our remediation in connection with the issuance of our audited financial statements for the year ending December 31, 2009. The anticipated additional costs that we may incur in relation to additional staff, external advisors and the implementation of controls or use of software tools to manage our compliance with such controls are expected to approximate \$0.5 million in 2009. Our board of directors, in coordination with our audit committee, will continually assess the progress and sufficiency of these initiatives and make adjustments as necessary.

Critical Accounting Policies

Our consolidated financial statements are prepared in conformity with accounting principles generally accepted in the United States of America. Our critical accounting policies, including the assumptions and judgments underlying them, require the application of significant judgment in the preparation of our financial statements, and as a result they are subject to a greater degree of uncertainty. In applying these policies, we use our judgment to determine the appropriate assumptions to be used in calculating estimates that affect the reported amounts of assets, liabilities, revenues and expenses. Estimates and assumptions are based on historical

42

experience and on various other factors that are believed to be reasonable under the circumstances. Accordingly, actual results could differ from those estimates. Our critical accounting policies include the following:

Revenue Recognition

We derive our revenues from the sale of application services and the rendering of professional services. We recognize revenues when all of the following conditions are satisfied:

persuasive evidence of an arrangement exists;

service has been delivered to the customer;

amount of the fees to be paid by the customer is fixed or determinable; and

collection of the fees is reasonably assured or probable.

Application Services

We typically enter into multi-study and single-study arrangements that include the sale of software licenses that provide our customers the right to use our software, as well as hosting and other support services to be provided over a specified term. We recognize revenues ratably over the term of the arrangement, beginning with the commencement of the arrangement term, which correlates with the activation of the hosting services, assuming all other revenue recognition criteria are met. The term of the arrangement includes optional renewal periods if such renewal periods are likely to be exercised.

Professional Services

We also provide a range of professional services that our customers have the ability to utilize on an as-needed basis. These services generally include training, implementation, interface creation, trial configuration, data testing, reporting, procedure documentation and other customer-specific services. Professional services do not result in significant alterations to our underlying software.

Our professional services are typically sold together with application services as a component of a single- study or multi-study arrangement. We account for arrangements that include both application services and professional services as a combined single unit of accounting and the related revenues are recognized ratably beginning with the commencement of the arrangement term, assuming all other remaining revenue recognition criteria are met.

In certain situations, when professional services are sold separate and apart from application services, they are recognized as services are rendered.

Management s estimate of fair value for professional services is used to derive a reasonable approximation for presenting application services and professional services separately in our consolidated financial statements.

Deferred Revenue

Deferred revenue consists of billings or payments received in advance of revenue recognition and is recognized as the revenue recognition criteria are met. Amounts that have been invoiced are initially recorded in accounts receivable and deferred revenue. We invoice our customers in accordance with the terms of the underlying contract, usually in installments in advance of the related service period. Accordingly, the deferred revenue balance does not represent the total contract value of outstanding arrangements. Payment terms are net 30 to 45 days. Deferred revenue that will be recognized during the subsequent 12-month period is recorded as current deferred revenue and the remaining portion as non-current deferred revenue.

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

In some instances, customers elect to renew their application services arrangements prior to the original termination date of the arrangement. The renewed application services agreement provides support for in-process clinical trials, and includes the right to use the software for initial clinical studies. As such, the unrecognized

43

portion of the deferred revenue associated with the initial arrangement is aggregated with the consideration received upon renewal and recognized as revenues over the renewed term of the application services arrangements.

Stock-Based Compensation

We currently follow ASC 718, *Compensation Stock Compensation* to account for all of our stock-based compensation plans. Prior to January 1, 2006, we applied Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees* which was superseded by ASC 718. According to ASC 718, all forms of share-based payments to employees, including employee stock options and employee stock purchase plans, are treated the same as any other form of compensation by recognizing the related cost in the statement of operations.

Under ASC 718, stock-based compensation expense is measured at the grant date based on the fair value of the award, and the expense is recognized ratably over the award s vesting period. For all grants, we recognize compensation cost under the straight-line method.

We measure the fair value of stock options on the date of grant using the Black-Scholes pricing model which requires the use of several estimates, including:

the volatility of our stock price;
the expected life of the option;
risk free interest rates; and

expected dividend yield.

The use of different assumptions in the Black-Scholes pricing model would result in different amounts of stock-based compensation expense. Furthermore, if different assumptions are used in future periods, stock-based compensation expense could be materially impacted in the future.

Prior to the completion of our IPO, we were not a publicly traded company and we had limited historical information on the price of our stock as well as employees—stock option exercise behavior. As a result, we could not rely on historical experience alone to develop assumptions for stock price volatility and the expected life of options. As such, our stock price volatility was estimated with reference to a peer group of companies. Subsequent to the completion of our IPO, we continued to use stock price volatility of our peer group of companies as a basis for determining volatility together with the closing prices of our publicly-traded stock. We will increase the weight of our own stock price volatility within the weighted average over time as sufficient historical experience of our stock price is established.

We estimate the expected life of options based on the likely date of exercise as opposed to the actual life of the options. We consider internal studies of historical experience and projected exercise behavior to determine such estimate. The risk-free interest rate is based on the United States Treasury yield curve with a maturity tied to the expected life of the option. We have not and do not expect to pay dividends on our common stock.

The fair value of each nonvested restricted stock award grant is measured as if the nonvested restricted stock was vested and issued on the grant date.

We recorded stock-based compensation of \$0.7 million, \$1.3 million and \$3.2 million during 2006, 2007 and 2008, respectively, and \$3.4 million during the nine months ended September 30, 2009. In future periods, stock-based compensation expense is expected to increase as a result of our existing unrecognized stock-based compensation and as we issue additional equity-based awards to continue to attract and retain employees and non-employee directors. As of December 31, 2008 and September 30, 2009, we had \$7.6 million and \$14.1

million, respectively, of unrecognized stock-based compensation costs related to all non-vested stock-based compensation awards granted under our 2000 Stock Option Plan and 2009 Long-Term Incentive Plan. The unrecognized compensation cost is expected to be recognized over an average period of 1.43 years as of December 31, 2008 and 1.66 years as of September 30, 2009.

Significant Factors, Assumptions and Methodologies Used in Determining the Fair Value of our Capital Stock

Prior to the completion of our IPO in June 2009, Financial Strategies Consulting Group, LLC, or FSCG, an unrelated third-party valuation firm, performed valuations of our common stock in order to assist our board of directors in determining the fair value of our common stock. These contemporaneous valuation reports valued our common stock as of December 31, 2005, February 28, 2006, September 30, 2006, December 31, 2006, April 30, 2007, December 31, 2007, March 31, 2008, June 30, 2008, September 30, 2008, December 31, 2008 and March 31, 2009. In addition, a retrospective valuation report was performed to value our common stock as of September 30, 2007. We have discussed with FSCG whether the previous valuations performed would be impacted by the subsequent restatement of our consolidated financial statements for the years ended December 31, 2005, 2006, 2007 and 2008, as described in Note 2, Restatement of Consolidated Financial Statements, to our audited consolidated financial statements. Since the historical valuations for the most part were completed on a contemporaneous basis with the information available at the time, including cash flow considerations, we and FSCG believe the previously utilized methodology remains appropriate and consistent with AICPA guidelines.

Market-comparable and income approaches were used to estimate our aggregate enterprise value at each valuation date. The market-comparable approach estimates the fair market value of the company by applying market multiples of publicly-traded firms in the same or similar lines of business to the results and projected results of the company being valued. When choosing the comparable companies used for the market-comparable approach, we included companies providing products and services in the EDC market. The list of comparable companies remained largely unchanged throughout the valuation process. Under the income approach, the fair value is equal to the present value of estimated future cash flows that could potentially be removed from the company without impairing future operations and profitability. The estimated future cash flows and the terminal value, or the value of the company at the end of the future estimation period, are discounted to their present value at a discount rate which would provide a sufficient return to a potential investor, reflecting the risk of achieving those cash flows.

We prepared financial forecasts for each valuation report date used in the computation of the enterprise value for both the market-comparable approach and the income approach. The financial forecasts were based on long-term revenue growth assumptions, and expense targets over time, expressed as a percentage of revenue that reflected our past experience and future expectations, as well as evolving estimates of industry growth. These forecasts also contemplated the achievement of certain milestones such as key customer sales, customer renewals, product development and the hiring of key personnel. We considered the risk associated with achieving these forecasts as one company specific factor in selecting the appropriate cost of capital rates, which ranged from 24% at the beginning of 2008 to 17% at the end of March 2009.

We also applied an illiquidity discount under both the income and market-comparable valuation approaches, given that the lack of public information and the illiquidity of shares held by private company shareholders typically results in lower valuations for privately held companies relative to comparable public companies. This factor ranged from 24% at the beginning of 2008 to 14% at the end of March 2009.

The average of the values derived under the market-comparable approach and the income approach resulted in an initial estimated value under four potential scenarios (IPO, sale, private company and liquidation). We applied the probability weighted expected return method, which is outlined in the AICPA Practice Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*, to the valuations of each of the four potential scenarios in order to derive the per share value of our common stock at various points in time.

45

In the IPO valuation scenario, the enterprise value was based on an estimated IPO value discounted to the present value taking into consideration both the risk and timing of the IPO. This scenario assumed that all of our outstanding preferred stock would automatically convert into common stock, and that related accrued dividends would be paid out in cash upon IPO completion.

In the sale scenario, we utilized both the income and market-comparable approaches, with the enterprise value based on the sale of a controlling interest in a private company, adjusted for liquidation preferences associated with our preferred stock.

In the private company scenario, the enterprise value was estimated using the market-comparable and income approaches, adjusted for liquidation preferences associated with our preferred stock, as well as the illiquidity inherent in private company ownership.

In the liquidation scenario, the enterprise value is estimated assuming a liquidation of assets, net of liability settlement.

During 2008, the volume of IPO issuance decreased significantly compared to prior periods due in part to the overall decline in the global equity markets. As a result, we reduced the probability of completing our IPO from 70% to 80% at the beginning of the period, to 50% to 60% at the end of the period. Concurrently, we increased the probability of a sale from 15% to 20% at the beginning of the period, after a reduction to 10% to 15% in March of 2008, to 25% to 30% at the end of the period. Similarly, we increased the probability of remaining a private company from 5% to 10% at the beginning of the period, to 15% to 20% at the end of the period. For purposes of making the estimates with respect to a potential IPO and sale, we assumed the time period to such event at the beginning of 2008 was three to six months and at the end of 2008 was one to three months.

During the first three months of 2009, we maintained the probability of completing our IPO at 50% to 60% as weakness in the global equity markets continued. As a result of the volatility in the global equity markets, we increased the probability of remaining a private company to 20% to 25%, fully offset by the decrease of the probability of a sale to 20% to 25%. In addition, we reduced the assumed timing of a potential IPO and sale to one month or less.

These estimates were made in the context of providing for adequate stock-based compensation expense recognition. There is inherent uncertainty in our assumptions and estimates, and if we had made different assumptions and estimates than those described above, the amount of our stock-based compensation expense, net loss and basic and diluted net loss per share amounts could have been materially different.

The valuation as of December 31, 2007 resulted in an estimated fair value per common share of \$21.55. By March 31, 2008, the estimated fair value per common share was \$19.23, reflecting a more conservative long-term revenue growth expectation, decreases in comparable company valuations, and an increase in the probability of remaining private relative to a sale. In addition, we reduced the risk-adjusted discount rate due to more conservative revenue expectations, which we believed reduced the risk of achieving such expectations.

The valuation as of June 30, 2008 resulted in an estimated fair value per common share of \$19.75. The increase was attributable to a revised expectation of lower capital expenses, resulting in greater cash flow over the valuation period, offset by a reduction in the probability of completing an IPO and a corresponding increase in the probability of a potential sale.

The valuation as of September 30, 2008 resulted in an estimated fair value per common share of \$20.58. The increase was primarily attributable to increases in key comparable company valuations, offset by a reduction in the probability of completing an IPO and a corresponding increase in the probability of a potential sale.

46

The valuation at December 31, 2008 resulted in an estimated fair value per common share of \$15.38. The decline was primarily attributed to an overall decline in the value of comparable companies as equity markets sharply weakened and, to a lesser extent, refinement of our long-term revenue and expense assumptions. Several positive factors partially offset the impact of these declines. We reduced the risk-adjusted discount rate slightly to reflect greater certainty regarding our ability to achieve the revised financial plan. We reduced the illiquidity discount to reflect our expectations for a shorter timeframe to a potential IPO or sale. Finally, our revenue growth exceeded that of our peer group.

The valuation at March 31, 2009 resulted in an estimated fair value per common share of \$15.70. The increase from December 31, 2008 was primarily attributable to an improvement in the value of key comparable companies. In addition the reduction of illiquidity discount from 18% to 14% resulting from moving closer to the IPO event also contributed to this increase.

In granting the following options, our board of directors intended to set the exercise prices based on the per share fair market value of our common stock underlying those options on the date of grant. In the absence of a public trading market prior to June 25, 2009, our board of directors relied upon the most recent FSCG valuation report of our common stock prior to the grant date. During the 12 months prior to the completion of our IPO in June 2009, we granted stock options with exercise prices as follows:

Grant Date	Options Granted	Fair Value of Common Stock Options Granted at Grant Exercise Price Intrinsic Valu						
08/13/08	99,960	\$ 20.15	\$ 19.75	\$ 0	0.40			
11/13/08	5,000	17.70	20.58					
01/15/09	189,500	15.43	15.70					
02/11/09	7,000	15.53	15.70					
05/18/09	65,000	14.74	15.70					
06/24/09	406.254	14.00(1)	14.00(1)					

(1) Equal to price per share in our initial public offering.

In 2007, we contracted with FSCG to provide contemporaneous valuations on April 30, 2007 and December 31, 2007. Given the material change in value between these reports, we elected to perform an additional retrospective valuation as of September 30, 2007. In 2008, FSCG provided quarterly valuations until our stock was publicly traded beginning in June 2009. Our board of directors used its judgment to determine the fair value per share on dates of grant that were between the formal FSCG valuation report dates. In applying this judgment, we considered whether there were any significant events or changes in our business that had a material impact on the fair value of our common stock between the formal FSCG valuation dates. If no events had arisen, we concluded that the price per common share between valuation dates increased or decreased on a ratable basis. We then utilized this value as a basis for recognizing stock-based compensation expense in our financial statements in accordance with ASC 718.

The exercise price of certain granted stock options was less than the fair value of the common stock at the date of grant. As these options vest, we will recognize a higher stock-based compensation expense due to the intrinsic value associated with these grants.

As discussed above, during the 12 months prior to the completion of our IPO in June 2009, we granted stock options with exercise prices ranging from \$14.00 to \$20.58 per share. Also as disclosed, we determined that the fair value of our common stock ranged from \$14.00 to \$20.15 per share during that period. Each of these values was either equal or in excess of the IPO price of \$14.00 per share. The IPO price of \$14.00 per share was also less than our most recent external valuation prior to the IPO performed at March 31, 2009 of \$15.70 per share. While some participants in the clinical development industry have described customer demand challenges from early stage life sciences companies, we believe there has been no material adverse change to our business

outlook. The difference between the IPO price of \$14.00 per share and our most recent valuation prior to the IPO of \$15.70 at March 31, 2009 was caused by a change in the primary valuation metrics we believe investors are focused on in the current volatile IPO market. In particular, we believe investors have become more focused on profitability, rather than revenue, as a primary valuation metric. In determining our IPO price range, we focused primarily on profitability metrics rather than revenue metrics to respond to this recent change.

There is no additional intrinsic value on such granted options that would require additional compensation expense to be recognized in future periods.

Goodwill and Intangibles

Goodwill, which consists of the excess of the purchase price over the fair value of identifiable net assets of businesses acquired, is evaluated for impairment using a two-step process that is performed at least annually on October 1 of each year, or whenever events or circumstances indicate that impairment may have occurred. The first step is a comparison of the fair value of an internal reporting unit with its carrying amount, including goodwill. If the fair value of the reporting unit exceeds its carrying value, goodwill of the reporting unit is not considered impaired and the second step is unnecessary. If the carrying value of the reporting unit exceeds its fair value, a second test is performed to measure the amount of impairment by comparing the carrying amount of the goodwill to a determination of the implied value of the goodwill. If the carrying amount of the goodwill is greater that the implied value, an impairment loss is recognized for the difference.

The implied value of goodwill is determined as of the test date by performing a purchase price allocation, as if the reporting unit had just been acquired, using currently estimated fair values of the individual assets and liabilities of the reporting unit, together with an estimate of the fair value of the reporting unit taken as a whole. The estimate of the fair value of the reporting unit is based upon information available regarding prices of similar groups of assets, or other valuation techniques including present value techniques based upon estimates of future cash flow.

Intangible assets, including technology, database, customer relationships, and customer contracts arising from the acquisition of Fast Track, are recorded at cost less accumulated amortization and are amortized using a method which reflects the pattern in which the economic benefit of the related intangible asset is utilized. For intangible assets subject to amortization, impairment is recognized if the carrying amount is not recoverable and the carrying amount exceeds the fair value of the intangible asset.

As of December 31, 2008 and September 30, 2009, we had goodwill and intangible assets of \$16.0 million and \$14.7 million, respectively. We have determined that there were no indicators of impairment of goodwill or intangible assets as of December 31, 2008 and September 30, 2009. There are many assumptions and estimates used that directly impact the results of impairment testing, including an estimate of future expected revenues, earnings and cash flows, and discount rates applied to such expected cash flows in order to estimate fair value. We have the ability to influence the outcome and ultimate results based on the assumptions and estimates we choose for testing. To mitigate undue influence, we set criteria that are reviewed and approved by various levels of management. The determination of whether or not goodwill or acquired intangible assets have become impaired involves a significant level of judgment in the assumptions underlying the approach used to determine the value of our reporting unit. Changes in our strategy or market conditions could significantly impact these judgments and require adjustments to recorded amounts of intangible assets.

Income Taxes

We use the asset and liability method of accounting for income taxes, as prescribed by ASC 740, *Income Taxes*, which recognizes deferred tax assets and liabilities for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable

48

income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized.

On January 1, 2007, we adopted FASB, Interpretation No. 48, *Accounting for Uncertainty in Income Taxes an interpretation of FASB Statement No. 109*, (currently under ASC 740-10). ASC 740-10 addresses the determination of whether tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements. Under ASC 740-10, we may recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position.

We had approximately \$56.1 million and \$83.7 million of federal net operating loss carryforwards as of December 31, 2007 and 2008 respectively, available to offset future taxable income, expiring from 2019 through 2028. We also had net operating loss carryforwards for state income tax purposes of approximately \$60.9 million and \$106.0 million as of December 31, 2007 and 2008, respectively, available to offset future state taxable income, expiring from 2009 through 2028. Certain net operating loss carryforwards were obtained through our acquisition of Fast Track in 2008.

The future utilization of the net operating loss carryforwards may be subject to significant limitations under the Internal Revenue Code. Due to these limitations and the likelihood that our future taxable income may be insufficient to utilize these tax benefits, we provided a valuation allowance against the net deferred tax assets as their future utilization is uncertain at this time. We believe the net deferred tax assets of \$0.2 million and \$0.1 million as of December 31, 2007 and 2008, respectively, are realizable as they were generated in foreign jurisdictions where we are taxpayers. The net change in the valuation allowance was an increase of \$8.5 million in 2006, an increase of \$11.1 million in 2007 and an increase of \$7.7 million in 2008.

For the provision for income taxes at interim basis, we follow ASC 740-270, *Income Taxes Interim Reporting*, and have developed an estimate of the annual effective tax rate based upon the facts and circumstances known at the time. Our effective tax rate is based upon expected income, statutory rates and permanent differences applicable to us in the various jurisdictions in which we operate.

The following Results of Operations section for the years ended December 31, 2006, 2007 and 2008 and the nine months ended September 30, 2008 have been revised. See Note 2, Restatement of Consolidated Financial Statements, to our consolidated financial statements for the years ended December 31, 2006, 2007 and 2008, and our unaudited condensed consolidated interim financial statements for the period ended September 30, 2009, which are included elsewhere in this prospectus.

Results of Operations

We recognize revenues from applications services arrangements ratably over the terms of these arrangements. As a result, a substantial majority of our application services revenues in each quarter are generated from arrangements entered into during prior periods. Consequently, an increase or a decrease in new application services arrangements in any one quarter may not affect our results of operations in that quarter.

Additionally, when we sell application services and professional services in a combined arrangement, which is our typical practice, we recognize revenues from professional services ratably over the term of the arrangement, rather than as the professional services are delivered, which varies throughout the arrangement term. Accordingly, a significant portion of the revenues for professional services performed in any reporting period will be deferred to future periods. We recognize expenses related to our professional services in the period in which the expenses are incurred. As a result, our professional services revenues and gross margin for any

49

reporting period may not be reflective of the professional services delivered during that reporting period or of the current business trends with respect to our professional services. The following table sets forth our consolidated results of operations as a percentage of total revenues for the periods shown.

		Year Ended December 31,			Nine Months Ended September 30,	
	2006	2007	2008	2008	2009	
Revenues:						
Application services	70.1%	70.8%	69.8%	69.8%	72.1%	
Professional services	29.9%	29.2%	30.2%	30.2%	27.9%	
Total revenues	100.0%	100.0%	100.0%	100.0%	100.0%	
Cost of revenues:						
Application services	20.1%	20.9%	18.6%	19.6%	17.0%	
Professional services	56.4%	52.5%	29.1%	31.9%	19.4%	
Total cost of revenues	76.5%	73.4%	47.7%	51.5%	36.4%	
Gross profit	23.5%	26.6%	52.3%	48.5%	63.6%	
Operating costs and expenses: Research and development Sales and marketing General and administrative	16.3% 35.2% 23.0%	17.0% 24.6% 21.2%	18.3% 22.9% 26.0%	19.6% 23.7% 26.9%	16.4% 19.6% 22.0%	
Total operating costs and expenses	74.5%	62.8%	67.2%	70.2%	58.0%	
(Loss) income from operations	(51.0)%	(36.2)%	(14.9)%	(21.7)%	5.6%	

Nine Months Ended September 30, 2009 Compared to Nine Months Ended September 30, 2008

Revenues

	Nine Months Ended September 30,								
	20	2008		2009		Change			
		% of		% of					
	Amount	Revenues	Amount	Revenues	Amount	%			
		(Amount in thousands)							
Revenues:									
Application services	\$ 52,029	69.8%	\$ 74,145	72.1%	\$ 22,116	42.5%			
Professional services	22,513	30.2%	28,702	27.9%	6,189	27.5%			
Total revenues	\$ 74,542	100.0%	\$ 102,847	100.0%	\$ 28,305	38.0%			

Total revenues. Total revenues increased \$28.3 million, or 38.0%, to \$102.8 million for the nine months ended September 30, 2009 from \$74.5 million for the same period in 2008. The increase in revenues was primarily due to a \$22.1 million increase in revenues from application services and a \$6.2 million increase in revenues from professional services. At the start of 2009, we had approximately \$116.7 million of full year backlog. As of September 30, 2009, the total 2009 remaining backlog is approximately \$33.1 million.

Application services revenues. Revenues from application services increased \$22.1 million, or 42.5%, to \$74.1 million for the nine months ended September 30, 2009 from \$52.0 million for the same period in 2008. The majority of the increase in application services revenues was derived from increased activity in our existing customer base, primarily resulting from new studies and renewals. In addition to maintaining a

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

high customer retention rate, we benefited from providing nine months of services for those customers who began their multi-year arrangements during 2008. Also, we were able to sell and implement several large multi-year arrangements

50

as well as make significant inroads into new midmarket customers during the first nine months of 2009. Revenues from new customers accounted for 8.7% of the total increase in application services revenues. While the revenues from single-study arrangements have continued to grow, the multi-study arrangement revenue growth remained strong and increased significantly by 51.6%. Revenues also expanded significantly from both domestic and international customers compared with the prior period. Revenues from customers based in North America grew 46.5%, whereas revenues from customers based in Europe and Asia grew 31.8% and 40.5%, respectively. Finally, our acquisition of Fast Track contributed approximately \$2.6 million of our increase in revenues as we were able to recognize a full nine months of revenues in 2009 as compared with only six and a half months in 2008. Revenues from Fast Track are primarily generated from customers based in North America.

Professional services revenues. Revenues from professional services increased \$6.2 million, or 27.5%, to \$28.7 million for the nine months ended September 30, 2009 from \$22.5 million for the same period in 2008. The increase in professional services revenues was attributable to higher demand for our services from new application services customers as well continued demand from existing customers driven by the increase in the number of studies performed by our customers. Revenues from international customers grew 45.2% compared with the prior period, as many of our international clients relied more heavily on our implementation related services.

Cost of Revenues

	Nine Months Ended September 30,									
	20	08	20	009	Chan	ge				
		% of		% of						
	Amount	Revenues	enues Amount Revenues (Amount in thousands)		Amount	%				
Cost of revenues:										
Application services	\$ 14,590	19.6%	\$ 17,521	17.0%	\$ 2,931	20.1%				
Professional services	23,815	31.9%	19,910	19.4%	(3,905)	(16.4)%				
Total cost of revenues	\$ 38,405	51.5%	\$ 37,431	36.4%	\$ (974)	(2.5)%				

Total cost of revenues. Total cost of revenues decreased \$1.0 million, or 2.5%, to \$37.4 million for the nine months ended September 30, 2009 from \$38.4 million for the same period in 2008. The decrease in total cost of revenues was primarily due to a decrease in cost of professional services revenues, partially offset by an increase in cost of application services revenues.

Cost of application services revenues. Cost of application services revenues increased \$2.9 million, or 20.1%, to \$17.5 million for the nine months ended September 30, 2009 from \$14.6 million for the same period in 2008. The increase was primarily due to \$1.3 million of additional costs incurred by Fast Track resulting from a full nine months of operations in 2009 as opposed to six and a half months in 2008. The remaining increase was due to an increase in personnel-related costs of \$1.1 million, depreciation and technology related expenses of \$1.3 million, partially offset by a decrease in consulting expenses of \$0.8 million. The increase in personnel-related costs was a result of our growth in business and our combined efforts to replace outside consultants with employees. The increase in depreciation and technology related expenses related to software license costs and equipment purchases primarily in our Houston data center, incurred also in support of our overall growth.

Cost of professional services revenues. Cost of professional services decreased \$3.9 million, or 16.4%, to \$19.9 million for the nine months ended September 30, 2009 from \$23.8 million for the same period in 2008. The decrease was primarily due to a decrease in consulting costs of \$2.1 million, certain customer reimbursable expenses of \$1.0 million, travel expense of \$0.4 million and depreciation expense of \$0.4 million. The decrease in consulting related costs was associated with our continuing efforts to reduce our reliance on outside

consultants and improve margin in our professional services business. The decrease in customer reimbursable expenses was due to the impact of a \$0.4 million non-recurring cost we incurred in the second quarter of 2008 and the reduction of hardware provisioning costs, as we discontinued this activity in 2009.

Operating Costs and Expenses

	Nine Months Ended September 30,									
	20	08	20	09	Chan	ge				
		% of	% of % of							
	Amount	Revenues	Amount	Revenues	Amount	%				
		(Amount in thousands)								
Operating costs and expenses:										
Research and development	\$ 14,632	19.6%	\$ 16,894	16.4%	\$ 2,262	15.5%				
Sales and marketing	17,654	23.7%	20,167	19.6%	2,513	14.2%				
General and administrative	20,047	26.9%	22,672	22.0%	2,625	13.1%				
Total operating costs and expenses	\$ 52,333	70.2%	\$ 59,733	58.0%	\$ 7,400	14.1%				

Total operating costs and expenses. Total operating costs and expenses increased \$7.4 million, or 14.1%, to \$59.7 million for the nine months ended September 30, 2009 from \$52.3 million for the same period in 2008. Costs increased in each department with the larger percentage increase in research and development and sales and marketing.

Research and development expenses. Research and development expenses increased \$2.3 million, or 15.5%, to \$16.9 million for the nine months ended September 30, 2009 from \$14.6 million for the same period in 2008. The increase was primarily due to an increase in personnel-related costs of \$4.0 million and miscellaneous costs of \$0.2 million, partially offset by a decrease in professional and consulting fees of \$1.2 million and the impact of a one-time write-off of in-process research and development projects of \$0.7 million in 2008. Our full nine months operations of Fast Track in 2009 accounted for \$1.5 million of the increase in personnel-related costs. The remaining increase in personnel-related costs was incurred to replace outside consultants, as well as support our strategy to enhance and broaden our products offerings. The decrease in professional and consulting fees was also due to certain non-recurring projects performed during the prior year.

Sales and marketing expenses. Sales and marketing expenses increased \$2.5 million, or 14.2%, to \$20.2 million for the nine months ended September 30, 2009 from \$17.7 million for the same period in 2008. The increase was primarily due to higher personnel-related costs of \$3.2 million, which was primarily attributable to higher incentive compensation related to our sales and business performance. The increase was also due to higher stock-based compensation costs as we granted new awards in the current year and higher compensation costs resulting from increased staffing levels in both our sales and marketing departments. The increase was partially offset by a decrease in travel and entertainment expense of \$0.3 million and a decrease in other costs of \$0.4 million.

General and administrative expenses. General and administrative expenses increased \$2.6 million, or 13.1%, to \$22.7 million for the nine months ended September 30, 2009 from \$20.0 million for the same period in 2008. The increase was primarily due to an increase in personnel-related costs of \$3.0 million and other miscellaneous costs of \$0.4 million, partially offset by a decrease in professional and consulting fees of \$0.8 million. The increase in personnel-related costs was primarily due to higher staffing levels as we expanded our corporate personnel in anticipation of becoming a public company. The increase was also due to higher incentive compensation due to business performance, as well as higher stock-based compensation costs as we granted new awards in association with completing our IPO. The decrease in professional and consulting fees was due to the reduction of certain non-recurring accounting related costs incurred in 2008.

Year Ended December 31, 2008 Compared to Year Ended December 31, 2007

Revenues

		Year Ended December 31,						
	20	07	200	08	Chang	ge		
		% of		% of				
	Amount	Revenues	Amount	Revenues	Amount	%		
			(Amount in the	ousands)				
Revenues:								
Application services	\$ 44,592	70.8%	\$ 73,820	69.8%	\$ 29,228	65.5%		
Professional services	18,391	29.2%	31,904	30.2%	13,513	73.5%		
Total revenues	\$ 62,983	100.0%	\$ 105,724	100.0%	\$ 42,741	67.9%		

Total revenues. Total revenues increased \$42.7 million, or 67.9%, to \$105.7 million in 2008 from \$63.0 million in 2007. The increase in revenues was primarily due to a \$29.2 million, or 65.5%, increase in revenues from application services, and a \$13.5 million, or 73.5%, increase in revenues from professional services. Revenues for 2008 includes Fast Track application and professional services revenues of \$4.0 million from the date of acquisition (March 17, 2008) through December 31, 2008. At the start of 2008, we had approximately \$79.7 million of full year backlog.

Application services revenues. Revenues from application services increased \$29.2 million, or 65.5%, to \$73.8 million in 2008 from \$44.6 million in 2007. Our acquisition of Fast Track contributed \$3.8 million of additional applications services revenues in 2008. Excluding the impact of Fast Track, application services revenues increased \$25.4 million, or 57.0%, compared with the prior year. The majority of the increase in application services revenues was derived from increased activity in our existing customer base, primarily resulting from new studies and renewals. In addition to maintaining a high customer retention rate, we also benefited from providing a full year of services to those customers who began their multi-year arrangements in the prior year. Revenues from domestic customers grew 59.9%, whereas revenues from customers in Europe and Asia grew 66.2% and 23.8%, respectively. Excluding the impact of Fast Track, our customer base grew to 120 compared to 93 at the end of 2007, accounting for the remaining growth in applications services revenues. The acquisition of Fast Track expanded our customer base by approximately 27 customers.

Professional services revenues. Revenues from professional services increased \$13.5 million, or 73.5%, to \$31.9 million in 2008 from \$18.4 million in 2007. Our acquisition of Fast Track contributed \$0.2 million of additional professional services revenues. Excluding the impact of Fast Track, the increase in professional services revenues was due to a higher number of studies started in the period, derived from both existing customers and new customers added during the year.

Cost of Revenues

		`	Year Ended D	ecember 31,		
	20	007	20	08	Chan	ge
		% of		% of		
	Amount	Revenues	Amount	Revenues	Amount	%
			(Amounts in t	thousands)		
Cost of revenues:						
Application services	\$ 13,170	20.9%	\$ 19,647	18.6%	\$ 6,477	49.2%
Professional services	33,035	52.5%	30,801	29.1%	(2,234)	(6.8)%
Total cost of revenues	\$ 46,205	73.4%	\$ 50,448	47.7%	\$ 4,243	9.2%

Total cost of revenues. Total cost of revenues increased \$4.2 million, or 9.2%, to \$50.4 million in 2008 from \$46.2 million in 2007. The increase in total cost of revenues was primarily due to the increase in cost of application services revenues. Cost of revenues for 2008 included \$2.6 million of cost of revenues incurred by Fast Track since the date of acquisition.

Cost of application services revenues. Cost of application services revenues increased \$6.5 million, or 49.2%, to \$19.6 million in 2008 from \$13.2 million in 2007. The increase was due to \$3.6 million in personnel-related costs, depreciation of \$2.3 million primarily associated with the build out and maintenance of our Houston data center, intangible asset amortization of \$1.2 million associated with the acquisition of Fast Track and \$0.7 million of other costs. This increase was partially offset by a decrease in consulting expenses of \$1.3 million.

Cost of professional services revenues. Cost of professional services decreased \$2.2 million, or 6.8%, to \$30.8 million in 2008 from \$33.0 million in 2007. The decrease was primarily due to a decrease in consulting costs of \$4.4 million as we replaced outside consultants with employees and \$0.6 million of other costs, partially offset by an increase in personnel-related costs of \$2.8 million.

Operating Costs and Expenses

			Year Ended D	ecember 31,		
	20	007	20	008	Chan	ige
		% of		% of		
	Amount	Revenues	Amount	Revenues	Amount	%
			(Amounts in	thousands)		
Operating costs and expenses:						
Research and development	\$ 10,716	17.0%	\$ 19,340	18.3%	\$ 8,624	80.5%
Sales and marketing	15,484	24.6%	24,190	22.9%	8,706	56.2%
General and administrative	13,361	21.2%	27,474	26.0%	14,113	105.6%
Total operating costs and expenses	\$ 39,561	62.8%	\$71,004	67.2%	\$ 31,443	79.5%

Total operating costs and expenses. Total operating costs and expenses increased \$31.4 million, or 79.5%, to \$71.0 million in 2008 from \$39.6 million in 2007. Costs increased in each department with the largest increase in general and administrative costs. Total operating costs and expenses for 2008 included Fast Track operating expenses of \$6.0 million from the date of acquisition through December 31, 2008.

Research and development expenses. Research and development expenses increased \$8.6 million, or 80.5%, to \$19.3 million in 2008 from \$10.7 million in 2007. The increase was primarily due to an increase in personnel-related costs of \$6.1 million, professional and consulting fees of \$0.8 million and a \$0.7 million write off of in-process research and development projects, which were acquired from Fast Track. The personnel increase was planned to support our development and investment in new products, including the integration of the Fast Track products. Our acquisition of Fast Track accounted for \$0.8 million of the increase in personnel-related costs. The write-off of certain in-process research and development projects was required as we determined that technological feasibility had not been established for these acquired projects. The write-off occurred in the first quarter of 2008. The remaining \$1.0 million increase in research and development expenses related to higher rent, travel related costs and other miscellaneous costs.

Sales and marketing expenses. Sales and marketing expenses increased \$8.7 million, or 56.2%, to \$24.2 million in 2008 from \$15.5 million in 2007. The increase was primarily attributable to higher personnel-related costs of \$6.6 million as we increased our staff in both our sales team and marketing departments, travel and conference related costs of \$0.8 million and \$0.4 million related to the increased professional and consulting fees. The remaining \$0.9 million increase in sales and marketing costs related to other miscellaneous costs. \$1.0 million of the increase in personnel-related costs was attributable to our acquisition of Fast Track.

General and administrative expenses. General and administrative expenses increased \$14.1 million, or 105.6%, to \$27.5 million in 2008 from \$13.4 million in 2007. The increase was primarily due to increases in personnel-related costs of \$8.9 million, professional and consulting fees of \$3.2 million, facility related costs of \$0.7 million primarily associated with a new office space, technology related expenses of \$0.6 million to support our growth and increased travel related expenses of \$0.3 million. Our acquisition of Fast Track accounted for \$1.9 million of the increase in personnel-related costs. The remaining increase in personnel-related costs was due to higher staffing levels, bonuses and stock based compensation as we expanded our back office support groups in anticipation of our IPO. The increase in professional and consulting fees includes certain non-recurring accounting related costs also incurred in anticipation of becoming a public company. We expect that costs incurred during 2008 as we strengthened our management team and corporate infrastructure, particularly in the finance department, and implemented the financial reporting, compliance and other infrastructure associated with being a public company will not increase significantly in 2009. The remaining \$0.4 million increase in general and administrative expenses was primarily due to other costs resulting from our acquisition of Fast Track and other miscellaneous expenses.

Year Ended December 31, 2007 Compared to Year Ended December 31, 2006

Revenues

	20	Year Ended December 31, 2006 2007 Change						
	Amount	% of Revenues	Amount	% of Revenues	Amount	%		
	Amount	Revenues	(Amount in th		Amount	70		
Revenues:								
Application services	\$ 25,406	70.1%	\$ 44,592	70.8%	\$ 19,186	75.5%		
Professional services	10,851	29.9%	18,391	29.2%	7,540	69.5%		
Total revenues	\$ 36,257	100.0%	\$ 62,983	100.0%	\$ 26,726	73.7%		

Total revenues. Total revenues increased \$26.7 million, or 73.7%, to \$63.0 million in 2007 from \$36.3 million in 2006. The \$26.7 million increase in revenues was primarily due to a \$19.2 million, or 75.5%, increase in revenues from application services, and \$7.5 million, or 69.5%, increase in revenues from professional services.

Application services revenues. Revenues from application services increased \$19.2 million, or 75.5%, to \$44.6 million in 2007 from \$25.4 million in 2006. The increase in application services revenues was primarily the result of the increase in the number of customers. Our customer base increased 86.0% to 93 by the end of 2007 compared to 50 at the end of 2006. Application services revenues also benefited from the full year impact of the large multi-study arrangements we signed during the prior year. A significant portion of our revenue growth was generated from international customers. Revenues from international customers increased 127.0% and 101.8% in Europe and Asia, respectively. Revenues from domestic customers grew 57.6% compared with the prior year.

Professional services revenues. Revenues from professional services increased \$7.5 million, or 69.5%, to \$18.4 million in 2007 from \$10.9 million in 2006. The increase was due to the large number of new customer contracts during the year as well as the full-year impact of the large multi-study arrangements added in 2006. The growth of professional services revenues relative to application services revenues was related to several large multi-study arrangements signed in 2006, and is not indicative of our expectation of relative growth going forward, as our customers become more adept at the management and configuration of their clinical trials as part of our knowledge transfer efforts.

55

Cost of Revenues

	Year Ended December 31,							
	20	006	20	007	Chang	ge		
		% of		% of				
	Amount	Revenues	Amount	Revenues	Amount	%		
			(Amounts in t	housands)				
Cost of revenues:								
Application services	\$ 7,288	20.1%	\$ 13,170	20.9%	\$ 5,882	80.7%		
Professional services	20,462	56.4%	33,035	52.5%	12,573	61.4%		
Total cost of revenues	\$ 27,750	76.5%	\$ 46,205	73.4%	\$ 18,455	66.5%		

Total cost of revenues. Total cost of revenues increased \$18.5 million, or 66.5%, to \$46.2 million in 2007 from \$27.8 million in 2006. The increase in total cost of revenues was primarily due to the increase in cost of professional services revenues.

Cost of application services revenues. Cost of application services revenues increased \$5.9 million, or 80.7%, to \$13.2 million in 2007 from \$7.3 million in 2006. The increase was primarily attributable to increased outside contractor costs of \$3.3 million due to additional support needed for our Houston data center, depreciation of \$1.9 million due to the full-year impact of the Houston data center as well as additional equipment purchased to support the business, personnel-related costs of \$1.3 million stemming from new employee hires in 2007, incremental computer related cost of \$0.8 million and other applications services cost of \$0.8 million, partially offset by a decrease in royalty costs due to the settlement of a royalty claim in 2006 for \$2.2 million.

Cost of professional services revenues. Cost of professional services revenues increased \$12.6 million, or 61.4%, to \$33.0 million in 2007 from \$20.5 million in 2006. The increase was due to increases in outside contractor cost of \$5.3 million, personnel-related costs of \$5.2 million as personnel increased to keep pace with the large increase in customer volume, certain pass through expenses for reimbursable out of pocket costs and hardware provisioning of \$0.6 million and depreciation of \$0.5 million. The remaining \$1.0 million increase consisted of professional fees and other costs.

Operating Costs and Expenses

	20	Year Ended December 31, 2006 2007				ge
	Amount	% of % of Revenues Amount Revenues (Amounts in thousands)			Amount	%
Operating costs and expenses:						
Research and development	\$ 5,905	16.3%	\$ 10,716	17.0%	\$ 4,811	81.5%
Sales and marketing	12,768	35.2%	15,484	24.6%	2,716	21.3%
General and administrative	8,335	23.0%	13,361	21.2%	5,026	60.3%
Total operating costs and expenses	\$ 27,008	74.5%	\$ 39,561	62.8%	\$ 12,553	46.5%

Total operating costs and expenses. Total operating costs and expenses increased \$12.6 million, or 46.5%, to \$39.6 million in 2007 from \$27.0 million in 2006. The increase in operating costs and expenses was primarily due to increased research and development, sales and marketing, and general and administrative as discussed below.

Research and development expenses. Research and development expenses increased \$4.8 million, or 81.5%, to \$10.7 million in 2007 from \$5.9 million in 2006. The increase was primarily due to an increase in personnel- related expense of approximately \$2.7 million as personnel increased by 80% year over year, consulting expense of \$1.0 million and other research and development expenses of \$1.1 million. Additional staffing was required to support our application development and investment in our new software applications.

Sales and marketing expenses. Sales and marketing expenses increased \$2.7 million, or 21.3%, to \$15.5 million in 2007 from \$12.8 million in 2006. The increase was due to increases in personnel-related costs of \$0.9 million as a result of higher commission expense compared with the prior year and increases in our marketing staff, professional fees of \$0.6 million and advertising and promotion related costs of \$0.4 million. The remaining increase of \$0.8 million consisted of recruiting, travel, and other sales and marketing costs.

General and administrative expenses. General and administrative expenses increased \$5.0 million, or 60.3%, to \$13.4 million in 2007 from \$8.3 million in 2006. The increase was primarily due to higher personnel-related expenses and recruiting fees of \$2.1 million and consulting and professional services fees of \$1.1 million. The personnel-related costs were the result of increased staffing, including several senior level positions. The increase in consulting and professional services fees primarily related to audit and accounting services. We also leased additional office space for certain corporate and professional services staff which resulted in an increase in rent, depreciation, and other office related costs of \$0.8 million. The remaining increase of \$1.0 million consisted of higher travel related costs, insurance and other general expenses.

Unaudited Quarterly Consolidated Results of Operations Data

The following table presents our unaudited quarterly consolidated results of operations data for each of the eight quarters through the quarter ended September 30, 2009. This information is derived from our unaudited consolidated financial statements, and includes all adjustments, consisting only of normal recurring adjustments, that we consider necessary for the fair presentation of the results of operations for the quarters presented. Historical results are not necessarily indicative of the results to be expected in future periods. You should read this data together with our consolidated financial statements and the related notes to these financial statements included elsewhere in this prospectus.

	Quarter Ended		Quanton	Ended(2)		0	hal		
	Dec. 31, 2007	Mar. 31, 2008	Jun. 30, 2008	Sept. 30, 2008	Dec. 31, 2008	Mar. 31, 2009	uarter End Jun. 30, 2009	Sept. 30, 2009	
			(Amounts in t	thousands)				
As restated(1):									
Revenues:									
Application services	\$ 12,553	\$ 14,821	\$ 18,076	\$ 19,132	\$ 21,791	\$ 23,665	\$ 24,523	\$ 25,957	
Professional services	5,056	6,158	7,677	8,678	9,391	9,937	9,505	9,260	
Total revenues	17,609	20,979	25,753	27,810	31,182	33,602	34,028	35,217	
Cost of revenues:									
Application services	3,852	4,475	4,889	5,226	5,057	5,670	5,845	6,006	
Professional services	8,835	8,194	8,257	7,364	6,986	6,613	6,839	6,458	
Total cost of revenues	12,687	12,669	13,146	12,590	12,043	12,283	12,684	12,464	
Gross profit	4,922	8,310	12,607	15,220	19,139	21,319	21,344	22,753	
Operating costs and expenses:									
Research and development(3)	3,312	4,872	4,778	4,982	4,708	5,497	5,789	5,608	
Sales and marketing	4,398	5,463	6,173	6,018	6,536	6,713	6,745	6,709	
General and administrative	4,926	5,807	7,144	7,096	7,427	6,821	8,037	7,814	
Total operating costs and expenses	12,636	16,142	18,095	18,096	18,671	19,031	20,571	20,131	
(Loss) income from operations	(7,714)	(7,832)	(5,488)	(2,876)	468	2,288	773	2,622	
Interest and other expenses (income), net	341	563	247	372	442	412	372	854	
, , , , , , , , , , , , , , , , , , ,									
(Loss) income before provision for income taxes	(8,055)	(8,395)	(5,735)	(3,248)	26	1,876	401	1,768	
Provision for income taxes	(8,033)	(8,393)	169	(5,248)	439	1,870	201	219	
FIGVISION TO MICOINE taxes	104	103	109	14/	439	182	201	219	
Net (loss) income	\$ (8,219)	\$ (8,560)	\$ (5,904)	\$ (3,395)	\$ (413)	\$ 1,694	\$ 200	\$ 1,549	

57

	_	uarter Inded			(Quarter	Fn	dod(2)				0		ter En	hob	
	De			ar. 31, 2008	Jı	un. 30, 2008	Se	pt. 30, 2008 nounts i		ec. 31, 2008 iousand	20	•	Jı		Se	pt. 30, 2009
Stock-based compensation expense and depreciation and amortization of i follows:	ntan	gible a	sset	s inclu	ded	in cost of	of re	evenues	and	operati	ng co	osts an	d ex	xpenses	are	as
Stock-Based Compensation																
Cost of revenues	\$	47	\$	57	\$	75	\$	78	\$	81	\$	91	\$	65	\$	124
Research and development		69		71		118		145		169		163		105		129
Sales and marketing		119		138		163		169		170		248		220		376
General and administrative		249		335		408		478		542		501		530		876
Total stock-based compensation	\$	484	\$	601	\$	764	\$	870	\$	962	\$ 1	,003	\$	920	\$	1,505
<u>Depreciation</u>																
Cost of revenues	\$	1,247	\$	1,385	\$	1,496	\$	1,579	\$	1,482	\$ 1	,629	\$	1,667	\$	1,738
Research and development		142		155		164		175		156		194		197		201
Sales and marketing		78		89		97		102		94		118		120		122
General and administrative		91		98		111		139		113		152		151		151
Total depreciation		1,558		1,727		1,868		1,995		1,845	2	,093		2,135		2,212
Amortization of intangible assets																
Cost of revenues				64		381		381		365		421		420		421
Sales and marketing				4		25		25		25		36		36		36
Total amortization of intangible assets				68		406		406		390		457		456		457
Total depreciation and amortization of intangible assets	\$	1,558	\$	1,795	\$	2,274	\$	2,401	\$	2,235	\$ 2	,550	\$	2,591	\$	2,669

- (1) Except for the unaudited consolidated results of operations data for each of the three quarters ended September 30, 2009, the unaudited quarterly consolidated results of operations data for the quarter ended December 31, 2007 and the year ended December 31, 2008 have been restated. See Note 2, Restatement of Consolidated Financial Statements , to our consolidated financial statements for the years ended December 31, 2006, 2007 and 2008, which are included elsewhere in this prospectus.
- (2) On March 17, 2008, we acquired Fast Track Systems, Inc., a provider of clinical trial planning solutions. The consolidated statements of operations data beginning from the first quarter of 2008 include the impact of the acquisition and operations of Fast Track since the date of acquisition. The information set forth above should be read in conjunction with the consolidated financial statements included elsewhere in this prospectus.
- (3) We determined that technological feasibility had not been established for certain in-process research and development projects acquired from Fast Track. These projects were written off, resulting in a \$0.7 million charge to research and development expense for the quarter ended March 31, 2008.

Liquidity and Capital Resources

In June 2009, we completed our IPO, issuing 6.3 million shares of common stock at a public offering price of \$14.00 per share. As a result of the offering, we received net proceeds of \$75.2 million, after deducting underwriting discounts and commissions of \$6.2 million and offering expenses of \$6.8 million. Such proceeds were held in cash and cash equivalents through September 30, 2009 and subsequently, a portion of such proceeds have been invested into high quality short-term investments. As a result of the IPO, all outstanding convertible preferred stock was automatically converted into 9.0 million shares of common stock. In addition, we paid out all accumulated accrued dividends of \$2.3 million to preferred stockholders at conversion.

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

Prior to completing the IPO in June 2009, we funded our growth primarily through the private sale of equity securities, borrowings through various debt agreements, working capital and equipment leases. At September 30, 2009 and December 31, 2008, our principal sources of liquidity were cash and cash equivalents of \$86.9 million and \$9.8 million, respectively. Cash and cash equivalents increased \$77.1 million during the first nine months of 2009 primarily due to net proceeds from the IPO and cash receipts from higher sales activity, partially offset by the repayment of our term loan, the funding of capital expenditures and the payment of accumulated accrued dividends to our former preferred stockholders. The increase in cash and cash equivalents of \$2.0 million in 2008 in comparison with 2007 primarily due to cash receipts from higher sales activity and proceeds from our senior secured credit facility, partially offset by cash used to repay our term notes and fund capital expenditures

58

required to support our growth. The increase in cash and cash equivalents of \$0.7 million in 2007 in comparison to 2006 was primarily due to cash receipts from increased sales activity and proceeds from our term note agreement, partially offset by repurchases of our common stock and funding of capital expenditures.

Prior to the repayment of our term loan, we had a senior secured credit facility that included a \$15.0 million term loan and a \$10.0 million revolving line of credit. The term loan was fully drawn at closing in September 2008. In July 2009, we used a portion of our net proceeds from the IPO to prepay the entire outstanding indebtedness of the term loan. The total payoff amount of \$14.7 million included the outstanding principal balance of \$14.3 million, as well as accrued interest and termination fees of \$0.4 million. Also in July 2009, we executed a standby letter of credit under our credit agreement in connection with the office lease of approximately \$0.2 million, which resulted in a reduction of the available amount under the revolving line of credit. As of September 30, 2009, approximately \$9.8 million of the revolving line of credit under the senior secured credit facility was still available for future borrowings. Due to the structure of the credit agreement, any future borrowings under the revolving line of credit will be classified as a current liability. Prior to 2008, we obtained additional working capital through various term notes provided by one of our former preferred stockholders: \$1.5 million in November 2003, \$2.5 million in December 2005 and \$8.0 million in October 2007. We previously repaid \$1.0 million of these term notes prior to fully repaying all of the term notes in September 2008.

We believe that our cash flows from operations, our available cash as of September 30, 2009 and our existing revolving line of credit will be sufficient to satisfy the anticipated cash requirements associated with our existing operations for at least the next 12 months. For the remainder of 2009, we expect to make approximately \$3.0 million in capital expenditures, primarily to increase the capacity in our Houston data center. We expect to acquire our capital equipment through purchases as opposed to capital lease arrangements. Our future capital expenditures and other cash requirements could be higher than we currently expect as a result of various factors, including any expansion of our business that we may complete. See Risk Factors.

Cash Flows

Cash Flows Provided By Operating Activities

Cash flows provided by operating activities during the nine months ended September 30, 2009 were \$23.7 million, which consisted primarily of a net income of \$3.4 million, non-cash adjustments of depreciation and amortization of \$7.8 million and stock-based compensation of \$3.4 million, a decrease in accounts receivable of \$5.6 million, and an increase in deferred revenue of \$2.6 million. The decrease in accounts receivable was due to strong customer collection activity. Deferred revenue was impacted by a \$5.0 million customer payment, provided in accordance with the underlying contractual agreement, made in advance of the full delivery of services required to begin revenue recognition.

Cash flows provided by operating activities during 2008 were \$9.5 million, which consisted of net loss of \$18.3 million, offset by positive non-cash adjustments to net loss of \$13.0 million and by a \$14.8 million increase in other operating activities. Positive non-cash adjustments to net loss consisted principally of \$8.7 million of depreciation and amortization, \$3.2 million of stock-based compensation and \$0.7 million related to the write-off of in-process research and development projects acquired from Fast Track. The significant increase in other operating activities includes the increase in deferred revenue of \$24.6 million and accrued expenses of \$3.0 million, partially offset by the increase in accounts receivable of \$8.9 million and the decrease in our accounts payable of \$4.2 million. Other operating activities were impacted by increased sales activity compared with the prior year and the timing of customer payments.

Cash flows provided by operating activities during 2007 were \$6.0 million, which consisted primarily of net loss of \$23.7 million, plus \$4.6 million of depreciation and amortization, \$1.3 million of stock-based compensation and \$33.3 million increase in deferred revenue, offset by a \$6.8 million increase in accounts receivable. The increase in deferred revenue and accounts receivable was primarily due to increased sales activity compared with the prior year.

59

Cash flows provided by operating activities during 2006 were \$3.5 million, which consisted primarily of net loss of \$19.0 million, plus \$2.0 million of depreciation and amortization, \$0.7 million of stock-based compensation and a \$17.7 million increase in deferred revenue, partially offset by a \$3.5 million increase in accounts receivable. The increase in deferred revenue and accounts receivable was a result of an increase in sales from both existing and new customers during 2006.

Cash Flows Used In Investing Activities

Cash flows used in investing activities during the nine months ended September 30, 2009 were related to \$3.4 million of purchases of furniture, fixtures and equipment. We also acquired \$1.2 million of equipment through capital lease arrangements.

Cash flows used in investing activities during 2008 were \$4.1 million, which consisted of purchases of furniture, fixtures and equipment of \$4.6 million and costs incurred to acquire Fast Track of \$0.6 million, partially offset by cash and cash equivalents acquired from acquisition of Fast Track of \$1.0 million. We also acquired \$2.7 million of equipment through capital lease arrangements. All acquisitions of furniture, fixtures and equipment were required to support our business growth.

Cash flows used in investing activities during 2007 were \$3.8 million, which consisted of purchases of furniture, fixtures and equipment of \$3.7 million and an increase in our restricted cash. We acquired \$9.1 million of equipment through capital lease arrangements.

Cash flows used in investing activities during 2006 were \$1.5 million due to purchases of furniture, fixtures and equipment to support our continued growth.

Cash Flows Provided by or Used In Financing Activities

Cash flows provided by financing activities during the nine months ended September 30, 2009 were \$56.8 million, which was primarily due to \$82.0 million of proceeds from the IPO, net of underwriting discounts and commissions. It was partially offset by a \$15.0 million repayment of the term loan under our credit facility, \$4.3 million of costs associated with our IPO, \$3.6 million of capital lease principal payments and \$2.3 million of preferred stock dividend payments.

Cash flows used in financing activities during 2008 were \$3.3 million, which consisted of \$4.2 million of capital lease principal payments and \$2.5 million of costs associated with our IPO, partially offset by \$3.4 million from the proceeds of borrowings under our new credit facility net of repayment of existing term loans and the payment of debt issuance costs. Non-cash financing activities included capital lease obligations of \$2.7 million with repayment terms of 36 months. Please refer to Contractual Obligations, Commitments and Contingencies in this section for additional information on future cash requirements.

Cash flows used in financing activities during 2007 were \$1.5 million, which consisted of \$2.8 million of capital lease principal payments and \$6.0 million relating to the acquisition of treasury stock, partially offset by \$7.3 million of net proceeds from our borrowing activities. The net proceeds from our borrowings were principally used to acquire our treasury stock. Non-cash financing activities included capital lease obligations of \$9.1 million.

Cash flows used in financing activities during 2006 were \$1.5 million, which consisted of \$1.7 million of payments of capital lease principal and repayments of notes payable, partially offset by proceeds of \$0.2 million from the exercise of stock options.

60

Contractual Obligations, Commitments and Contingencies

The following table of our material contractual obligations as of September 30, 2009 summarizes the aggregate effect that these obligations are expected to have on our cash flows in the periods indicated (in thousands):

		Payme	Payments Due by Period				
	Total	1 year or less	2-3 years	4-5 years	More than 5 years		
Contractual Obligations:			·	·	·		
Operating lease obligations	\$ 11,089	\$ 3,098	\$ 4,855	\$ 2,122	\$ 1,014		
Capital lease obligations	4,588	3,508	1,080				
Letters of credit	676	676					
Total	\$ 16,353	\$ 7,282	\$ 5,935	\$ 2,122	\$ 1,014		

In 2006, one of our former employees made a claim seeking compensation of approximately \$1.6 million in relation to a wrongful dismissal lawsuit. Subsequently, the claim was reduced to approximately \$1.4 million as of December 31, 2008. The court rendered its decision on January 15, 2009, which awarded approximately \$0.1 million to the plaintiff. The plaintiff filed a notice of appeal in September 2009, which remains pending. We will continue to vigorously defend this claim until it is resolved. We have accrued approximately \$0.7 million as of September 30, 2009 and December 31, 2008.

In 2006, it was claimed that certain applications offered to our customers potentially infringed on intellectual property rights held by a third party. As a result of negotiations with the claimant, we entered into a license and settlement agreement in June 2007, pursuant to which we licensed the intellectual property held by the claimant for use in our future sales to customers and settled all past infringement claims. We paid a settlement amount of \$2.2 million to the claimant in 2007. In June 2009, the claimant initiated a lawsuit against us claiming breach of contract. The complaint includes allegations that we have failed to pay unspecified royalties relating to sales of our products. We believe that the allegations in this lawsuit are without merit. We filed an answer in July 2009, denying all material allegations and asserting affirmative defenses. We also asserted counterclaims for a declaratory judgment that no royalties are owed with respect to sales of our products, as well as a counterclaim for claimant s breach of the license and settlement agreement. The parties are now engaged in the discovery process. Since the probable outcome and the future economic impact of this litigation on us remain uncertain, we are unable to develop an estimate of our potential liability, if any, as it relates to this litigation. As a result, we did not record a liability as of September 30, 2009. The claimant also filed the patent infringement lawsuits against two of our customers as discussed below.

In 2008, two customers requested us to indemnify them in connection with patent infringement lawsuits filed by the claimant who also filed a lawsuit against us in June 2009 as discussed above. We agreed to defend and indemnify one of these customers with respect to the allegations, claims, and defenses relating to its use of our software. As the estimated indemnification obligation concerning this claim was determined to be probable and could be reasonably estimated, we have accrued \$0.2 million which was included in our condensed consolidated balance sheet as of September 30, 2009 and in our condensed consolidated statements of operations for the nine months ended September 30, 2009. This estimate was based upon our analysis of the customer s defense costs relating to its use of our software and any change in the assumptions or strategies related to this claim could affect our future results of operations.

In January 2009, we entered into agreements with certain of our executive officers that provide them with certain benefits upon the termination of their employment following a change of control in our company. See Management Executive Compensation Compensation Discussion and Analysis Post-Termination Compensation and Benefits for a description of such benefits.

Letters of Credit

We had three outstanding standby letters of credit issued in connection with office leases as of December 31, 2007 in the total amount of \$0.4 million and four outstanding standby letters of credit as of December 31, 2008 and September 30, 2009 in the total amount of \$0.5 million and \$0.7 million, respectively. These standby letters of credit were fully collateralized with our restricted cash as of December 31, 2007 and 2008 and our restricted cash and revolving credit line under our credit facility as of September 30, 2009.

Tax Uncertainties

We believe that our income tax positions and deductions will be sustained on audit and we do not anticipate material obligations in connection with uncertainties related to tax matters.

Effects of Recently Issued Accounting Standards

In December 2007, the FASB issued SFAS No. 141(R), *Business Combinations*, (currently under ASC 805), and SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements, an amendment of ARB No. 51*, (currently under ASC 810-10-65-1). SFAS No. 141(R) is required to be adopted concurrently with SFAS No. 160 and is effective for business combination transactions for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. Early adoption is prohibited. Application of SFAS No. 141(R) and SFAS No. 160 is required to be adopted prospectively, except for certain provisions of SFAS No. 141(R) and SFAS No. 160, which are required to be adopted retrospectively. Business combination transactions accounted for before adoption of SFAS No. 141(R) should be accounted for in accordance with SFAS No. 141, *Business Combinations*, and that accounting previously completed under SFAS No. 141 should not be modified as of or after the date of adoption of SFAS No.141(R). We adopted SFAS No. 141(R) and SFAS No. 160 on January 1, 2009 and the adoptions did not have a material impact on our financial position or results of operations.

In May 2009, the FASB issued SFAS No. 165, *Subsequent Events*, (currently under ASC 855-10), which provides guidance on management s assessment of subsequent events and establishes general standards of accounting for and disclosure of events that occur after the balance sheet date but before financial statements are issued or are available to be issued. SFAS No. 165 is effective prospectively for interim or annual financial periods ended after June 15, 2009. We adopted SFAS No. 165 in the second quarter of 2009. We have evaluated the subsequent events through December 2, 2009, the filing date of the registration statement of which this prospectus forms a part.

In June 2009, the FASB issued SFAS No. 166, *Accounting for Transfers of Financial Assets an amendment of SFAS No. 140*, and SFAS No. 167, *Amendment to FASB Interpretation No. 46(R)*. SFAS No. 166 amends the derecognition guidance and eliminates the exemption from consolidation for qualifying special-purpose entities, or QSPEs, in ASC 860, *Transfer and Servicing*. As a result, a transferor will need to evaluate all existing QSPEs to determine whether they must now be consolidated in accordance with SFAS No.167, which amends the consolidation guidance applicable to variable interest entities. The amendments will significantly affect the overall consolidation analysis under ASC 810-10, *Consolidation*, and all entities and enterprises currently within the scope of ASC 810-10, as well as QSPEs that are currently excluded from the scope of ASC 810-10. SFAS No. 166 is effective for financial asset transfers occurring after the beginning of an entity s first fiscal year that begins after November 15, 2009. SFAS No. 167 is effective as of the beginning of the first fiscal year that begins after November 15, 2009. The adoption of these statements is not expected to have a material impact on our results of operations, financial position and cash flows.

In June 2009, the FASB issued SFAS No. 168, *The FASB Accounting Standards Codification and the Hierarchy of Generally Accepted Accounting Principles a replacement of SFAS No. 162*, (currently under ASC 105-10). SFAS No. 168 establishes the ASC as the source of authoritative accounting principles recognized by

62

the FASB to be applied by nongovernmental entities in the preparation of financial statements in conformity with GAAP. Rules and interpretive releases of the SEC under authority of federal securities laws are also sources of authoritative GAAP for SEC registrants. SFAS No. 168 is effective for financial statements issued for interim and annual periods ending after September 15, 2009. We adopted SFAS No. 168 in the third quarter of 2009 and quoted the accounting literature references contained in these condensed consolidated financial statements in accordance with the ASC.

In October 2009, the FASB issued Accounting Standards Update, or ASU, No. 2009-13, *Multiple-Deliverable Revenue Arrangements*. ASU No. 2009-13 amends the current guidance on arrangements with multiple deliverables under ASC 605-25, *Revenue Recognition Multiple-Element Arrangements*, to (a) eliminate the separation criterion that requires entities to establish objective and reliable evidence of fair value for undelivered elements; (b) establish a selling price hierarchy to help entities allocate arrangement consideration to the separate units of account; (c) eliminate the residual allocation method which will be replaced by the relative selling price allocation method for all arrangements; and (d) significantly expand the disclosure requirements. ASU No. 2009-13 is effective for new or materially modified arrangements in fiscal years beginning on or after June 15, 2010. Early adoption is permitted. If early adoption is elected and the period of adoption is not the beginning of the fiscal year, retrospective application from the beginning of the fiscal year of adoption and additional disclosure are required. Retrospective application for all prior periods presented in the financial statements is also permitted, but not required. We are currently evaluating the impact, if any, of these provisions of ASU No. 2009-13 on our consolidated financial statements.

In October 2009, the FASB also issued ASU No. 2009-14, *Certain Revenue Arrangements that Include Software Elements*. ASU No. 2009-14 amends the scoping guidance for software arrangements under ASC 985-605, *Software Revenue Recognition*, to exclude tangible products that contain software elements and nonsoftware elements that function together to interdependently deliver the product s essential functionality. Such tangible products being excluded from ASU No. 2009-14 will instead fall under the scope of ASU No. 2009-13. The FASB also provided several considerations and examples for entities applying this guidance. The effective date for ASU No. 2009-14 is consistent with ASU No. 2009-13 as stated above. We are currently evaluating the impact, if any, of these provisions of ASU No. 2009-14 on our consolidated financial statements.

Off-Balance Sheet Arrangements

As of December 31, 2007 and 2008 and September 30, 2009, we did not have any relationships with unconsolidated entities of financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. Other than our operating leases for office space and computer equipment, we do not engage in off-balance sheet financing arrangements.

Quantitative and Qualitative Disclosures about Market Risk

The following discussion should be read in conjunction with our audited consolidated financial statements appearing elsewhere in this prospectus.

Interest Rate Sensitivity

We had unrestricted cash and cash equivalents totaling \$9.8 million at December 31, 2008 and \$86.9 million at September 30, 2009. Our cash equivalents are invested primarily in money market accounts and high quality liquid investments of a short duration and are not materially affected by fluctuations in interest rates. The unrestricted cash and cash equivalents are held for working capital purposes. We do not enter into investments for trading or speculative purposes. Due to the short-term nature of these investments, we believe that we do not have any material exposure to changes in the fair value of our investment portfolio as a result of changes in interest rates. Declines in interest rates, however, would reduce future investment income.

63

We have a floating rate revolving credit line under our senior secured credit facility, which is currently undrawn. Accordingly, we will be exposed to fluctuations in interest rates if such revolving credit line is drawn. Assuming the maximum available amount of our revolving credit line was drawn as of September 30, 2009, each hundred basis point change in prime rate would result in a change in interest expense by an average of approximately \$0.1 million annually. Prior to the repayment in July 2009, we also had a term loan with floating rate under our senior secured credit facility. As of December 31, 2008, based on the ending balance of our term loan and assuming the entire amount of our revolving credit line were drawn, each hundred basis point change in prime rate would result in a change in interest expense by an average of approximately \$0.2 million annually.

Exchange Rate Sensitivity

We have two separate exposures to currency fluctuation risk: subsidiaries outside the United States which use a foreign currency as their functional currency which are translated into U.S. dollars for consolidation and non-U.S. dollar invoiced revenues.

Changes in foreign exchange rates for our subsidiaries that use a foreign currency as their functional currency are translated into U.S. dollars and result in cumulative translation adjustments, which are included in accumulated other comprehensive income (loss). At December 31, 2008 and September 30, 2009, we had translation exposure to various foreign currencies including the Euro, British Pound Sterling and Japanese Yen. The potential loss resulting from a hypothetical 10% adverse change in quoted foreign currency exchange rates amounts to \$0.2 million and \$0.3 million as of December 31, 2008 and September 30, 2009, respectively.

We generally invoice our customers in U.S. dollars. However, we invoice a portion of customers in foreign currencies, a majority of which is in Euro, Swiss Franc and Japanese Yen. As such, the fluctuations in such currencies could impact our operating results.

Impact of Inflation

We do not believe that inflation has had a material effect on our business, financial condition or results of operations. If our costs were to become subject to significant inflationary pressures, we might not be able to offset these higher costs fully through price increases. Our inability or failure to do so could harm our business, operating results and financial condition.

Fair Value of Financial Instruments

ASC 825-10, *Financial Instruments*, requires disclosure about fair value of financial instruments. The carrying amounts of our financial instruments which consist of cash and cash equivalents, receivables, accounts payable and accrued liabilities approximate fair value because of the short maturity of these instruments. Amounts outstanding under long-term debt agreements are considered to be carried at their estimated fair values because they bear interest at rates which approximate market. All methods of assessing fair value result in a general approximation of value, and such value may never actually be realized.

Related Party Transactions

We have engaged in a number of related party transactions. See Certain Relationships and Related Transactions.

64

BUSINESS

Company Overview

We are a leading global provider of hosted clinical development solutions that enhance the efficiency of our customers clinical development processes and optimize their research and development investments. Our customers include pharmaceutical, biotechnology and medical device companies, academic institutions, contract research organizations, or CROs, and other organizations engaged in clinical trials to bring innovative medical products to market and explore new indications for existing medical products. Our solutions allow our customers to achieve clinical results more efficiently and effectively by streamlining the design, planning and management of key aspects of the clinical development process, including protocol development, CRO negotiation, investigator contracting, the capture and management of clinical trial data and the analysis and reporting of that data on a worldwide basis. Our customers rely on our solutions to safely accelerate the clinical development process and maximize the commercial life of their products.

Our principal offering, Medidata Rave, is a comprehensive platform that integrates electronic data capture, or EDC, with a clinical data management system, or CDMS, in a single solution that replaces traditional paper-based methods of capturing and managing clinical data. Medidata Rave offers a robust, flexible platform enabling sponsors to manage increasingly complex trials. Medidata Rave s intuitive, user-friendly Internet-based technology facilitates rapid adoption by investigators, sponsors and CROs. In addition, our on-demand, hosted technology platform facilitates rapid and cost-effective deployment of our solutions on a global basis. We have designed our Medidata Rave software to scale reliably and cost-effectively for clinical trials of all sizes and phases, including those involving substantial numbers of clinical sites and patients worldwide.

We also offer applications that improve efficiencies in protocol development and trial planning, contracting and negotiation. Our Medidata Designer application, a clinical trial protocol authoring tool, enables customers to write trial protocols more effectively and automatically configure Medidata Rave. By eliminating the need to separately configure the EDC platform, Medidata Designer reduces overhead cost and shortens the planning phase of the development process. Our Medidata Grants Manager product enables our customers to increase the efficiency of trial budgeting and investigator contracting as well as improving compliance. Our Medidata CRO Contractor application facilitates CRO outsourcing, budgeting and contract negotiation.

We derive a majority of our revenues from Medidata Rave application services through multi-study arrangements for a pre-determined number of studies. We also offer our application services on a single-study basis that allows customers to use our solution for a limited number of studies or to evaluate it prior to committing to multi-study arrangements. We support our solutions with comprehensive service offerings, which include global consulting, implementation, technical support and training for customers and investigators. We invest heavily in training our customers, their investigators and other third parties to configure clinical trials independently. We believe this knowledge transfer accelerates customer adoption.

Our diverse and expanding customer base currently includes 22 of the top 25 global pharmaceutical companies measured by revenue and many middle-market life sciences companies, as well as CROs through our ASP*ire* to Win program. In the nine months ended September 30, 2009, Amgen, AstraZeneca, Johnson & Johnson, Roche and Takeda Pharmaceutical were our largest customers measured by revenues.

Our deep expertise derived from facilitating hundreds of studies across all development phases and therapeutic areas in more than 80 countries has positioned us as a leader in providing clinical trial solutions. For 2008, we generated \$105.7 million in revenues, a 67.9% increase over 2007. For the nine months ended September 30, 2009, we generated \$102.8 million in revenues, a 38.0% increase over the comparable period in 2008. Our business model provides us with a recurring revenue stream that we believe delivers greater revenue visibility than perpetual software licensing models.

Industry Overview

The Clinical Development Market

Clinical development is sponsored by the pharmaceutical industry, medical device manufacturers, academic institutions, research foundations, government agencies and individual clinicians. The pharmaceutical industry, consisting of branded pharmaceutical firms, biotechnology companies and generic drug manufacturers, is the largest contributor to clinical development spending. According to IMS Health, the pharmaceutical industry is responsible for the development and marketing of drug therapies that generated approximately \$712 billion in global pharmaceutical sales in 2007, representing a compound annual growth rate of approximately 6% over the previous five years.

Based on data from EvaluatePharma, we estimate that global research and development expenses in the pharmaceutical industry exceeded \$120 billion in 2008. Clinical development has historically comprised one of the largest components of the pharmaceutical industry s research and development expenditures. The average total capitalized cost to develop one new prescription drug in 2005 was estimated by The Tufts Center for the Study of Drug Development at \$1.2 billion. One new drug approved by the U.S. Food and Drug Administration, or FDA, from an initial pool of 5,000 to 10,000 candidates, takes an average of 10 to 15 years for total development.

The clinical development of new drugs, therapies and medical devices is centered on clinical trials designed to test human safety and efficacy prior to product commercialization and includes three mandated phases of progressively larger numbers of investigators and patients for longer durations of time. Out of an aggregate \$120 billion global research and development budget, approximately 2,000 pharmaceutical, biotechnology, medical device companies and academic research institutions conducted an estimated 10,000 clinical trials in 2007. Early in the development process a sponsor will apply for patents in relevant jurisdictions to secure exclusive rights to its intellectual property. After applying for patent protection, which is generally effective for a period of 20 years from the date an application is filed, sponsors will commence the clinical development process, which can range from six to seven years, depending on process efficiency and specific regulatory requirements. Delays in the clinical development process may not only increase the cost of drug development, but also reduce a company s revenues by shortening the time for exclusive product sales afforded under patent protection.

Historically, companies generally realized an attractive return on investment following receipt of regulatory approval. In recent years, however, companies have faced increasing pressures to accelerate drug development, including:

the increasing number of drugs losing patent protection and greater competition by generic manufacturers;

large numbers of compound failures during the development cycle, resulting in the need for more drug candidates to enter the drug development pipeline and reach development milestones more quickly;

efforts by managed care companies and third-party payers, including Medicare and Medicaid, to reduce price and limit utilization of high-cost medicines;

the expanding scope and cost of post-approval studies, spurred by safety concerns regarding previously approved drugs; and

commercial incentives to expand approved treatment indications.

The Clinical Development Process and Regulation

The clinical development process is subject to rigorous regulation by the U.S. federal government and related regulatory authorities, such as FDA, as well as by foreign governments and regulatory authorities if drugs, biological products or medical devices are tested or marketed abroad. As a result of increasing demands by these regulatory agencies to expand the number of patients tested and utilize improved safety and efficacy assessment procedures, the clinical development process has become more complex.

66

In the United States, before a company can market a new drug it must obtain approval of a New Drug Application, or NDA, or, in the case of a biologic, a Biologic License Application, or BLA, from FDA. FDA will approve an NDA or BLA based on its judgment that there has been substantial evidence presented to demonstrate the safety and effectiveness of the new drug or biologic. The evidence presented in an NDA or BLA generally consists of volumes of data and analysis that address all aspects of the drug development process, including the clinical trial protocol design, drug chemistry, toxicity levels, side-effect profile, efficacy results, manufacturing specifications, proposed product labeling and marketing claims. In some instances, FDA requests that a company conduct post-approval trials to monitor safety and to review efficacy issues. Traditionally, FDA reviewed these volumes of data and analysis using paper records, but increasingly accepts electronic data from sponsors that rely on computerized systems to manage electronic source data and documentation. The following table outlines the drug development process in the United States:

Stage of Drug Development Discovery / Preclinical Testing	Trial Phase	Purpose of Stage Screen and select drug candidate for specific disease indications and conduct laboratory and animal studies to evaluate safety for human testing. Develop protocol outlining the study s setup and requirements and submit for FDA approval.	Approximate Time to Complete Phase 12 to 72 months	Approximate Number of Trial Participants per Phase
Clinical Testing (humans)	Phase I	Determine drug s safety profile, including how drug should be administered, dose levels and potential side effects by exposing volunteers to the drug.	6 to 12 months	5 to 80
	Phase II	Further evaluate the safety of the drug, and assess clinical efficacy, side effects and dosing by exposing subjects with the disease or condition to the drug.	6 to 12 months	15 to 300
	Phase III	Verify clinical efficacy of the drug and identify potential safety issues, including side effects in large target patient populations.	12 to 48 months	50 to 5,000
FDA Review and Approval		After submission of an NDA, FDA evaluates the submission and makes a determination as to whether the drug should be approved based on substantial evidence that the drug is safe and effective. If the drug is approved, the drug can be commercially marketed throughout the United States.	6 to 24 months	
Post-Approval	Phase IV	Monitor ongoing safety in various patient populations and identify additional indications of the drug for potential approval by FDA.	Ongoing (following FDA approval)	Varies

Medical devices typically require some form of premarket notification, regulatory clearance or pre-market approval by FDA before the device can be commercialized. In the device context, the equivalent to the NDA or BLA is the premarket approval application, or PMA. FDA reserves the PMA requirement for those medical devices deemed by FDA to pose the greatest risks, such as life-sustaining, life-supporting or implantable devices, or devices that have a new intended use, or technology that is not substantially equivalent to that of a legally marketed device. A PMA generally must be supported by the same type and volume of data and analysis that is required for an NDA or a BLA, including technical specifications, preclinical data, clinical trial results, manufacturing requirements and proposed labeling, to demonstrate to FDA s satisfaction the safety and effectiveness of the device for its intended use. As with the NDA and BLA processes, PMA data sources and documentation increasingly are being presented to FDA electronically rather than via paper.

67

In addition to regulations in the United States, companies seeking to market a new drug, biologic or device outside the United States are subject to a variety of foreign regulations governing clinical trials, commercial sales and distribution. Whether or not a company obtains FDA approval for a product, that company must obtain approval by the comparable regulatory authorities of foreign countries before commencing clinical trials or marketing the product in those countries. The approval process varies from country to country and the time may be longer or shorter than that required for FDA approval. After regulatory approval, the clinical trial sponsor maintains responsibility for collecting and reporting the occurrence of new and unusual serious side effects to all such regulatory agencies.

The Opportunity for Clinical Trial Solutions

The traditional process of capturing and analyzing data in clinical trials relies on pre-printed, paper case report forms to submit data from the clinical trial sites to the clinical trial sponsor. Each case report form is manually checked for accuracy at the clinical site and subsequently entered into a computerized CDMS at the sponsor or CRO running the trial. Inconsistent, questionable, or missing data items are identified and must be addressed by facsimile, mail or hand-delivered document exchange. Each change in data requires documentation. These paper-based processes result in significant complexity and cost. Key limitations include:

Delay in clinical development process. Manual data collection can delay interim and final data analysis by months or years, leading to delayed regulatory submission, product approval and product revenues, as well as increased development costs. In addition, these delays may reduce the exclusive sales period available under patent protection.

Impaired data quality. Paper-based data collection and reporting are more susceptible to transcription and other errors, resulting in reduced accuracy and requiring a lengthy and costly correction process. In addition, poor data quality can cause increased scrutiny during regulatory review, which may further delay a product s approval.

Limited data visibility to effect real-time decision making. With manual data collection, sponsors cannot evaluate trial status until relatively late in the process. Limited access to complete information precludes early termination of unsuccessful trials and reallocation of resources. Delayed access to data also prevents sponsors from quickly implementing measures to enhance patient safety.

Compared to traditional paper-based data collection, EDC technology provides substantial benefits at all stages of the clinical development process and has become widely accepted across the industry. However, we believe that most clinical trials are still conducted using the traditional paper-based format. We believe the total annual market opportunity for EDC solutions is in excess of \$1.4 billion.

Despite the increased efficiency provided by EDC, early generation solutions have typically faced the following challenges:

Integration. EDC solutions have had difficulty integrating complex, diverse and large volumes of data across multiple applications.

Investigator site requirements. EDC installations can impose specific software and hardware requirements on trial sponsors and their investigator sites, causing delays in capturing data.

Complex customization. EDC solutions often require custom programming to meet the requirements of diverse therapeutic areas across multiple phases.

Usability. The user interface of EDC solutions often does not accommodate the needs and preferences of the medical researchers who coordinate and administer clinical trials, which limits the pace of adoption.

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

Workflow and security limitations. EDC solutions often have limited ability to manage multiple languages, multiple workflows and blinded data.

Scalability. EDC solutions often lack the ability to scale against multiple studies in a single database, requiring increased effort and expense.

68

The Medidata Solution

Our solutions allow users to accurately and efficiently design clinical trials and capture, manage and report clinical trial data through an easy-to-use, Internet-enabled platform. We believe our solutions provide our customers with the following benefits:

Accelerated time to market. Our on-demand platform and delivery model streamlines the clinical development process, enabling users to compress the time associated with designing and implementing clinical trials and entering, cleansing and analyzing data. By reducing the clinical trial timeline through early and ongoing integration of multiple data sources, our solution accelerates the medical product development process, thereby maximizing commercial life under patent protection. In addition, our data products provide customers with benchmarking tools that can be used to improve speed, quality and efficiency of clinical trials.

Improved quality and visibility of results. Medidata Rave allows users engaged in clinical trials to enhance the quality and completeness of their data earlier in the process by providing real-time data cleansing and eliminating duplicative manual entry of data. Decision making is enhanced through consistent access to reliable data, including allowing for adaptive trial design, the early identification and termination of unsuccessful trials and timely access to trial data that may identify significant safety concerns.

Comprehensive clinical development solution. We have designed our comprehensive solutions to provide support throughout the clinical development process, from protocol authoring to preparing data for regulatory analysis and submission. We provide third party technology providers with access to our application programming interface, or API, and developer tools, which facilitates integration with complementary business systems. Medidata Rave can be integrated easily with auxiliary clinical and operational data systems, making it the backbone for a complete end-to-end solution. Medidata Rave s comprehensive security model also simplifies the management of double-blinded studies within a single platform.

Enhanced investigator acceptance. We have designed the user interface of our application services to meet the needs of clinicians, with intuitive, consistent point-and-click navigation and a familiar clinical data entry approach. We have incorporated user input into the design of our interface and provide embedded training tools to accelerate end-user adoption.

Seamless execution of global trials. Medidata Rave provides a single data repository that can be used in multiple languages simultaneously, avoiding the need for the installation and maintenance of parallel versions of the system. This capability allows investigators around the world to enter data in a variety of languages while enabling monitors and data managers to view the same data in a consistent language.

Lower cost of ownership. Our product architecture scales reliably and cost-effectively across clinical trials of all sizes. Our customers can run all clinical trials on a single instance, further reducing deployment cost per study.

Our Growth Strategy

Our strategy is to become the global standard for application service solutions for EDC and complementary technologies for the clinical development process. Key elements of our strategy include:

Expand our global customer base. We expect EDC adoption to increase, resulting in significant growth in spending on EDC solutions. We will continue to pursue new relationships with large global pharmaceutical and biotechnology companies by leveraging our support infrastructure, unique language translation capabilities and industry expertise. In addition, we have marketing, sales and services resources dedicated to small- and middle-market life sciences companies, as we believe this market represents an under-penetrated opportunity for customer expansion.

69

Increase sales to our existing customers. We intend to drive adoption of our products and services within our existing customer base by facilitating the use of our application services in new trials and converting existing single-study customers into multi-study customers. We expect our knowledge transfer model to accelerate customer adoption, resulting in additional licensing opportunities. Further, we will continue to demonstrate the significant efficiencies that our customers can achieve by standardizing their end-to-end clinical development processes on our platform.

Enhance our suite of products and services. We intend to add new features to our existing offerings and add new offerings to maximize the efficiency of the clinical development process. For example, our acquisition of Fast Track in March 2008 has enabled us to add capabilities in the areas of trial planning, including collaborative protocol authoring, contracting and negotiation. We believe our clinical trials expertise will enable us to leverage our customers operational data to provide metrics-driven insights and advisory services to facilitate enhanced market penetration.

Expand indirect sales channel initiatives. We will continue to pursue strategic partnerships with CROs and healthcare information technology consultants to position our software solutions as the platform of choice for their outsourced clinical trial management services. Through our ASPire to Win program, we provide support and training to enable CROs to cost-effectively implement our products and services in sponsor studies and to provide additional services related to clinical trial design and deployment.

Our Solutions

We provide clinical development solutions for life science organizations around the world. Our solutions include software and services that enable organizations to systematically design protocols, capture, manage and report clinical data and analyze the results of that data in a cost-effective and efficient manner. We have also designed our solutions to enable our customers to efficiently plan clinical trials by providing budgeting, pricing, workflow and relationship management capabilities. Our software-as-a-service business model eliminates the costs associated with installing and maintaining applications within the customer s information technology infrastructure.

Application Services

Medidata Rave. Medidata Rave combines a scalable EDC solution with a robust and fully integrated CDMS. Medidata Rave s rich functionality allows customers to build clinical trials and capture, manage and report clinical trial data on a global basis and in multiple languages:

Build. Medidata Rave offers a complete set of capabilities designed to allow clinical trial teams to build and deploy studies without the need for software programming professionals. Study teams can configure and manage ongoing revisions of case report forms, trial workflow, requirements for source document verification and complex data-cleaning algorithms. Integrated tools for the re-use of previously built studies and study components further streamline the deployment process when building multiple trials.

Capture. Medidata Rave s intuitive user interface facilitates the capture and cleaning of data from global investigator sites, and is designed to provide compliance with regulatory requirements through comprehensive and easy-to-use audit trails and support for electronic signatures. Medidata Rave also allows for the real-time integration of data from other sources, including laboratory information management systems, or LIMS, paper case report forms, electronic patient-reported outcome, or ePRO, devices and interactive voice response systems, or IVRS.

Manage. Medidata Rave s web-based interface provides clinical data management and operations personnel with the ability to monitor, query, code and obtain real-time reports and views of study data. The platform further provides comprehensive tools for automated cleaning, tracking, import and export

70

of all study data, and allows independent transformation of clinical data for use in data analysis and warehousing. Medidata Rave s Amendment Manager and version control capabilities allow customers to manage mid-study changes without system downtime. Our strong support for industry standards, such as those provided by the clinical data interchange standards consortium, or CDISC, provides a foundation for integration with other systems at sponsors, CROs and their technology partners.

Report. Medidata Rave s platform provides insight into both clinical and metric data in real time. Study teams can extract and analyze both clinical and operational data, which allows customers to view progress on their individual studies and current pipeline status across all of their studies. By reporting data during the course of the study, our platform enables sponsors to analyze interim data utilizing an adaptive trial design to modify the study conduct prior to its completion. Multiple language trials are also supported through the reporting phase. Monitors and sponsors have real-time access to reports in multiple languages, regardless of the data input language.

In addition, recent extensions to the Medidata Rave platform provide enhanced capabilities for our customers by automating processes to increase efficiencies and reduce the amount of resources required for clinical trial set-up and implementation. These include:

Rave Monitor, which offers site visit report functionality as an integral part of the Medidata Rave system, providing an efficient, compliant and cost-effective way to manage site visits by research monitors. Rave Monitor provides users with online and offline visit report capture, approval workflow and inter-study and cross-study status reporting, within the context of their existing Medidata Rave deployment.

Rave Safety Gateway, which provides a solution for collecting and transmitting serious adverse events and related data from sites to safety reporting systems, reducing potential errors and enhancing reporting speed. Safety Gateway automatically transmits safety case data entered into Medidata Rave at sites to sponsors safety reporting systems using an industry-standard file format, reducing the burden of collecting and reconciling safety data.

Medidata Designer. Medidata Designer, our protocol authoring tool, enhances the efficiency of clinical trial start-up by structuring protocol development with intuitive tools, guiding clinical research teams through the study design and set-up processes. Medidata Designer facilitates integration with downstream clinical trial processes and systems, including data capture, management, analysis and electronic data submission. Medidata Designer can automatically configure Medidata Rave studies, ensuring quality, consistency and efficiency for customers collaborating through both products. A recent extension to this tool, Medidata Designer Gateway, is an interface for clinicians and data managers that enables our customers to more efficiently build a structured study protocol and harmonizing those study-level and library-level protocol procedures with the EDC forms contained in Medidata Rave.

Medidata Grants Manager. Medidata Grants Manager enables our customers to benchmark their investigator budgets against industry data as well as their own grant history to increase the efficiency of site contracting and to ensure fair and consistent site payments. Medidata Grants Manager includes data from nearly one quarter of a million grants and contracts and approximately 27,000 protocols in over 1,400 treatment indications.

Medidata CRO Contractor. Medidata CRO Contractor focuses on benchmarks for CRO outsourcing, budgeting and negotiation, similar to Medidata Grants Manager. Our database includes reliable cost benchmarks from contracts with more than 500 global CROs.

Hosting

Substantially all of our customers use our hosting services for Medidata Rave at our dedicated data center in Houston, Texas, which was designed specifically to optimize the delivery of our application services and to ensure the availability and security of our customers research data. Our state of the art facility includes 24 by 7 staffing, enterprise class security, redundant power and cooling systems, large-scale data back-up capabilities and multiple Internet access points and providers. In addition, we maintain back-up facilities located in Secaucus and Piscataway, New Jersey and use SAVVIS, IBM and Iron Mountain for disaster recovery services and offsite data storage.

71

Our hosting operations incorporate industry-standard hardware, databases and application servers in a flexible, scalable architecture. Elements of our applications infrastructure can be replaced or added with minimal interruption in service, in order to reduce the likelihood that the failure of any single device will cause a broad service outage. We can scale to increasing numbers of customers by adding industry-standard computers and servers and have invested heavily in our data center operations during 2006 and 2007 to expand our storage capacity to meet increasing customer demands. Our storage architecture helps to ensure the safe, secure archiving of customers data and to deliver the speed and performance required to enable customers to access and manage their clinical study data in real-time.

Support

We have a multi-national organization to support our applications worldwide. We also offer 24 by 7 support to our customers investigator sites through multi-lingual help desks located in Edison, New Jersey, Sofia, Bulgaria and Tokyo, Japan.

Professional Services

In order to provide reliable, repeatable and cost-effective implementation and use of our application services, we have developed a standard methodology to deliver professional services to our customers. Our methodology leverages both the industry-specific expertise of our employees and the specific capabilities of our platform to simplify, streamline and expedite the Medidata Rave implementation process. This methodology also enables us to deliver a comprehensive set of supporting documents and work instructions to facilitate our customers—compliance with applicable regulatory requirements. Our professional services include:

implementation services to meet customers data requirements for various indications;

workflow design to meet the needs of different study phases and global regulatory requirements; and

guidance on best practices for using our application services.

We offer knowledge transfer services, to enable our customers and partners to design, configure, implement and manage trials, and intuitive e-learning training courses for end users. We also offer a variety of additional training services through our training group, known as Medidata University, to facilitate the successful adoption of our application services throughout the customer's or partner's organization. We also provide professional services for Medidata Designer, to assist our customers to efficiently implement and reinforce best practices for protocol design.

Technology

We have designed our technology to maximize ease of use, flexibility, data visibility and system scalability to handle high-volume, global trials. We deploy our solutions through the use of industry-standard web browsers and three tiered server architectures: a web server, a proprietary application server and a database server. End users can access our solutions through any web browser from anywhere in the world without downloading or installing any Medidata-specific software. In addition, our software has end-to-end support for unicode characters, required to deliver multi-lingual studies. Additionally, we utilize technologies such as firewalls, intrusion detection and encryption to ensure the privacy and security of our customers data.

We developed our solutions on a broad base of technologies, including Java 2 Enterprise Edition, or J2EE, Oracle, Microsoft.NET, Microsoft SQL Server and Business Objects. By creating consistent data models that can accommodate the broad software-as-a-service requirements from multiple biopharma, medical device and CRO customers, we have been able to avoid customer-specific builds or other customizations to our core product, thereby streamlining development and maintenance. Furthermore, our interfaces are built on fully documented application programming interfaces, or APIs, which allow us to safely update customers—data in new versions of the system, and to develop additional interfaces to address new market opportunities. These APIs also allow us to import and export configurations and auxiliary data in both human-readable and XML formats. By including version control and the ability to dynamically integrate data without system interruption, we are better able to accommodate the industry-specific challenges facing clinical trial teams around protocol amendments and the need for incremental changes to study data collection and cleaning processes during a clinical trial.

72

Research and Development

We believe that our future success will depend on our ability to continue to enhance and broaden our application services to meet the evolving needs of clinical trial sponsors and other entities engaged in clinical trials. As of September 30, 2009, we had 142 employees in research and development. Our research and development efforts are focused on developing new, complementary software solutions, as well as enhancing our existing software solutions.

When developing our technical solutions to manage clinical data, industry regulatory requirements also dictate that substantial documentation be created to demonstrate data integrity in the solution, known in the industry as a validation package. Our software development lifecycle practices include streamlined methodologies for generating and maintaining validation packages during the software release process. These methodologies include a validated path for upgrading existing installations and data. For Medidata Rave, with a major update occurring approximately once per year, the concurrency and robustness of validation packages provide our customers with an ability to stay on current technology, allowing us to minimize the number of legacy releases that require maintenance and support.

Our research and development department includes a product management team that works with both internal and customer experts to create new features and functionality, a technical documentation team, as well as product engineering and software quality assurance functions. We also have a dedicated research and development team building integration software and APIs on top of our platform. For example, our research and development team has integrated Medidata Rave with SAS Drug Development s data management, collaborative reporting and analysis solution. This integration provides our customers with immediate access to data collected and managed in Medidata Rave through the SAS Drug Development product, along with other data gathered in the research and development process. We incurred \$5.9 million, \$10.7 million, \$19.3 million and \$16.9 million in research and development expenses for the years ended December 31, 2006, 2007 and 2008 and the nine months ended September 30, 2009, respectively.

Sales and Marketing

We market and sell our application services through a direct sales force and through relationships with CROs and other strategic partners. Our marketing efforts focus on increasing awareness, consideration and preferences for our application services and professional services and generating qualified sales leads. As of September 30, 2009, we had 89 employees in sales and marketing.

Our sales force operates globally, including in North America, Europe and Asia. The team, which is organized by both region and focus area, also includes pre-sales product consultants and sales operations support. Sales through this direct channel currently represent the largest source of our total revenues.

Sponsors of clinical trials are increasingly outsourcing their clinical research activities in an attempt to control costs and expand capacity. Our CRO relationships help us position our software solutions as the core platform for their outsourced client trial management services. Through our ASP*ire* to Win program, we partner with CROs to deliver the Medidata Rave clinical trial technology along with the CRO s project and data management expertise. We also train, certify and support our CRO and other clinical services partners on Medidata Rave which enables them to quickly and cost-effectively implement our technology in sponsors studies. Our strategic clinical services partners include Chiltern International Inc., Clinsys Clinical Research, Inc., CMIC Co., Ltd., Covance Inc., Eliassen Group, EPS International Co., Ltd., Global Research Services, LLC, ICON Clinical Research, L.P., INC Research, Inc., Kendle International Inc., LAXAI, Omnicare Inc., PAREXEL International Corporation, PharmaLinkFHI, Inc., PRA International, Inc., Quintiles Transnational Corporation and United BioSource Corporation.

Our marketing strategy is to generate qualified sales leads, enhance the global recognition of our brand and products and establish Medidata as the premier provider of clinical trial solutions. Our principal marketing

73

initiatives target key executives and decision makers within our existing and prospective customer base and include sponsorship of, and participation in, industry events including user conferences, trade shows and webinars. We also advertise through online and print media, publish Medidata-authored articles in trade magazines and journals, and participate in cooperative marketing efforts with our CRO partners and other providers of complementary services or technology, including joint press announcements, joint trade show activities and joint seminars and webinars.

We have been able to obtain valuable insight into our customers needs through the following specific customer initiatives:

Medidata Customer Advisory Board. We sponsor an annual meeting of the Medidata Customer Advisory Board which provides our customers with an opportunity to learn about our strategies and plans and gives us useful feedback on our application services.

Medidata User Group. Our customers sponsor an annual meeting that gives them an opportunity to share best practices relating to Medidata Rave and provide feedback.

Medidata webinars. We host periodic web-based seminars for current and prospective customers, which are typically focused on our products or current developments.

MyMedidata.com. MyMedidata.com offers a global portal for our customers and partners and provides them with answers to frequently asked questions; on-line forums and polls where they can interact with our representatives and other members; and updates on Medidata-related events.

Customers

We are committed to developing long-term, partnering relationships with our customers on a global basis and working closely with new customers to configure our systems to meet the unique needs of their trials. Our customers include leading pharmaceutical, biotechnology, medical device companies, academic institutions, clinical research organizations and other entities engaged in clinical trials. As of September 30, 2009, we had 157 customers, including 22 of the top 25 global pharmaceutical companies measured by revenue. Our representative customers by industry group include:

<u>Pharmaceutical</u>	Biotechnology	<u>CROs</u>
Abbott Laboratories	Amgen Inc.	CMIC Co., Ltd.
Astellas Pharma Inc.	Array BioPharma, Inc.	Covance Inc.
AstraZeneca PLC	Elan Pharmaceuticals Inc.	ICON Clinical Research, L.P.
Baxter International, Inc.	Genzyme Corporation	INC Research, Inc.
Bayer HealthCare AG	Gilead Sciences, Inc.	Kendle International, Inc.
Daiichi Sankyo Co., Ltd.	Infinity Pharmaceuticals, Inc.	
F. Hoffmann La Roche, Ltd.		<u>Institutions</u>

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

Johnson & Johnson Medical Devices

H. Lundbeck A/S

National Cancer Institute of Canada

Northwestern University

Orion Corporation Boston Scientific Corporation

Pfizer Inc. DePuy International Ltd.

Takeda Pharmaceutical Corporation Ltd. Edwards Lifesciences Corporation

Wyeth

Our five largest customers accounted for 48%, 46% and 47% of our revenues in 2007, 2008 and the nine months ended September 30, 2009, respectively. For 2007, two customers, Amgen and Johnson & Johnson, accounted for approximately 13% and 12% of our total revenues, respectively. In 2008, two customers, AstraZeneca and Johnson & Johnson, accounted for approximately 11% and 10% of our total revenues, respectively. For the first nine months of 2009, Takeda Pharmaceutical and AstraZeneca each accounted for approximately 10% of our total revenues. No other customer accounted for 10% or more of our total revenues during any of these periods.

74

We compete on the basis of several factors, including the following:

Competition

The market for electronic data collection, data management and other clinical trial solutions is highly competitive and rapidly evolving. It is subject to changing technology, shifting customer needs, changes in laws and regulations, and frequent introductions of new products and services. In the EDC market, in addition to internally developed solutions, we compete with firms such as BioClinica, etrials Worldwide, Inc., eResearch Technology, Inc., ClinPhone, Datatrak International, Omnicom Corporation, Oracle Clinical and Phase Forward Incorporated. In the clinical trial authoring tool market, we compete with internally developed protocol tools, commercially available software offering structured environments for creating protocols such as Microsoft Office and SharePoint solutions and providers of XML authoring tools using Microsoft Word to create protocols such as Invision Research. In addition, we face competition at the clinical data product level from smaller independent companies such as TTC LLC and ClearTrial, LLC.

ease of use of our products and rates of user adoption;

product functionality and flexibility;

speed and performance required to enable customers to access clinical trial data in real-time;

product reliability and scalability;

hosting security;

regulatory compliance;

financial stability;

breadth and scope of commercial and technology partnerships;

depth of expertise and quality of our professional services and customer support on a global basis; and

sales and marketing capabilities.

Although some of our competitors and potential competitors have greater name recognition, longer operating histories and greater financial.

Government Regulation

The use of our software applications, services and hosted solutions by customers engaged in clinical trials must be done in a manner that is compliant with a complex array of U.S. federal and state laws and regulations, including regulation by FDA, as well as regulations and guidance issued by foreign governments and international non-governmental organizations. Our applications have been designed to allow our customers to deploy them as part of a validated system compliant with applicable laws and regulations.

technological and other resources than we do, we believe that we compete favorably with our competitors on the basis of these factors.

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

Regulation of Clinical Trials and Electronic Systems Used in Clinical Trials

The conduct of clinical trials is subject to regulation and regulatory guidance associated with the approval of new drugs, biological products and medical devices imposed upon the clinical trial process by FDA, foreign governmental regulatory agencies and international non-governmental organizations, such as the International Conference on Harmonization and the World Health Organization.

The laws, regulations and guidance from various countries and regions are often, but not always, harmonized. In those areas which are not yet harmonized, conflicting or even contradictory requirements may exist. Further, the regulatory environment and requirements for clinical trials and drug/device approvals are undergoing rapid change in the United States, the European Union and in other regions. We continue to monitor regulatory developments and industry best practices in these areas and make changes as necessary to remain in compliance.

75

The use of our software products, services and hosted solutions by customers engaged in clinical trials must be done in a manner that is compliant with these laws, regulations and guidance. Failure to do so could, for example, have an adverse impact on a clinical trial sponsor s ability to obtain regulatory approval of new drugs, biological products or medical devices or even to continue a clinical trial.

The use of software during the clinical trial process must also adhere to the regulations and regulatory guidance known as Good Clinical Practices, or GCPs, other various codified practices such as, the Consolidated Guidance for Industry from the International Conference on Harmonization Regarding Good Clinical Practices for Europe, Japan and the United States and other guidance documents. In addition to these regulations and regulatory guidance, FDA and other countries have developed regulations and regulatory guidance concerning electronic records and electronic signatures. In the United States, these regulations are interpreted for clinical trials in a guidance document titled U.S. FDA Computerized Systems Used in Clinical Investigations Guidance for Industry. In general, regulatory guidance stipulates that computerized systems used to capture or manage clinical trial data must meet certain standards for attributability, accuracy, retrievability, traceability, inspectability, validity, security and dependability. If we or our customers violate the GCPs or other regulatory requirements, both parties run the risk that the violation will result in a warning letter from FDA, the suspension of the clinical trial, investigator disqualification, debarment, the rejection or withdrawal of a product marketing application, criminal prosecution or civil penalties, any of which could have a material adverse effect on our business, results of operations or financial condition.

Regulation of Health Information

Government regulation of the use and disclosure of patient privacy and data protection imposes a number of requirements. In the United States, regulations issued pursuant to the Health Insurance Portability and Accountability Act of 1996, or HIPAA, require certain—covered entities, including facilities and providers which are involved in clinical trials, to comply with established standards regarding the privacy and security of protected health information and to use standardized code sets when conducting certain electronic transactions. The regulations also require business associates—that provide services on behalf of the covered entity to follow the same standards. Although we are not a covered entity or a business associate—and therefore technically are not subject to HIPAA regulations, many users of our products and services are directly regulated under HIPAA and our products cannot be utilized in a manner that is inconsistent with the users—HIPAA compliance requirements. In addition, to the extent we perform functions or activities on behalf of customers that are directly regulated by such medical privacy laws, we may be required to comply with a number of the same HIPAA requirements. The breach of such requirements on our part may result in liability to our customers and us. In addition to HIPAA, most states have enacted or are considering their own privacy and data protection laws. Such state laws, if more stringent than HIPAA requirements, are not preempted by the federal requirements and we must comply with them.

In addition to complying with the privacy laws of the United States, many foreign governments have data privacy protection laws that include additional protections for sensitive patient information, such as confidential medical records. Because we provide services in many of these countries, we must meet these requirements and must provide our services in a manner that supports our customers compliance obligations.

Intellectual Property

Our success and ability to compete are dependent on our ability to develop and maintain the proprietary aspects of our technology and operate without infringing the proprietary rights of others. We rely upon a combination of trademark, trade secret, copyright, patent and unfair competition laws, as well as license agreements and other contractual provisions, to protect our intellectual property and other proprietary rights. In addition, we attempt to protect our intellectual property and proprietary information by requiring our employees and consultants to enter into confidentiality, non-competition and assignment of inventions agreements. We have registered trademarks and service marks in the United States and abroad, and applications for the registration of

76

additional trademarks and service marks. Our principal trademarks are Medidata, Medidata Designer, Medidata Rave and ASP*ire* to Win. We have filed trademark applications for Medidata Grants Manager and Medidata CRO Contractor. We also hold several domain names, including the domain name mdsol.com. Although we do not rely heavily on patent protection, we hold one patent and have five patent applications outstanding with the U.S. Patent and Trademark Office as well as certain corresponding foreign patent applications.

The legal protections described above afford only limited protection for our technology. Due to rapid technological change, we believe that factors such as the technological and creative skills of our personnel, new product and service developments and enhancements to existing products and services are more important than the various legal protections of our technology to establishing and maintaining a technology leadership position.

On June 6, 2007, we entered into a license and settlement agreement with a third party, in connection with allegations that our Rave Remote product infringed a U.S. patent claimed to be owned by the third party. Under the license and settlement agreement, we agreed to make a lump-sum payment to the third party of \$2.2 million to settle the claim and obtained a royalty bearing license to utilize the patent at issue with respect to Rave Remote and comparable systems and services. Rave Remote is an older product that allows data to be collected and cleaned on personal computers that are not permanently connected to the Internet and is not material to our business. On June 18, 2009, the third party initiated a lawsuit against us in the United States District Court for the District of Maryland claiming breach of contract. The complaint includes allegations that we have failed to pay unspecified royalties relating to sales of Medidata products. We filed an answer in July 2009, denying all material allegations and asserting affirmative defenses. We also asserted counterclaims for a declaratory judgment that no royalties are owed with respect to sales of our products, as well as a counterclaim for the third party s breach of the license and settlement agreement. The parties are now engaged in the discovery process. Although we will continue to defend these claims vigorously, and we believe that we have substantial and meritorious defenses to the claims, neither the outcome of the litigation nor the amount and range of potential damages or exposure associated with the litigation can be assessed at this time. In addition, two of our ASPire to Win partners have requested us to indemnify them in connection with patent infringement lawsuits filed by the same third party. We have agreed to defend and indemnify one of these partners with respect to the allegations, claims, and defenses relating to its use of Medidata Rave.

We have licensed in the past, and expect that we may license in the future, certain of our proprietary rights, such as trademarks, technology or copyrighted material, to third parties. We generally provide in our customer agreements that we will indemnify our customers against third-party infringement claims relating to our technology provided to the customer.

Employees

As of September 30, 2009, we had a total of 571 employees, of which 218 were employed at our headquarters and additional locations in New York, New York, 240 at other locations in the United States, 68 in the United Kingdom and 45 in Japan. As of September 30, 2009, we had 227 employees in customer services and support, 142 employees in research and development, 89 employees in sales and marketing, 18 employees in data operations and 95 employees in administration and executive management. We also retain additional outside contractors from time to time to supplement our services and research and development staff on an as-needed basis. As of September 30, 2009, we had 106 independent contractors, the majority of which have been engaged in connection with help desk and customer service functions. None of our employees are covered by a collective bargaining agreement. We consider our relationships with our employees to be good.

77

Properties

Our corporate headquarters and other material leased real property as of September 30, 2009 are shown in the following table. We do not own any real property.

Location	Use	Size	Expiration of Lease
New York, New York	Corporate headquarters	20,000 square feet	September 2013
New York, New York	Office space	14,875 square feet	December 2009
New York, New York	Office space	19,000 square feet	March 2012
Edison, New Jersey	Office space	13,700 square feet	March 2010
Conshohocken, Pennsylvania	Office space	8,742 square feet	June 2011
Ross, California	Office space	3,138 square feet	December 2010
Houston, Texas	Data center	7,778 square feet	July 2013
Uxbridge, United Kingdom	Office space	8,500 square feet	December 2017
Tokyo, Japan	Office space	3,640 square feet	April 2011

We believe these facilities and additional or alternative space available to us will be adequate to meet our needs for the foreseeable future.

Legal Proceedings

We are a party to a lawsuit brought by a former employee of a Medidata subsidiary, MDSOL Europe Limited, in connection with the termination of her employment on November 30, 2006. The lawsuit was brought before the Belgian Labor Court seeking approximately \$1.4 million. The court rendered its decision on January 15, 2009, which awarded approximately \$0.1 million to the plaintiff. The plaintiff filed a notice of appeal in September 2009, which remains pending. We will continue to vigorously defend this claim until it is resolved. As of September 30, 2009, we had accrued approximately \$0.7 million with respect to this claim.

On June 6, 2007, we entered into a license and settlement agreement with a third party in connection with allegations that our Rave Remote product infringed a U.S. patent claimed to be owned by the third party. Under the license and settlement agreement, we agreed to make a lump-sum payment to the third party of \$2.2 million to settle the claim and obtained a royalty bearing license to utilize the patent at issue with respect to Rave Remote and comparable systems and services. Rave Remote is an older product that allows data to be collected and cleaned on personal computers that are not permanently connected to the Internet and is not material to our business. On June 18, 2009, the third party initiated a lawsuit against us in the United States District Court for the District of Maryland (*DataSci, LLC v. Medidata Solutions, Inc.*, Civil Action No. 09-1611) claiming breach of contract. The complaint includes allegations that we have failed to pay unspecified royalties relating to sales of Medidata products. We filed an answer in July 2009, denying all material allegations and asserting affirmative defenses. We also asserted counterclaims for a declaratory judgment that no royalties are owed with respect to sales of our products, as well as a counterclaim for the third party s breach of the license and settlement agreement. The parties are now engaged in the discovery process. Although we will continue to defend these claims vigorously, and we believe that we have substantial and meritorious defenses to the claims, neither the outcome of the litigation nor the amount and range of potential damages or exposure associated with the litigation can be assessed at this time.

We are not currently a party to any other material legal proceedings.

78

MANAGEMENT

Executive Officers and Directors

The following table sets forth the names, ages and positions of each of our directors and executive officers as of December 1, 2009.

Name	Age	Position
Tarek A. Sherif	47	Chairman, Chief Executive Officer and Director
Glen M. de Vries	37	President and Director
Bruce D. Dalziel	51	Chief Financial Officer
Steven I. Hirschfeld	47	Executive Vice President Global Sales and Alliances
Lineene N. Krasnow	58	Executive Vice President Product and Marketing
Carlos Dominguez(1)(2)	51	Director
Neil M. Kurtz, M.D.(1)(3)	59	Director
George McCulloch(1)(3)	32	Director
Peter Sobiloff(2)	53	Director
Robert B. Taylor(2)(3)	62	Director

- (1) Member of compensation committee
- (2) Member of nominating and corporate governance committee
- (3) Member of audit committee

Set forth below is a brief description of the business experience of our executive officers and directors listed above.

Tarek A. Sherif is one of our founders. Mr. Sherif has served as our chief executive officer since 2001 and as a member of our board of directors since 2000. Prior to forming the company, Mr. Sherif was the managing member of Sherif Partners L.L.C., a company focused on public and private investments in technology and life science companies. Prior to that, Mr. Sherif served as portfolio manager at R.D.L. Securities, a privately held equity fund specializing in publicly traded technology companies, including those in the healthcare and information technology fields. Mr. Sherif has also served as assistant vice president of corporate finance at General Electric Capital Corporation, and mergers and acquisitions analyst at Brown Brothers Harriman & Company. Mr. Sherif holds a B.A. in economics from Yale College and an M.B.A. in business administration and finance from Columbia University.

Glen M. de Vries is one of our founders. Mr. de Vries has served as our president since February 2008 and as a member of our board of directors since 1999. From 2000 to 2008, Mr. de Vries served as our chief technology officer. Mr. de Vries has over 15 years of experience in medical software development, including electronic health records and consumer-targeted products. As president of OceanTek, Inc., a web development firm focused on applications for the healthcare industry, Mr. de Vries was the chief consultant for a Fortune 500 global e-commerce project, and was the author of web security components currently in use by websites and corporate intranets. Previously, he served as a research assistant at Columbia University focusing on both research science and creating a paperless clinical data management system. Mr. de Vries holds a B.S. in molecular biology and genetics from Carnegie Mellon University.

Bruce D. Dalziel has served as our chief financial officer since October 2007. Prior to joining us, Mr. Dalziel served as chief financial officer of The BISYS Group, Inc., a provider of business process outsourcing solutions, from 2005 to 2007, and as chief financial officer of DoubleClick, Inc., a provider of digital marketing technology and services, from 2001 to 2005. Mr. Dalziel has managed all aspects of finance, including financial reporting and control, tax, treasury and risk management, as well as investor relations, facilities, corporate technology, business operations and legal, with substantial merger and acquisitions activity in both

roles. Prior to his employment at DoubleClick, Inc., Mr. Dalziel held a variety of positions at Prudential Insurance Company of America over a 14 year period, including corporate vice president of financial planning and analysis, vice president of institutional asset management sales and chief financial officer of international insurance. Mr. Dalziel holds a B.A. in English literature from Ursinus College, a B.S. in industrial engineering from Georgia Institute of Technology and an M.B.A. from Columbia University.

Steven I. Hirschfeld has served as our vice president sales since September 2002 and was promoted to executive vice president global sales and alliances in September 2005. From 1999 to 2001, Mr. Hirschfeld served as vice president of sales at I-Many, Inc., a provider of software and related professional services to support contract-based, business to business relationships. Prior to that, Mr. Hirschfeld spent five years at The Janis Group as sales leader and general manager where he launched and managed several of The Janis Group s emerging business units and directed the corporate marketing department. Mr. Hirschfeld holds a B.S. in business administration from the University of Delaware.

Lineene N. Krasnow joined us as vice president marketing in April 2005 and has served as executive vice president product and marketing since August 2008. Prior to joining us, Ms. Krasnow held various executive positions at IBM Corporation, a globally integrated innovation company. Most recently, Ms. Krasnow served as vice president of marketing management corporate from 2001 to 2005. Prior to that, Ms. Krasnow s other positions at IBM included vice president of worldwide marketing management for IBM s Personal Systems Group; vice president of marketing for IBM Personal Systems Asia-Pacific in Tokyo. Ms. Krasnow holds a B.B.A. in marketing from the University of Notre Dame.

Carlos Dominguez has served on our board of directors since April 2008. Mr. Dominguez has held various executive positions at Cisco Systems Inc. and has been serving as its senior vice president, office of the chairman and chief executive officer since January 2008. Mr. Dominguez joined Cisco in 1992 and previously served as senior vice president of its Worldwide Service Provider Operations group from 2004 to 2008 and as a vice president for U.S. Service Provider Sales from 1999 to 2004.

Neil M. Kurtz, M.D. has served on our board of directors since 2002. Dr. Kurtz has served as president and chief executive officer of Golden Living since August 2008. Prior to joining Golden Living, Dr. Kurtz served as president and chief executive officer and a member of the board of directors of TorreyPines Therapeutics, Inc., a clinical-stage biopharmaceutical company, since 2002. Dr. Kurtz co-founded Worldwide Clinical Trials, a contract research organization, where he held the positions of president and chief executive officer until its acquisition by United Health Group, or UHG, in 1999. After the acquisition, Dr. Kurtz became president of Ingenix Pharmaceutical Services, a division of UHG, and also served as a member of the UHG Executive Board until joining TorreyPines Therapeutics, Inc. Dr. Kurtz s career includes senior positions with Boots Pharmaceuticals, Bayer Corporation, Bristol-Myers Squibb and Merck. He currently serves on the board of directors of NeurogesX, a specialty pharmaceutical company. Dr. Kurtz holds a B.A. in psychology from New York University and an M.D. from the Medical College of Wisconsin.

George McCulloch has served on our board of directors since 2004. He is currently a partner at Level Equity Management, LLC, a private investment firm he co-founded in July 2009. Previously Mr. McCulloch served as a managing director at Insight Venture Partners, or Insight, which he joined in January 2003. Mr. McCulloch holds a B.A. in history from Stanford University.

Peter Sobiloff has served on our board of directors since 2004. Mr. Sobiloff has served as a managing director at Insight since 2000. Immediately prior to joining Insight in 1998, he was vice president of business development at i2 Technologies from 1997 to 1998. Mr. Sobiloff was previously president of Think Systems, a supply chain management software company. Prior to this, he was president of Datalogix, a vendor of enterprise application software for process manufacturers, and previously held senior executive roles at Ross Systems, a vendor of financial application software. Mr. Sobiloff holds a B.A. from Baruch University.

80

Robert B. Taylor has served on our board of directors since April 2008. Mr. Taylor has served as senior vice president for finance and administration of the Colonial Williamsburg Foundation since January 2001. Prior to joining the Colonial Williamsburg Foundation, Mr. Taylor previously served as vice president and treasurer of Wesleyan University from 1985 to 2001. Mr. Taylor also serves on the board of directors and as chair of the Audit Committee of Zygo Corporation. Mr. Taylor holds a B.A. from St. Lawrence University.

Composition of the Board of Directors

We have a board of directors comprised of seven members, which we believe is compliant with the independence criteria for boards of directors under the rules of The NASDAQ Stock Market and SEC rules and regulations.

The directors are elected at the annual meeting of stockholders. Our directors hold office until the earlier of their death, resignation or removal or until their successors have been elected and qualified. There are no family relationships among any of our directors or executive officers.

Committees of the Board of Directors

Our board of directors has an audit committee, a compensation committee and a nominating and corporate governance committee, each of which has the composition and responsibilities described below. The composition and functioning of all of our committees complies with all applicable requirements of the Sarbanes-Oxley Act of 2002, The NASDAQ Stock Market and SEC rules and regulations. The full text of the charters of our committees are available on our website at www.mdsol.com.

Audit Committee

Our audit committee is comprised of Robert Taylor (chairman), Neil Kurtz and George McCulloch. In compliance with the transitional rules of the SEC and The NASDAQ Stock Market, our audit committee consists entirely of independent directors, as defined under The NASDAQ Stock Market listing standards as well as under rules adopted by the SEC pursuant to Sarbanes-Oxley Act of 2002. The board of directors has determined that Mr. Taylor is an audit committee financial expert as defined under SEC rules and regulations by virtue of his business background and experience described under Executive Officers and Directors above.

Our board of directors has adopted a written charter for the audit committee, which became effective in connection with our IPO and reflects standards set forth in SEC regulations and The NASDAQ Stock Market rules. The composition and responsibilities of the audit committee and the attributes of its members, as reflected in the charter, are intended to be in accordance with applicable requirements for corporate audit committees. The audit committee charter will be reviewed, and amended if necessary, on an annual basis.

The audit committee assists the board in fulfilling its oversight responsibility relating to our financial statements and the disclosure and financial reporting process, our system of internal controls, our internal audit function, the qualifications, independence and performance of our independent registered public accounting firm, compliance with our code of business conduct, and ethics and legal and regulatory requirements. The audit committee has the sole authority to appoint, retain, terminate, compensate and oversee the work of the independent registered public accounting firm, as well as to pre-approve all audit and non-audit services to be provided by the independent registered public accounting firm.

Compensation Committee

The members of our compensation committee are Carlos Dominguez (Chairman), Neil Kurtz and George McCulloch. All three members of the compensation committee are independent as defined under the applicable listing standards of The NASDAQ Stock Market. The compensation committee operates under a written charter

81

adopted by the board of directors. Our committee is responsible for administering any incentive compensation plans, equity-based compensation plans and other benefit plans and making recommendations to the board of directors with respect to such plans. Also, the committee evaluates the chief executive officer s performance, determines compensation arrangements for all of our executive officers, including our chief executive officer, and makes recommendations to the board of directors concerning compensation policies for us and our subsidiaries.

Nominating and Governance Committee

Our nominating and governance committee is comprised of Robert Taylor (Chairman), Carlos Dominguez and Peter Sobiloff. All three members of the nominating and governance committee are independent as defined under the applicable listing standards of The NASDAQ Stock Market. The nominating and governance committee operates under a written charter adopted by the board of directors. Our nominating and governance committee has responsibility for, among other things: reviewing board composition, procedures and committees, and making recommendations on these matters to the board of directors; reviewing, soliciting and making recommendations to the board of directors and stockholders with respect to candidates for election to the board; and overseeing compliance by the board of directors and management with our corporate governance principles and ethics standards and code of conduct.

Compensation Committee Interlocks and Insider Participation

None of our executive officers serves as a member of the compensation committee or board of directors of any other entity that has an executive officer serving as a member of our board of directors or compensation committee.

In 2008, TorreyPines Therapeutics entered into a single-study arrangement to use our solutions. Mr. Kurtz, a member of our board of directors, was chief executive officer of TorreyPines Therapeutics but resigned from his position at TorreyPines Therapeutics during the third quarter of 2008 to assume a position with another company. We recognized a total of \$365,000 of application and professional services revenues from this customer for 2008. As of December 31, 2008, accounts receivable relating to this customer was \$5,000.

Director Compensation

The compensation committee of our board of directors has adopted a compensation policy that is applicable to all of our non-employee directors. This compensation policy provides that each such non-employee director will receive the following compensation for service on our board of directors:

an annual cash retainer of \$30,000;

an additional annual cash retainer of \$20,000 for serving as chairman of the audit committee and \$12,000 for serving as a member of the audit committee:

an additional annual cash retainer of \$15,000 for serving as chairman of the compensation committee and \$10,000 for serving as a member of the compensation committee;

an additional annual cash retainer of \$5,000 for serving as chairman of the nominating and corporate governance committee and \$4,000 for serving as a member of the nominating and corporate governance committee; and

upon first joining our board of directors, upon completion of our IPO, and at each subsequent annual meeting, an equity award valued at \$100,000, comprised 50% of restricted shares and 50% in options. The initial equity awards vest over four years and the subsequent annual awards vest over two years.

In addition, we reimburse our directors for all reasonable expenses incurred for attending meetings and service on our board of directors.

82

2008 Director Compensation

The following table sets forth a summary of the compensation paid or accrued by us to individuals who were directors during any part of 2008. The table excludes Messrs. Sherif, de Vries, McCulloch and Sobiloff, who did not receive any compensation from us in their roles as directors in 2008. In addition, this table excludes our former directors, Dr. Ikeguchi and Mr. Goodman, who resigned from the board of directors effective prior to the completion of our IPO and did not receive any compensation from us in their roles as directors in 2008.

	Fees Earned	Fees Earned				
	or Paid in	Option				
	Cash	Awards(1)	Total			
Name	(\$)	(\$)	(\$)			
Carlos Dominguez	\$ 20,833	\$ 8,139(2)	\$ 28,972(3)			
Robert B. Taylor	34,722	8,139(2)	42,861(3)			
Neil M. Kurtz(4)	35,611		35,611			

- (1) Amounts shown do not reflect compensation actually received by the directors. Instead, the amounts shown are the compensation costs recognized by us in the period presented for option awards as determined pursuant to ASC 718, excluding estimated forfeitures. These compensation costs reflect option awards granted in the period presented. The assumptions used to calculate the value of option awards are set forth under Note 2 of the Notes to Consolidated Financial Statements. The aggregate number of option awards outstanding held by our directors as of December 31, 2008 is as follows: Carlos Dominguez, 4,533; Neil M. Kurtz, 100,000; and Robert B. Taylor, 4,533. None of our other directors have received option awards.
- (2) The option awards granted to Messrs. Dominguez and Taylor had a grant date fair value of \$51,450.
- (3) Upon completion of our IPO, we granted 2,600 shares of restricted stock to each of Messrs. Dominguez and Taylor as a part of their initial equity awards for joining our Board of Directors. Because these proposed restricted stock awards were not granted in 2008 they are not included in the above tables or in the statements of beneficial ownership.
- (4) In May 2009, our board of directors approved providing cash compensation to Mr. Kurtz under our non-employee director compensation plan, retroactive to April 1, 2008 (the date on which Messrs. Dominguez and Taylor joined the board of directors). This resulted in a payment to Mr. Kurtz of approximately \$62,000 for board membership through June 30, 2009.

Messrs. McCulloch and Sobiloff are subject to agreements with Insight Venture Partners pursuant to which all compensation received by them in their roles as directors is transferred to the entities affiliated with Insight Venture Partners holding our common stock pro rata in accordance with those entities ownership of our common stock.

Executive Compensation

Compensation Discussion and Analysis

Compensation Overview, Objectives and Philosophy

The primary objective of our compensation and benefits program is to attract, motivate and retain the best possible executive talent. We believe that executive compensation should support our business goals and encourage increased stockholder value. We expect to implement and maintain compensation plans that link executive compensation to the achievement of key goals including revenues and profitability measures. We also seek to have plans which are attractive to potential employees relative to other companies with whom we compete for employees.

Evolution of our Compensation Approach

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

Our compensation approach is necessarily tied to our stage of development as a company. Historically, our compensation program has been characterized by below-median cash compensation and below-median equity compensation, when compared with public companies in our peer group. Historically, the non-employee members of our board of directors reviewed and approved executive compensation and benefits policies, subject to final board approval, often based on the recommendation of our chief executive officer, based on his subjective assessment. Going forward, we expect that the specific direction, emphasis and components of our

executive compensation program will continue to evolve, and, we expect to reduce our reliance upon subjective determinations in favor of an approach that involves benchmarking the compensation paid to our executive officers against peer companies that we identify and the use of clearly defined, objective targets to determine incentive compensation awards. We also intend to reduce our executive compensation program s emphasis on stock options as a long-term incentive component in favor of other forms of equity compensation such as restricted stock awards.

Anticipating these changes, beginning in March 2008 three of our then directors, Edwin Goodman, Neil Kurtz and Peter Sobiloff, in consultation with Pearl Meyer & Partners, an independent compensation consulting firm retained by our board of directors, conducted a review of total executive compensation and equity ownership, comparing our executive s total compensation levels to those of other executives at comparable public technology companies and conducting interviews with our independent board members and members of management to gain insights into our compensation philosophy. We expect to continue to utilize a compensation consultant to assist our compensation committee in developing our executive compensation program, and in the future we may look to programs implemented by comparable public companies in refining our compensation approach.

Compensation Setting Process

Historically, compensation decisions for our executive officers were approved by our board of directors upon the recommendation of our compensation committee, which in turn considered the recommendation of our chief executive officer. We traditionally placed significant emphasis on the recommendation of our chief executive officer with respect to the determination of executive compensation (other than his own), in particular with respect to the determination of base salary, cash incentive and equity incentive awards. In 2008, our compensation committee became solely responsible for administering our executive compensation program, although we continue to rely, in part, upon the advice and recommendations of our chief executive officer, particularly with respect to those executive officers that report directly to him. The compensation committee s composition and oversight of our executive compensation program is described in more detail below and in the section above entitled. Committees of the Board of Directors. Compensation Committee.

For purposes of determining our executive officer compensation in 2007 and in prior years, we considered the following factors: our understanding of the amount of compensation generally paid by similarly situated companies to their executives with similar roles and responsibilities; the roles and responsibilities of our executives; the individual experience and skills of, and expected contributions from, our executives; the amounts of compensation being paid to our other executives; and our executives historical compensation at our company; an assessment of the professional effectiveness and capabilities of the executive officer; and the performance of the executive officer against the corporate objectives used to determine incentive compensation. We placed the most emphasis in determining compensation on our understanding of the amount of compensation generally paid by similarly situated companies to their executives with similar roles and responsibilities and the subjective assessment of the professional effectiveness and capabilities of the executive officer. Our understanding of the amount of compensation generally paid by similarly situated companies was based on our compensation committee s and chief executive officer s own business judgment and collective experience in such matters. This understanding was not based on quantitative data or benchmarking against any specific professional service firm or similar company or set of professional service firms or similar companies.

Beginning in March 2008, our board of directors retained Pearl Meyer & Partners to conduct an assessment of our executive compensation practices. This market survey compared the compensation paid to our chief executive officer and our other executive officers to executives at similar management levels and functions at 12 software, healthcare technology services or other technology oriented companies that had median annual revenue of \$129 million. This market survey was developed for purposes of establishing a comprehensive compensation plan for 2008 and subsequent years and was not considered by the compensation committee in determining executive compensation prior to 2008.

84

Roles of the Compensation Committee and Chief Executive Officer

Our compensation committee administers our new executive compensation program, including:

reviewing and making recommendations to the board of directors with respect to adoption and approval of all cash-based and equity-based incentive compensation plans for the chief executive officer and other executives;

administering and interpreting all such cash-based and equity-based compensation plans;

approving the goals and objectives to be considered in determining compensation for the chief executive officer and other executives;

determining salary paid to the chief executive officer and other executives;

determining all grants of cash-based and equity-based incentive compensation; and

determining the degree to which incentive compensation is earned.

The compensation committee determines all compensation for our chief executive officer and our other executive officers, including salaries, cash-based incentives and equity-based incentives. When making individual compensation decisions for executives other than the chief executive officer, the compensation committee considers the recommendations and performance evaluations made by the chief executive officer with respect to those executives, which evaluation may take into account many factors, including compensation survey data and individual skills, experience and impact on the organization, and personal and corporate performance. In addition, the compensation committee may consider any other factor or input as it deems necessary to make final compensation decisions. In assessing and determining chief executive officer compensation, the committee considers our overall financial and operating performance, the chief executive officer s contribution to that performance, and other factors in the same manner as it does for the other executives.

Under our new executive compensation program, the compensation committee selected target performance levels by which it will evaluate each executive officer s performance. The compensation committee seeks to establish target performance levels for new incentive compensation programs that are not guaranteed to be achievable, but will require execution of ambitious business strategies over the course of the year. Our compensation committee has discretion to adjust the actual results related to the performance targets, positively or negatively, for items which, in the opinion of the compensation committee, were not reasonably within management s control. The compensation committee may also modify compensation plan targets in light of new business initiatives that we may wish to pursue and that might have a short-term impact on individual or corporate goals.

Executive Officer Market Compensation Data

To ensure that our executive compensation is competitive in the marketplace, beginning with 2008 compensation arrangements, we relied on comparative benchmark data. We considered selected comparable companies if they met at least three of the following criteria:

business competitor, which consists primarily of technology-focused healthcare services companies;

labor market competitor, which consists of high-technology companies focused on information commerce; and

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

annual revenues from approximately \$45 million to \$1.5 billion.

85

To develop the list of compariable companies, Pearl Meyer & Partners suggested a list of candidate companies to our compensation committee, which reviewed and adjusted the list after consultation with Pearl Meyer & Partners. We selected the following comparable companies for 2008:

Allscripts Misys Healthcare Solutions, Inc.

athenahealth, Inc.

BladeLogic, Inc.

Concur Technologies, Inc.

Eclipsys Corporation

eResearch Technology, Inc.

HLTH Corporation

MEDecision, Inc.

Merge Healthcare Incorporated

Phase Forward Incorporated

Quality Systems, Inc.

Taleo Corporation

Pearl Meyer & Partners surveyed the executive compensation data for equivalent executive positions for each of the comparable companies by reviewing their most recent SEC proxy filings to develop a market composite of compensation for each executive position within Medidata. Our management and compensation committee reviewed the survey data with respect to various elements of executive compensation at comparable companies and the level of executive compensation. In consultation with Pearl Meyer & Partners, our 2008 executive compensation program was approved by our compensation committee in May 2008.

Elements of our Compensation

Our compensation framework for our named executive officers in 2008 consisted of the following key elements:

Base salary;

Annual cash bonuses; and

Long-term incentives (including the grant of stock options and/or restricted stock units). In addition to these key elements of compensation, our compensation framework in 2008 included employee benefits, limited perquisites and change in control protections. See Change in Control Agreements.

Our compensation philosophies with respect to each of these elements, including the basis for the compensation awarded to each of our executive officers, are discussed below. In addition, although each element of compensation described below is considered separately, the compensation committee takes into account the aggregate compensation package for each individual. The committee sphilosophy is to significantly weight those aspects of compensation tied to performance, such as annual cash incentives based on measurable performance objectives and long-term equity incentives. The weighting among the three major components is structured such that a majority of an executive spotential financial compensation will be incentive-based (cash bonuses and equity incentives), rather than fixed (base salary). Our compensation committee believes that this structure focuses our executive compensation plan on a pay-for-performance basis.

For named executive officers (other than Ms. Krasnow who was promoted to Executive Vice President in August 2008), the compensation committee decided that for fiscal 2008, for retention purposes it would set total annual cash compensation (i.e., base salary plus at target cash incentives awards) with reference to the 50th percentile of the comparable companies. The total value of long-term, equity-based incentive awards would be targeted with reference to the 60th percentile of the comparable companies which, when combined with the 50th percentile-based target for cash compensation, results in overall total target compensation at approximately the 60 th percentile of the selected comparable companies group for these named executive officers.

In 2008, the compensation committee established a general goal to pay our top four named executive officers at the 60th percentile of the market survey results for base salary compensation, at the 60th percentile for total cash compensation (i.e., base salary plus cash incentives awards) for achievement of pre-defined performance objectives (as set forth below). The percentile rankings are made with reference to compensation paid to executives at similar management levels and functions.

86

We generally categorized our incentive compensation in 2008 as either annual or long-term. Annual incentive programs included all compensation, whether cash or equity, which is earned or vests based on achieving pre-defined financial performance or other employment objectives within 12 months from the date of grant. Long-term incentive programs included all compensation, whether cash or equity, which is earned or vests based on achieving pre-defined financial performance or other employment objectives more than 12 months after the date of grant.

Base Salary

In reviewing the Pearl Meyer & Partners market survey, the compensation committee observed that 2007 base salary compensation for each of Tarek Sherif, Glen de Vries, and Steven Hirschfeld was below the median of the companies surveyed. Accordingly, the committee made adjustments to named executive officer salaries in May 2008 in order to increase those salaries to within the target percentile range. Each individual named executive officer s base salary was set above or below the intended market positioning, depending on the compensation committee s subjective assessment of the individual named executive officer s experience, recent performance and expected future contribution, and retention concerns. We hired Bruce Dalziel as our chief financial officer in September 2007 and his base salary for 2008 was negotiated in connection with his employment based on his prior experience, his prior levels of compensation, and competitive market factors.

For a description of the base salary paid to our named executive officers for 2008, please refer to the Summary Compensation Table included in this prospectus.

Annual Bonus

The pay philosophy is to target annual cash compensation with reference to the 50th percentile of the selected comparable companies, with the opportunity to earn annual incentives in excess of that level based on achieving performance superior to the objectives established by our compensation committee. Annual cash incentives are paid to reward achievement of critical operating, financial, strategic and individual measures and goals that are expected to contribute to shareholder value creation over time.

Bonuses in 2008 were based on the following corporate financial metrics, which were designed to motivate our named executive officers to achieve profitable growth:

2008 revenues: and

2008 EBITDAO, representing net income calculated in accordance with GAAP, adding back interest, taxes, depreciation, amortization and stock-based compensation.

The compensation committee selected these metrics as broad indicators of the success of our business and the likely increase in stockholder value, in order to align executive incentives with the interests of stockholders. Both corporate financial metrics are weighted equally in determining the total financial metric factor, with the opportunity to earn annual incentives in excess of that level based on achieving performance superior to the objectives established by our compensation committee. The performance targets used for 2008 annual incentives included \$115.0 million of revenues and \$5.9 million of EBITDAO, before items related to (i) the acquisition of Fast Track Systems, (ii) budgeted public company costs that were not incurred in 2008 and (iii) changes in our backlog resulting from 2007 audit adjustments and quarterly reviews, which were not contemplated in the initial budgeting process. Our compensation committee has discretion to adjust the actual results related to the performance targets, positively or negatively, for items which, in the opinion of the compensation committee, were not reasonably within management s control. Taking into account the items described above that were deemed by the committee to be outside of management s control, the financial targets used by the compensation committee to evaluate executive performance in 2008 were \$110.9 million of revenues and \$4.2 million of EBITDAO. The compensation committee established a target grid comparing revenues and EBITDAO at different levels. Based on the performance grid, the target bonus amount for each executive would be 100% of target if we attained each of the performance targets specified above, 42% of target if we attained \$101.9 million

87

of revenues and \$2.3 million of EBITDAO, 150% of target if we attained \$115.9 million of revenues and \$7.3 million of EBITDAO and 160% of target if we attained \$117.5 million of revenues and \$7.9 million of EBITDAO. No bonus would be payable if either the \$99.9 million revenue threshold or \$1.3 million EBITDAO threshold was not met. The specific targets for each financial metric were, in the judgment of the compensation committee, achievable but nevertheless subject to a number of uncertainties and extraneous influences which could prevent their achievement. Earned bonus amounts are subject to positive and negative adjustment at the committee s discretion. In exercising such discretion, the committee does not follow a strict formulaic approach, but instead looks at the overall company and individual performance in the context of the objectives. In addition, our compensation committee has discretion to adjust the actual results related to the performance targets, positively or negatively, for items which, in the opinion of the compensation committee, were not reasonably within management s control. Ultimate achievement of performance objectives were evaluated by our compensation committee based on the annual targets and after considering overall events and factors for the year. As a threshold issue, our compensation committee assessed certain subjective aspects of management performance, including bookings, improvements in the control environment and preparation toward our potential IPO. Having determined that these non-financial objectives for the year had been satisfied, the committee determined that each of the named executive officers (with the exception of Ms. Krasnow discussed below) be awarded a bonus percentage at 160% of target based entirely on our strong financial performance.

As described in Note 2, Restatement of Consolidated Financial Statements, to our consolidated financial statements, we restated previously issued financial statements for the years ended December 31, 2005, 2006, 2007 and 2008. In establishing the performance goals for 2008 and determining whether those goals had been met, we were not aware that the financial results would be subsequently restated. Upon review of our restated financial results, the compensation committee determined that no adjustments to its conclusions regarding 2008 bonuses would be required because revenue and earnings growth objectives for the year had been satisfied.

Incentive bonuses are also subject to possible adjustment based on the achievement of individual objectives at the discretion of the committee. Individual performance goals and objectives are not formally pre-established and documented for each named executive. Rather, the compensation committee reserves discretion to examine significant contributions made by each named executive officer based upon the recommendations of the chief executive officer and the committee s deliberations.

Although the compensation committee has discretion to adjust annual cash incentives based on individual objectives, they did not do so during 2008. For future periods, specific objectives may be set for any named executive officer based on his or her individual responsibilities. While goals may be subjective by nature, to the extent possible, the committee will select objective and quantifiable targets in order to improve accountability for results. The compensation committee may determine the degree to which each named executive officer achieved targeted personal objective goals, based on the evaluation of our chief executive officer for the other named executive officers and for our chief executive officer, based on the committee s deliberations.

For 2008, the annual cash incentive bonus for Ms. Krasnow was based on the recommendation of our chief executive officer based on his subjective assessment of her professional effectiveness and accomplishments during 2008. Although beginning in 2009 the compensation committee expects to determine cash-based incentive awards for Ms. Krasnow, for 2008 her award was discretionary and not based upon a pre-determined incentive plan arrangement. Ms. Krasnow s 2008 bonus target was 40% of her base salary. For 2008, Ms. Krasnow received a cash bonus in the amount of \$127,840, representing approximately 54% of her base salary for the year. Ms. Krasnow was awarded an amount in excess of her target amount in recognition of her leadership in helping to achieve corporate financial performance objectives described above based on the subjective determination of our chief executive officer and not on any quantitative factors.

For a description of the bonuses earned by our named executive officers in 2008, please refer to the Summary Compensation Table included herein.

88

Long-Term Incentives

We believe that long-term performance is achieved through an ownership culture that encourages participation by our executive officers in equity-based awards. Our incentive plans have been established to provide our current and future directors, officers, consultants and advisors, including our executive officers, with incentives to help align their interests with the interests of our stockholders. We believe that the use of equity-based awards offers the best approach to achieve our compensation goals.

Stock options provide executives with a significant and long-term interest in our success. By only rewarding the creation of shareholder value, we believe stock options provide our named executive officers with an effective risk and reward profile. Although it is our current practice to use stock options as our sole form of long-term incentive compensation, the compensation committee reviews this practice on an annual basis in light of our overall business strategy, existing market-competitive best practices and other factors.

Historically, our equity-based incentives to our executives, other than our founders, were primarily stock option awards. While we continue to believe that awards of stock options are valuable incentives for our executives, we intend to award restricted stock as part of our long term incentive compensation program in the future. This practice was adopted in part because it aligns us with our public company peers and also because restricted stock results in less dilution to existing stockholders than stock options of equivalent value. We believe that using a combination of restricted stock and stock option awards strikes a proper balance to motivate and reward our executives.

Prior to 2008, our chief executive officer, and president, who were founders of the Company, were not granted stock options. They received option grants for the first time as part of their 2008 compensation package. Stock options are granted periodically and are subject to vesting based on the executive s continued employment. Historically, we have granted our executive officers a combination of incentive stock options and non-qualified stock options that vest over four years from the date of the grant. In 2008, the committee determined that the long term incentive award should be granted 50% in stock options and 50% in time-vested restricted stock. Accordingly, as part of 2008 compensation packages, in August 2008 we granted each of Messrs. Sherif and de Vries options to purchase 36,730 shares of our common stock (see Management Grants of Plan-Based Awards) and we authorized the grant of 21,900 shares of restricted stock to each of Messrs. Sherif and de Vries upon completion of our IPO.

Stock options are granted to our named executive officers in amounts determined by the compensation committee in its discretion. Grants have not been formula-based, but instead have historically been granted taking into account a mixture of the following qualitative factors: the executive s level of responsibility; the competitive market for the executive s position; the executive s potential contribution to our growth; and the subjective assessment of the professional effectiveness and capabilities of the executive as determined by our chief executive officer for our executives other than our chief executive officer and by our compensation committee for our chief executive officer. Although no specific number of options granted can be attributable to any specific factor, we have placed the most emphasis in determining the amount of the stock option grants on the competitive market for the executive s position and the executive s potential contribution to our success. Additionally, larger awards are typically made to the named executive officers that have areas of responsibility and function that are more likely to build long-term shareholder value as determined by how directly linked their areas of responsibility and function are to our growth.

Our newly-adopted equity award grant policy formalizes our process for granting equity-based awards to officers and employees after this offering. Under our equity award grant policy all grants must be approved by our board of directors or compensation committee. All stock options will be awarded at fair value and calculated based on our closing market price on the grant date. Under our equity award grant policy, equity awards will typically be made on a regularly scheduled basis, as follows:

grants made in conjunction with the hiring of a new employee or the promotion of an existing employee will be made on the first trading day of the month following the later of (i) the hire date or the promotion date or (ii) the date on which such grant is approved; and

89

any grants made to existing employees other than in connection with a promotion will be made on an annual basis. For a description of the stock options granted to our named executive officers in 2008, please refer to the Summary Compensation Table included herein.

2009 Plan Awards

We intend to make annual equity incentive award grants to our non-employee directors, named executive officers and certain other employees. Upon completion of our IPO, we made the following annual awards for 2009 in the form of restricted stock and stock options pursuant to our 2009 Long-Term Incentive Plan, or 2009 Plan.

Restricted Stock. We issued 294,478 shares of restricted stock, which will become 25% vested on each anniversary of our IPO, subject to continuous employment of the participant with us through each such date.

Stock Options. We granted options to purchase 406,254 shares. The options have an exercise price equal to the IPO price, and have a 10 year term. The options vest in 48 equal monthly installments commencing one month after the grant date, subject to continuous employment of the participant with us through each such date.

Equity awards granted upon completion of our IPO were granted pursuant to the 2009 Plan (described under Management Equity Benefit Plans) and are subject to the terms of the 2009 Plan. All of these awards are contingent upon completion of this offering. The shares of restricted stock and stock options are subject to time-based vesting, and are not subject to further performance-based criteria.

In approving awards for our named executive officers, our compensation committee considered survey data prepared by Pearl Meyer & Partners with respect to various elements of executive compensation at comparable companies and the committee is prior determination to target equity-based incentive awards at the 60th percentile of equity-based incentive awards at the comparable companies. These awards were based on Medidata is strong performance as a whole and not on the achievement of any individual officer. The committee first determined the total dollar value of the awards to be granted to the executives and then determined to base the awards on a mix of 50% options and 50% shares of restricted stock based upon their estimated fair market value (as determined under the Black-Scholes valuation model). Our named executive officers, Messrs. Sherif, de Vries, Dalziel and Hirschfeld and Ms. Krasnow, received approximately 4.4%, 4.4%, 2.0%, 1.7% and 1.7%, respectively, of the equity awards granted upon completion of our IPO pursuant to the 2009 Plan. In addition to the annual award, upon completion of our IPO we made a one-time special grant to Mr. Dalziel of 10,714 shares of restricted stock and options to purchase 17,730 shares and a one-time special grant to Mr. Hirschfeld of 9,241 shares of restricted stock and options to purchase 15,293 shares. These special awards represent 75% of the value of their respective annual long-term incentive awards for 2009 described above and were granted to Messrs. Dalziel and Hirschfeld based on the subjective determination of our compensation committee with input from Pearl Meyer & Partners in recognition of their contributions to our IPO process and their ongoing roles as public company executives. The special restricted stock and option awards to Messrs. Dalziel and Hirschfeld are subject to the same vesting as the other 2009 annual awards described above.

Our non-employee directors will also receive an annual equity grant in the form of restricted stock and stock options. See Management Director Compensation.

Post-Termination Compensation and Benefits.

We believe a change in control plan serves as an important retention tool to ensure that personal uncertainties do not dilute our executive s complete focus on promoting stockholder value.

90

Consequently, in January 2009 we entered into agreements with certain of our executive officers that provide them with certain benefits upon the termination of their employment following a change of control in our company. These benefits include a lump sum payment equal to 100% of the executive s annual base salary and target bonus, the continuation of employee benefits (at our expense) for 12 months following termination and the accelerated vesting of equity compensation awards. In connection with its approval of these agreements, the compensation committee considered competitive market and best practice data provided by outside advisors. The compensation committee also reviewed the cost to the company of such agreements and the individual payout levels to the executives under various scenarios. Following its review, the compensation committee determined that the cost of these agreements was reasonable and not excessive, given the benefit conferred to us. We believe that these agreements will help to maintain the continued focus and dedication of these executive officers to their assigned duties without the distraction that could result from the possibility of a change-of-control.

For additional information on these change-in-control agreements, see Potential Payments upon Termination of Employment or a Change of Control below.

Equity Benefit Plans

Amended and Restated 2000 Stock Option Plan

Our Amended and Restated 2000 Stock Option Plan, or 2000 Stock Plan, provides for the grant of nonstatutory and incentive stock options to our employees, directors and consultants. As of January 31, 2009, options to purchase 2,620,863 shares of common stock were outstanding and 372,010 shares of common stock were reserved for future grant under the 2000 Stock Plan. Our board of directors does not intend to grant any further awards under the 2000 Stock Plan. Effective upon completion of our IPO, we adopted the 2009 Long-Term Incentive Plan, under which we will make all future awards. All outstanding stock options granted under the 2000 Stock Plan remain outstanding and subject to their respective terms and the terms of the 2000 Stock Plan.

2009 Long-Term Incentive Plan

Our board of directors and existing stockholders have adopted and approved our 2009 Plan. The 2009 Plan became effective upon completion of our IPO and is a comprehensive incentive compensation plan under which we can grant equity-based and other incentive awards to officers, employees and directors of, and consultants and advisers to our company and our subsidiaries. The purpose of the 2009 Plan is to help us attract, motivate and retain such persons and thereby enhance shareholder value.

We have reserved up to 2,500,000 shares of our common stock for issuance under the 2009 Plan. Unissued shares covered by awards that terminate, shares that are forfeited, and shares withheld or surrendered for the payment of the exercise price or withholding obligations associated with an award will remain available for issuance under the 2009 Plan. The number of shares issuable under the 2009 Plan is subject to adjustment in the event of certain capital changes affecting outstanding shares of our common stock, such as the payment of a stock dividend, a spin-off or other form of recapitalization.

Awards under the 2009 Plan may be in the form of stock options, restricted stock and other forms of stock-based incentives, including stock appreciation rights and deferred stock rights.

Stock options represent the right to purchase shares of our common stock within a specified period of time for a specified price. The purchase price per share must be at least equal to the fair market value per share on the date the option is granted. Stock options may have a maximum term of ten years. Our compensation committee has the flexibility to grant stock options that are intended to qualify as incentive stock options under Section 422 of the Internal Revenue Code.

Restricted stock awards consist of the issuance of shares of our common stock subject to certain vesting conditions and transfer restrictions that lapse based upon continuing service and/or the

91

attainment of specified performance objectives. The holder of a restricted stock award may be given the right to vote and receive dividends on the shares covered by the award.

Stock appreciation rights entitle the holder to receive the appreciation in the fair market value of the shares of our common stock covered by the award between the date the award is granted and the date the award is exercised. In general, settlement of a stock appreciation right will be made in the form of shares of our common stock with a value equal to the amount of such appreciation.

Deferred stock awards represent the right to receive shares of our common stock in the future, subject to applicable vesting and other terms and conditions. Deferred stock awards are generally settled in shares of our common stock at the time the award vests, subject to any applicable deferral conditions as may be permitted or required under the award. The holder of a deferred stock award may not vote the shares covered by the award unless and until the award vests and the shares are issued. Dividend equivalents may or may not be payable with respect to shares covered by deferred stock award.

The 2009 Plan also provides for stock bonus and other forms of stock-based awards and for cash incentive awards.

The 2009 Plan is administered by the compensation committee of our board of directors. Subject to the terms of the 2009 Plan, the compensation committee (or its designee) may select the persons who will receive awards, the types of awards to be granted, the purchase price (if any) to be paid for shares covered by the awards, and the vesting, forfeiture and other terms and conditions of the awards. In general, awards granted under the 2009 Plan will not be transferrable.

In the event of a change in control or sale event as described in the 2009 Plan, outstanding awards under the 2009 Plan may be converted into equivalent awards with respect to shares of an acquiring or successor company (or corporate parent), subject to substantially similar vesting and other terms and conditions. In general, if an outstanding award is not so converted, it will become fully vested and will be cashed out or otherwise entitled to participate in the change in control transaction or sale event based upon its then intrinsic value.

Unless sooner terminated by our board of directors, the 2009 Plan shall expire on the tenth anniversary of the date of its adoption. The board of directors may amend or terminate the 2009 Plan at any time, provided, however, that no such action may adversely affect outstanding awards without the holder s consent. Amendments to the 2009 Plan will be subject to shareholder approval if and to the extent required in order to comply with applicable legal or stock exchange requirements.

The 2009 Plan is intended to constitute a plan described in Treasury Regulation Section 1.162-27(f)(1), pursuant to which the deduction limits under Section 162(m) of the Internal Revenue Code do not apply during the applicable reliance period, which would end upon the earliest of: (i) a material modification of the 2009 Plan, (ii) the issuance of all available shares under the 2009 Plan, or (iii) the first shareholders meeting at which directors are to be elected that occurs after the close of the third calendar year in which we become publicly held.

2009 Employee Stock Purchase Plan

Our 2009 Employee Stock Purchase Plan, or ESPP, has been adopted by our board of directors and our existing stockholders. The ESPP became effective upon completion of our IPO. A total of 500,000 shares of our common stock are reserved for issuance under the ESPP.

Under the ESPP, eligible employees are allowed to purchase shares of our common stock at a 5% discount from the share price at the end of the offering period. Purchases are made at the end of the ESPP offering periods which, unless changed, will be semi-annual periods ending June 30 and December 31 of each year. Funds used to purchase shares at the end of an offering period are accumulated through payroll deduction during an offering period. Participants may withhold as much as 10% of their pay under the ESPP and their participation is completely voluntary. There is a \$25,000 limit on the value of shares that may be purchased by any participant under the ESPP in any calendar year.

In general, the ESPP is open to all of our employees and to employees of our participating subsidiaries whose customary employment is more than twenty hours per week and for more than five months per calendar year. Employees who own 5% of the Company s stock (taking into account shares that may be acquired under the ESPP) are not eligible to purchase shares.

The ESPP is intended to qualify for favorable tax treatment under Section 423 of the Internal Revenue Code and to meet the requirements of a non-compensatory plan under ASC 718-50-25. The ESPP is administered by the compensation committee of our board of directors. Our board of directors has the right to amend or terminate the ESPP. In general, amendments may be made without stockholder approval, except for amendments that increase the number of shares that may be issued under the ESPP (other than increases due to certain capital changes).

Employee Benefits and Perquisites

Consistent with our compensation philosophy to attract and retain talent, we intend to continue to maintain competitive employee benefits and perquisites for all employees, including executive officers.

In 2008, our named executive officers, like our other employees, participated in various employee benefit plans, including medical and dental care plans, qualified 401(k) retirement plan, life, accidental death and dismemberment and disability insurance, paid time off and other benefits.

For a further description of these benefits in provided in 2008, please refer to the Summary Compensation Table set forth herein.

We do not generally differentiate the benefits we offer our named executive officers from the benefits we offer our other employees and we also do not currently maintain any benefit programs exclusive to executives such as executive pension plans, deferred compensation plans, supplemental insurance or other executive retirement benefits. In the future, the compensation committee, in its discretion, may revise, amend or add to the officers executive benefits and perquisites as it deems advisable.

Tax Considerations

Section 162(m) of the Code places a limit of \$1.0 million on the amount of compensation we may deduct for federal income tax purposes in any one year with respect to our chief executive officer, chief financial officer and the next three most highly compensated officers, which we refer to herein as the named executive officers. However, performance-based compensation that meets certain requirements is excluded from this \$1.0 million limitation.

The 2009 Long-Term Incentive Plan is intended to constitute a plan described in Treasury Regulation Section 1.162-27(f)(1), pursuant to which the deduction limits under Section 162(m) of the Code do not apply during the applicable reliance period. In general, the reliance period ends upon the earliest of:

the expiration of the plan;
the material modification of the plan;
the issuance of all available stock and other compensation that has been allocated under the plan; or

the first stockholder meeting at which directors are to be elected that occurs after the close of the third calendar year in which we became publicly held.

While we seek to take advantage of favorable tax treatment for executive compensation where appropriate, the compensation committee may in the future award compensation which would not comply with the Section 162(m) requirements for deductibility if the compensation committee concluded that to be in our best interest.

Summary Compensation Table

The following table provides information regarding the compensation of our chief executive officer, chief financial officer and each of the next three most highly compensated executive officers in the year ended December 31, 2008. We refer to these officers as our named executive officers.

Name and Dringing Position	Year	Salary (\$)	Bonus (\$)	Option Awards(1) (\$)	All Other Compensation(2) (\$)	Total (\$)
Name and Principal Position Tarek A. Sherif	2008	\$ 360,000	\$ 448,000	\$ 53,536	\$ 4,600(3)	\$ 866,136
Chairman and Chief Executive Officer						
Glen M. de Vries	2008	360,000	448,000	53,536	4,600	866,136
President						
Bruce D. Dalziel	2008	340,000	320,000	612,853	4,600	1,277,453
		,	,	,,,,,,	,	,,
Chief Financial Officer						
Steven I. Hirschfeld	2008	240,000	400,000	141,570	4,600	786,170
		,	,	- 1-,- 1 -	,,,,,	, , , , , , ,
Executive Vice President						
Global Sales and Alliances						
Lineene N. Krasnow	2008	235,000	127,840	104,907	4,600	472,347
Executive Vice President						
Product and Marketing						
i rounce and marketing						

- (1) Amounts shown do not reflect compensation actually received by the Named Executive Officers. Instead, the amounts shown are the compensation costs recognized by the Company in the period presented for option awards as determined pursuant to ASC 718, excluding estimated forfeitures. These compensation costs reflect option awards granted in and prior to the period presented. The assumptions used to calculate the value of option awards are set forth under Note 2 of the Notes to Consolidated Financial Statements.
- (2) Represents employer contribution to 401(k) plan.
- (3) Mr. Sherif resides in New York, New York and is required to work in our U.K. office on a frequent basis. During 2008, we paid rent on Mr. Sherif s apartment in London, England, which totaled \$42,353 (based on the exchange rate at December 31, 2008). Mr. Sherif has reimbursed the Company for his use of the apartment during 2008 in an amount totaling \$24,000. We believe that Mr. Sherif s reimbursements cover his incidental personal use of the apartment and that the costs incurred by us are comparable to or less than the costs we would have incurred to reimburse him for stays in London hotels. This arrangement was terminated in 2009, in association with Mr. Sherif s decision not to renew the London apartment lease.

Grants of Plan-Based Awards

The following table provides information regarding grants of plan-based awards to our named executive officers during the year ended December 31, 2008:

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

		All Other Option Awards: Number of Securities			Grant Date Fair Value of Stock and Option		
	Grant	ant Underlying Options		wards	Awards		
Name	Date	(#)(1)	(\$ /Sh)			(\$)(2)	
Tarek A. Sherif	8/13/08	36,730	\$	19.75	\$	427,170	
Glen M. de Vries	8/13/08	36,730		19.75		427,170	

- (1) Each stock option award was granted pursuant to our 2000 Stock Option Plan. The options vest in 48 equal monthly installments commencing one month after the grant date.
- (2) The amounts in this column represent the grant date fair value, computed in accordance with ASC 718, of each stock option granted to the named executive officer in 2008.

94

On January 15, 2009, we awarded the following stock options to Ms. Krasnow. The awards made to Ms. Krasnow were made by the board of directors taking into account the recommendation of our chief executive officer based on his subjective assessment of the professional effectiveness and capabilities of Ms. Krasnow.

	Number	
	of	Exercise
Executive	Options	Price
Lineene Krasnow	72,500	\$ 15.70

Number

In addition, upon completion of our IPO, we granted 21,900 shares of restricted stock to each of Messrs. Sherif and de Vries as a part of their 2008 compensation packages. Because these potential restricted stock awards were not made in 2008, they are not included in the statements of beneficial ownership.

Outstanding Equity Awards at December 31, 2008

The following table provides information regarding equity awards granted to our named executive officers that were outstanding at December 31, 2008:

	Number of Securities Underlying Unexercised Options (#)	Option Award Number of Securities Underlying Unexercised Options (#)	Option Exercise Price	Option Expiration
Name	Exercisable	Unexercisable	(\$)	Date
Tarek A. Sherif	3,060(2)	33,670	\$ 19.75	8/13/2018
Glen M. de Vries	3,060(2)	33,670	19.75	8/13/2018
Bruce D. Dalziel	69,062(3)	151,938	12.08	10/02/2017
Steven I. Hirschfeld	183,334(4)	0	0.17	8/30/2012
	101,921(5)	66,779	5.00	7/01/2016
Lineene N. Krasnow	132,915(6)	12.085	0.62	3/31/2015

- (1) Each stock option award was granted pursuant to our 2000 Stock Option Plan.
- (2) These stock options will vest ratably each month over four years, commencing on September 13, 2008.
- (3) These stock options vested as to 25% of the underlying shares on September 10, 2008 and the remaining will vest ratably each month over three years thereafter.
- (4) These stock options are fully vested.
- (5) These stock options vested as to 25% of the underlying shares on July 1, 2007 and the remaining will vest ratably each month over three years thereafter.
- (6) These stock options vested as to 25% of the underlying shares on April 1, 2006 and the remaining will vest ratably each month over three years thereafter.

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

Option Exercises

None of our named executive officers exercised options during 2008.

Potential Payments upon Termination of Employment or a Change of Control

We have entered into change in control agreements with our chief executive officer and our other named executive officers. These agreements provide for payments to be made to each named executive officer upon termination of employment. Payments will be due in the event the named executive officer s employment is involuntarily terminated by us without cause or by the executive for good reason, within a two-year period

95

following a change of control, as these terms are defined in the agreements. These agreements provide that, upon a qualifying termination event, a named executive officer will be entitled to:

a payment equal to the executive starget annual incentive award amount for the year of termination based on the date of termination; prorated based on the date of termination;

a severance payment equal to the executive s base salary for the year of termination plus the executive s full target bonus amount for the year of termination (or, if greater, the annual incentive award amount actually paid to the executive for the previous year);

continuation of health benefits (at our expense) for 12 months;

immediate vesting of any remaining unvested equity awards; and

a tax gross-up payment under Section 280G sufficient to reimburse the executive for 50% of any excise taxes payable as a result of any termination payments following a change in control, if applicable.

The severance and pro rata bonus amounts are payable in cash, in a lump sum. Receipt of these benefits are conditioned upon the executive executing a general release of claims against the company. As of September 30, 2009, in the event of a qualifying termination Mr. Sherif would have been entitled to cash payments totaling \$878,000, Mr. de Vries would have been entitled to cash payments totaling \$878,000, Mr. Dalziel would have been entitled to cash payments totaling \$710,000, Mr. Hirschfeld would have been entitled to cash payments totaling \$702,500 and Ms. Krasnow would have been entitled to cash payments totaling \$391,510.

96

PRINCIPAL AND SELLING STOCKHOLDERS

Beneficial Ownership of Our Common Stock

The following table sets forth certain information regarding the beneficial ownership of our common stock as of September 30, 2009, and as adjusted to reflect the sale of our common stock offered by this prospectus by:

each of our named executive officers;

all our directors and executive officers as a group;

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

each selling stockholder.

The amounts and percentages of common stock beneficially owned are reported on the basis of regulations of the SEC governing the determination of beneficial ownership of securities. Under the rules of the SEC, a person is deemed to be a beneficial owner of a security if that person has or shares voting power, which includes the power to vote or to direct the voting of such security, or investment power, which includes the power to dispose of or to direct the disposition of such security. A person is also deemed to be a beneficial owner of any securities of which that person has a right to acquire beneficial ownership within 60 days. Under these rules, more than one person may be deemed a beneficial owner of the same securities and a person may be deemed a beneficial owner of securities as to which he has no economic interest. The number of shares of common stock outstanding used in calculating the percentage for each listed person includes the shares of common stock underlying options held by such person that are, or within 60 days after the date of this prospectus will become, exercisable, but excludes shares of common stock underlying options held by any other person.

Except as indicated by footnote, the persons named in the table have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them, subject to community property laws where applicable.

Percentage of ownership prior to the offering is based on 22,663,868 shares of common stock outstanding on September 30, 2009 and percentage of ownership after the offering is based on 22,753,868 shares of common stock outstanding upon the completion of this offering (including an aggregate of 90,000 shares of common stock that will be issued upon the exercise of options held by certain selling stockholders and sold by them in this offering).

Unless otherwise indicated below, each person or entity has an address in care of our principal executive offices at 79 Fifth Avenue, 8th Floor, New York, New York 10003.

						Benefic	cial		
	Beneficial Ownership Prior to the					Ownership After the			
	Offering(1)					Offering			
		Options	Number of			Number of			
		Exercisable	Shares		Shares	Shares			
	Common	within	Beneficially		Being	Beneficially			
Name and Address of Beneficial Owner	Stock	60 days	Owned	Percent	Offered	Owned	Percent		
Executive Officers and Directors:									
Tarek A. Sherif(2)	1,240,206	17,080	1,257,286	5.5%	145,000	1,112,286	4.9%		
Glen M. de Vries	1,484,112	17,080	1,501,192	6.6%	145,000	1,356,192	6.0%		

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

Bruce D. Dalziel	37,000	124,015	161,015	*		161,015	*
Steven I. Hirschfeld	139,187	327,980	467,167	2.0%	75,000	392,167	1.7%
Lineene N. Krasnow	13,021	162,227	175,248	*	75,000	100,248	*
Carlos Dominguez	6,171	2,930	9,101	*		9,101	*
Neil M. Kurtz, M.D.	3,571	101,230	104,801	*	15,000	89,801	*
George McCulloch(3)	3,571	1,230	4,801	*		4,801	*
Peter Sobiloff(4)	4,812,013	2,460	4,814,473	21.2%	2,657,790	2,156,683	9.5%
Robert Taylor	11,171	2,930	14,101	*		14,101	*
All Executive Officers and Directors as a group (10							
persons)	7,746,452	757,932	8,504,384	36.3%	3,112,790	5,391,594	23.0%

						Benefi	cial
Beneficial Ownership Prior to the						Ownership A	After the
	Offering(1)					Offeri	ng
		Options	Number of			Number of	
		Exercisable	Shares		Shares	Shares	
	Common	within	Beneficially		Being	Beneficially	
Name and Address of Beneficial Owner	Stock	60 days	Owned	Percent	Offered	Owned	Percent
5% Stockholders:							
Entities affiliated with Insight Venture Partners(5)	4,812,013	2,460	4,814,473	21.2%	2,657,790	2,156,683	9.5%
EJD, LLC(6)	1,429,712		1,429,712	6.3%	635,000	794,712	3.5%

	Beneficial Ownership Prior to the Offering(1) Options Number of Exercisable Shares SI Common within Beneficially B					Benefic Ownership A Offeri Number of Shares Beneficially	After the
Name and Address of Beneficial Owner	Stock	60 days	Owned	Percent	Offered	Owned	Percent
Other Selling Stockholders:							
Stonehenge Capital Fund New York, LLC(7)	861,747		861,747	3.8%	721,500	140,247	*
The Steven Kaplan 2009 GRAT(8)	500,000		500,000	2.2%	250,000	250,000	1.1%
The Alexis Edwin Te 2009 GRAT(9)	240,000		240,000	1.1%	80,000	160,000	*
Silicon Alley Ventures, LP(10)	239,725		239,725	1.1%	200,710	39,015	*

^{*} Represents beneficial ownership of less than one percent (1.0%) of the outstanding common stock.

If the underwriters exercise their option to purchase additional shares in full, certain selling stockholders will sell a total of 750,000 additional shares in the offering, which shares shall be allocated as follows: 570,738 shares to entities affiliated with Insight Venture Partners, 140,247 shares to Stonehenge Capital Fund New York, LLC and 39,015 shares to Silicon Alley Ventures, LP.

- (1) Shares shown in the table above include shares held in the beneficial owner s name or jointly with others, or in the name of a bank, nominee or trustee for the beneficial owner s account.
- (2) Excludes 243,000 shares in process of being transferred to Mr. Sherif s former spouse pursuant to a domestic relations order.
- (3) Mr. McCulloch has granted all economic benefits relating to these shares of restricted stock and options to the Insight Partnerships, pro rata in accordance with these entities ownership of our common stock. Mr. McCulloch therefore disclaims beneficial ownership of these securities, except to the extent of his pecuniary interest therein. See footnote 5 below for more information regarding the Insight Partnerships.
- (4) Represents (i) 4,804,871 shares of common stock (ii) 7,142 shares of restricted stock and (iii) 2,460 options exercisable within 60 days of September 30, 2009 beneficially owned by the Insight Partnerships. All economic benefits relating to the shares of restricted stock and options have been granted to the Insight Partnerships, pro rata in accordance with these entities ownership of our common stock.

 Mr. Sobiloff therefore disclaims beneficial ownership of these securities, except to the extent of his pecuniary interest therein. See footnote 5 below for more information regarding the Insight Partnerships.
- (5) Consists of 3,798,687 shares held by Insight Venture Partners IV, L.P., 507,854 shares held by Insight Venture Partners (Cayman) IV, L.P., 468,145 shares held by Insight Venture Partners IV (Co-Investors), L.P. and 30,185 shares held by Insight Venture Partners IV (Fund B), L.P. Insight Venture Associates IV, L.L.C. is the general partner of each of the Insight partnerships (collectively, the Insight

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

Partnerships). Also includes (i) 7,142 shares of restricted stock and (ii) 2,460 options exercisable within 60 days of September 30, 2009, which were granted to Messrs. McCulloch and Sobiloff. Messrs. McCulloch and Sobiloff have granted all economic benefits relating to these shares of restricted stock and options to the Insight Partnerships, pro rata in accordance with those entities ownership of our common stock. Insight Holdings Group, L.L.C. (Insight Holdings) is the managing member of Insight Venture Associates IV, L.L.C. (Insight Associates IV), which in turn is the general partner of the Insight Partnerships. Jeffrey L.

98

Horing, Deven Parekh and Peter Sobiloff are the members of the board of managers of Insight Holdings. Because Messrs. Horing, Parekh and Sobiloff are the members of the board of managers of Insight Holdings, Insight Holdings is the managing member of Insight Associates IV and Insight Associates IV is the general partner of each of the Insight Partnerships, they have voting and dispositive power over these shares. The foregoing is not an admission by Insight Associates IV or Insight Holdings that it is the beneficial owner of the shares held by the Insight Partnerships. Each of Messrs. Horing, Parekh or Sobiloff disclaims beneficial ownership of the shares except to the extent of his pecuniary interests in these entities. The address of the Insight Partnerships is c/o Insight Venture Partners, 680 Fifth Avenue, New York, New York, 10019.

- (6) Dr. Edward F. Ikeguchi is a sole manager of EJD, LLC and has the power to exercise voting and investment control with respect to the shares held by EJD, LLC. The address of EJD, LLC is 36 Blossom Terrace, Larchmont, NY 10538.
- (7) Thomas J. Adamek, David B. Webber, John P. Witten and Barry G. Gowdy share voting and dispositive power with respect to the shares held by this selling stockholder. The address of Stonehenge Capital Fund is 152 West 57th Street, 20th Floor, New York, NY 10019.
- (8) Shares owned by a grantor retained annuity trust, or GRAT, for which Steven Kaplan serves as trustee with sole voting and dispositive power over such shares. The address of Mr. Kaplan is 301 Whippoorwill Road, Chappaqua, NY 10514.
- (9) Shares owned by a GRAT for which Alexis Edwin Te serves as trustee with sole voting and dispositive power over such shares. The address of Mr. Te is 31 Woodland Way, Manhasset, NY 11030.
- (10) Silicon Alley Venture Partners LLC is the general partner of Silicon Alley Ventures, LP and has voting and dispositive control with respect to the shares held by this selling stockholder. Stephen Brotman controls Silicon Alley Venture Partners LLC and has the sole power to vote and dispose of the shares held by this selling stockholder. The address for Silicon Alley Ventures, LP is c/o Greenhill SAVP, 300 Park Avenue, New York, NY 10022.

99

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

In addition to the director and executive compensation arrangements discussed above in Management, we have been a party to the following transactions since January 1, 2006, in which the amount involved exceeded or will exceed \$120,000, and in which any director, executive officer or holder of more than 5% of any class of our voting stock, or any member of the immediate family of or entities affiliated with any of them, had or will have a material interest.

Stock Repurchases

In October 2007, we entered into an agreement with certain executive officers and directors pursuant to which we repurchased an aggregate of 496,811 shares of our common stock at a price of \$12.077 per share (or \$5,999,986 in the aggregate). The transaction consisted of 149,194 shares repurchased from Tarek Sherif, chief executive officer and chairman; 149,288 shares repurchased from Glen de Vries, president and director; 49,041 shares repurchased from Steven Hirschfeld, executive vice president global sales & alliances; and 149,288 shares repurchased from EJD, LLC, an entity affiliated with Edward Ikeguchi, a former director. All of the repurchased shares were subsequently retired in June 2009.

Registration Rights

Holders of our senior preferred stock outstanding prior to the completion of our IPO are entitled to certain registration rights with respect to the common stock issued upon conversion of the senior preferred stock in connection with the IPO. In addition, holders of shares of our common stock issued in connection with our acquisition of Fast Track have certain registration rights with respect to such shares. See Description of Capital Stock Registration Rights.

Sale Right

Starting May 27, 2009, the holders of at least 66% of our Series D preferred stock outstanding prior to the completion of our IPO (or the common stock issued upon conversion of the Series D preferred stock) had the right to request that we effect a sale of all or substantially all of our assets or a merger or other business combination on terms satisfactory to the holders of a majority of the Series D preferred stock. This right terminated upon completion of our IPO.

Drag-along Right

Starting May 27, 2009, the holders of a majority of the outstanding shares of our common stock (on an as-converted basis), which majority included the holders of a majority of the Series D preferred stock that was outstanding prior to the completion of our IPO, had the right to require our other stockholders that are parties to the stockholders agreement referenced below to participate in a sale of all of their shares of our capital stock to an unaffiliated third-party purchaser. This right terminated upon completion of our IPO.

Change in Control

In connection with our IPO, we entered into transition agreements with certain of our executive officers. See Management Potential Payments Upon Termination of Employment or a Change of Control above.

Equity Awards

We have granted options to purchase shares of our common stock to our directors and executive officers. See Management Summary Compensation Table, Management Grants of Plan-Based Awards and Management Outstanding Equity Awards at December 31, 2008. At the completion of our IPO we granted equity awards to our executive officers and certain other employees in the form of restricted stock and stock options pursuant to our 2009 Long-Term Incentive Plan. See Management 2009 Plan Awards.

100

Note Purchase Agreement

In October 2007, we entered into an amended and restated note purchase agreement with our former preferred stockholder, Stonehenge Capital Fund New York, LLC, which provided for extending the maturity of our then outstanding Term Note A and Term Note B, which had an aggregate principal balance of \$4.0 million, and issuing a new Term Note C in the principal amount of \$8.0 million. In September 2008, we prepaid in full the outstanding principal and accrued interest on these notes with proceeds from our senior secured credit facility.

Stockholders Agreement

Pursuant to a stockholder agreement by and among us and certain of our stockholders, each of Messrs. Sobiloff, McCulloch, Goodman, Sherif, de Vries, Ikeguchi and Kurtz were elected to serve as a member of our board of directors. Messrs. Sobiloff and McCulloch were selected as representatives of our former Series D preferred stockholder as designated by Insight Venture Partners and Mr. Goodman was selected as a representative of our former Series C preferred stockholders as designed by Milestone Venture Partners. The stockholders agreement and all rights thereunder automatically terminated upon completion of our IPO.

Indemnification Agreements

In connection with our IPO, we entered into indemnification agreements with each of our directors and executive officers. These agreements, among other things, require us to indemnify each director and executive officer to the fullest extent permitted by Delaware law, including indemnification of expenses such as attorneys fees, judgments, fines and settlement amounts incurred by the director or executive officer in any action or proceeding, including any action or proceeding by or in right of us, arising out of the person s services as a director or executive officer.

Separation Agreement

On August 12, 2008, we entered into a Separation Agreement and General Release with Dr. Ikeguchi, our former chief medical officer and a former director, with respect to the termination of Dr. Ikeguchi s employment with us. Pursuant to the Separation Agreement, Dr. Ikeguchi received a payment of \$120,000 and at his option, we continued to make premium payments for COBRA benefits until July 31, 2009. In accordance with the agreement, Dr. Ikeguchi resigned from the board of directors effective immediately prior to the completion of our IPO, and we have reimbursed him for any out-of-pocket expenses incurred in the performance of his duties.

Customer Contract

In 2008, TorreyPines Therapeutics entered into a single-study arrangement to use our solutions. Mr. Kurtz, a member of our board of directors, was chief executive officer of TorreyPines Therapeutics but resigned from his position at TorreyPines Therapeutics during the third quarter of 2008 to assume a position with another company. We recognized a total of \$365,000 of application and professional services revenues from this customer for 2008. As of December 31, 2008, accounts receivable relating to this customer was \$5,000.

Policy for Approval of Related Person Transactions

Our board of directors reviews and approves transactions with directors, officers and holders of five percent or more of our voting securities and any member of the immediate family of and any entity affiliated with any of the foregoing persons. In connection with the completion of our IPO, we adopted a formal policy that requires all related party transactions to be approved by our audit committee or another independent body of our board of directors. In approving or rejecting any such proposal, our audit committee (or other independent committee) is to consider the relevant facts and circumstances available and deemed relevant to the committee, including, but not limited to, whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances and the extent of the related party s interest in the transaction.

101

DESCRIPTION OF CAPITAL STOCK

Our amended and restated certificate of incorporation authorizes us to issue up to 100,000,000 shares of common stock, \$0.01 par value, and 5,000,000 shares of preferred stock, \$0.01 par value, the rights and preferences of which may be established from time to time by our board of directors.

As of September 30, 2009, there were outstanding:

22,663,868 shares of common stock held by 284 stockholders of record;

3,083,104 shares of common stock issuable upon the exercise of outstanding stock options at a weighted average exercise price of \$8.42 per share; and

no shares of preferred stock.

All of our issued and outstanding shares of common stock are duly authorized, validly issued, fully paid and non-assessable. Our shares of common stock are not redeemable and do not have preemptive rights. We have not issued any shares of preferred stock.

The following description of our capital stock and provisions of our fourth amended and restated certificate of incorporation and amended and restated bylaws are summaries and are qualified by reference to the fourth amended and restated certificate of incorporation and the amended and restated bylaws which have been filed with the SEC.

Common Stock

Holders of common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights in connection with the election of directors. Accordingly, holders of a majority of the shares of common stock entitled to vote in any election of directors may elect all of the directors standing for election.

Subject to any preferential rights of any then outstanding preferred stock, holders of common stock are entitled to receive any dividends that may be declared by our board of directors out of legally available funds. In the event of our liquidation, dissolution or winding up, holders of common stock will be entitled to receive proportionately any of our assets remaining after the payment of liabilities and any preferential rights of our preferred stock then outstanding.

Holders of common stock have no preemptive, conversion, subscription, redemption or conversion rights. The outstanding shares of common stock are validly issued, and fully paid. The rights, preferences and privileges of holders of common stock will be subject to those of the holders of any shares of our preferred stock we may issue in the future.

Preferred Stock

Our board of directors may, from time to time, authorize the issuance of one or more classes or series of preferred stock without stockholder approval. Though we have no current intention to issue any shares of preferred stock, our certificate of incorporation permits us to issue up to 5,000,000 shares of preferred stock. Subject to the provisions of our certificate of incorporation and limitations prescribed by law, our board of directors is authorized to adopt resolutions to issue shares, establish the number of shares constituting any series, and provide or change the voting powers, designations, preferences and relative rights, qualifications, limitations or restrictions on shares of our preferred stock, including dividend rights, redemption rights, conversion rights and liquidation preferences, in each case without any action or vote by our stockholders.

102

TD1		C 1	. 1	1 1	CC .	.1	1		. 11 11	1		- 1	.1 *
The	issilance of	nreterred	stock ma	v adversel	v attect	the mo	hts of or	ir common	stockholders	hv	among	other	things
1110	issualice of	preferred	Stock IIIu	y uu veibei	y unicet	uic iig	1165 01 0	ai committe	otockiioidei s	Uy,	unions	Othici	umingo

restricting dividends on the common stock;

diluting the voting power of the common stock;

impairing the liquidation rights of the common stock; or

delaying or preventing a change in control without further action by the stockholders.

As a result of these or other factors, the issuance of preferred stock could have an adverse impact on the market price of our common stock.

Registration Rights

After the completion of this offering, the holders of approximately 2,154,223 shares of our common stock that were issued upon conversion of shares of our convertible preferred stock in connection with our IPO are entitled to certain registration rights. These registration rights include:

Piggyback Registration Rights. If we determine to register any of our securities under the Securities Act, either for our own account or for the account of others, the holders of registration rights are entitled to written notice of the registration and are entitled to include their shares of our common stock. The number of shares of our common stock requested to be registered may not be limited to less than 25% of the number of securities to be registered in the offering.

Demand Registration Rights. One or more holders of 30% or more of securities registrable under the registration rights agreement may demand us to use our best efforts to effect the expeditious registration of their shares of our common stock on up to two occasions. The demand registration rights became effective on May 27, 2009.

S 3 Registration. If we qualify for registration on Form S 3, holders of registration rights may also request a registration on Form S 3 at any time, and we are required to use our best efforts to effect the expeditious registration of their shares of our common stock.

We are also party to a registration rights agreement with certain former holders of shares of capital stock of Fast Track, which we acquired in March 2008. This agreement provides for unlimited piggyback registration rights to former holders of shares of Fast Track who hold 10,000 or more shares of our common stock on a fully-diluted, as-converted basis at the time we determine to register any of our securities under the Securities Act, either for our own account or for the account of others.

Under our registration rights agreements, we have agreed to pay all registration expenses, other than underwriting discounts and commissions, including reasonable fees and expenses of one independent counsel to the holders of registration rights.

All of these registration rights are subject to applicable conditions and limitations, including the right of the underwriters of an offering to limit the number of shares included in such registration.

Anti-takeover Effects of Certain Provisions of Our Certificate of Incorporation and Bylaws

Our certificate of incorporation contains provisions that could make it more difficult to acquire control of our company by means of a tender offer, open market purchases, a proxy contest or otherwise. A description of these provisions is set forth below.

103

Preferred Stock

We believe that the availability of the preferred stock under our certificate of incorporation provides us with flexibility in addressing corporate issues that may arise. Having these authorized shares available for issuance allows us to issue shares of preferred stock without the expense and delay of a special stockholders meeting. The authorized shares of preferred stock, as well as shares of common stock, are available for issuance without further action by our stockholders, unless action is required by applicable law or the rules of any stock exchange on which our securities may be listed. The board of directors has the power, subject to applicable law, to issue series of preferred stock that could, depending on the terms of the series, impede the completion of a merger, tender offer or other takeover attempt that some, or a majority, of the stockholders might believe to be in their best interests or in which stockholders might receive a premium for their stock over the then prevailing market price of the stock.

Advance Notice Procedure

Our bylaws provide an advance notice procedure for stockholders to nominate director candidates for election or to bring business before an annual meeting of stockholders. Only persons nominated by, or at the direction of, our board of directors or by a stockholder who has given proper and timely notice to our secretary prior to the meeting, will be eligible for election as a director. In addition, any proposed business other than the nomination of persons for election to our board of directors must constitute a proper matter for stockholder action pursuant to the notice of meeting delivered to us. For notice to be timely, it must be received by our secretary not less than 90 nor more than 120 calendar days prior to the first anniversary of the previous year s annual meeting (or if the date of the annual meeting is advanced more than 30 calendar days or delayed by more than 60 calendar days from the anniversary date of the previous year s annual meeting, not earlier than the 90th calendar day prior to such meeting or the 10th calendar day after public disclosure of the date of such meeting is first made). These advance notice provisions may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed or may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempt to obtain control of us.

Special Meetings of Stockholders

Our bylaws provide that special meetings of stockholders may be called only by our chairman of the board, chief executive officer, president or the board pursuant to a resolution adopted by a majority of the board.

Anti-Takeover Effects of Delaware Law

Section 203 of the Delaware General Corporation Law (DGCL) provides that, subject to exceptions specified therein, an interested stockholder of a Delaware corporation shall not engage in any business combination, including general mergers or consolidations or acquisitions of additional shares of the corporation, with the corporation for a three-year period following the time that such stockholder becomes an interested stockholder unless:

prior to such time, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;

upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced (excluding specified shares); or

on or subsequent to such time, the business combination is approved by the board of directors of the corporation and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least $66^{2}/3\%$ of the outstanding voting stock not owned by the interested stockholder.

104

Under Section 203, the restrictions described above also do not apply to specified business combinations proposed by an interested stockholder following the announcement or notification of one of specified transactions involving the corporation and a person who had not been an interested stockholder during the previous three years or who became an interested stockholder with the approval of a majority of the corporation s directors, if such transaction is approved or not opposed by a majority of the directors who were directors prior to any person becoming an interested stockholder during the previous three years or were recommended for election or elected to succeed such directors by a majority of such directors. The restrictions described above also do not apply to specified business combinations with a person who is an interested stockholder prior to the time when the corporation s common stock is listed on a national securities exchange, so these restrictions would not apply to a business combination with any person who was one of our stockholders prior to our IPO.

Except as otherwise specified in Section 203, an interested stockholder is defined to include:

any person that is the owner of 15% or more of the outstanding voting stock of the corporation, or is an affiliate or associate of the corporation and was the owner of 15% or more of the outstanding voting stock of the corporation at any time within three years immediately prior to the date of determination; and

the affiliates and associates of any such person.

Under some circumstances, Section 203 makes it more difficult for a person who is an interested stockholder to effect various business combinations with us for a three-year period.

Limitation on Liability and Indemnification Matters

Our certificate of incorporation limits the liability of our directors to the fullest extent permitted by Delaware law. The effect of these provisions is to eliminate the rights of our company and our stockholders, through stockholders derivative suits on behalf of our company, to recover monetary damages against a director for breach of fiduciary duty as a director, including breaches resulting from grossly negligent behavior. However, exculpation does not apply if the directors acted in bad faith, knowingly or intentionally violated the law, authorized illegal dividends or redemptions or derived an improper benefit from their actions as directors. In addition, our bylaws provide that we will indemnify our directors and officers to the fullest extent permitted by Delaware law.

In connection with our IPO, we entered into separate indemnification agreements with each of our directors and executive officers that are broader than the specific indemnification provisions contained in the DGCL. These indemnification agreements require us, among other things, to indemnify our directors and officers against liabilities that may arise by reason of their status or service as directors or officers.

In addition, we maintain directors and officers liability insurance to provide our directors and officers with insurance coverage for losses arising from claims based on breaches of duty, negligence, errors and other wrongful acts.

There is no currently pending material litigation or proceeding involving any of our directors or officers for which indemnification is sought.

Listing

Our common stock is listed on The NASDAQ Global Market under the symbol MDSO.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company.

105

SHARES ELIGIBLE FOR FUTURE SALE

Future sales of our common stock in the public market, or the availability of such shares for sale in the public market, could adversely affect market prices prevailing from time to time. As described below, only a limited number of shares will be available for sale shortly after this offering due to contractual and legal restrictions on resale. Nevertheless, sales of our common stock in the public market after such restrictions lapse, or the perception that those sales may occur, could adversely affect the prevailing market price at such time and our ability to raise equity capital in the future.

Based on the number of shares outstanding as of September 30, 2009, upon completion of this offering 22,753,868 shares of common stock will be outstanding, assuming no exercise of outstanding options other than those options exercised by certain selling stockholders for the purpose of selling shares in this offering and excluding:

2,993,104 shares of common stock issuable upon the exercise of outstanding stock options to purchase our common stock at a weighted average exercise price of \$8.66 per share;

1,781,768 shares of common stock reserved for future grants or awards from time to time under our 2009 Long-Term Incentive Plan; and

500,000 additional shares of common stock to be available for future grant under our 2009 Employee Stock Purchase Plan. Of the outstanding shares, all of the shares sold in our IPO and the shares held by non-affiliates for more than six months are, and all of the shares sold in this offering will be, freely tradable, except that any shares held by our affiliates, as that term is defined in Rule 144 under the Securities Act, may only be sold in compliance with the limitations described below.

The remaining 9,594,066 shares of common stock outstanding after this offering will be restricted as a result of securities laws or lock-up agreements as described below. Following the expiration of the lock-up period, all shares will be eligible for resale in compliance with Rule 144 or Rule 701 to the extent such shares have been released from any repurchase option that we may hold. Restricted securities—as defined under Rule 144 were issued and sold by us in reliance on exemptions from the registration requirements of the Securities Act. These shares may be sold in the public market only if registered pursuant to an exemption from registration, such as Rule 144 or Rule 701 under the Securities Act.

Rule 144

In general, under Rule 144 as currently in effect, a person (or persons whose shares are aggregated) who is deemed to be an affiliate of ours at the time of sale, or at any time during the preceding three months, and who has beneficially owned restricted shares for at least six months, is entitled to sell within any three-month period a number of shares that does not exceed the greater of 1% of the then outstanding shares (22,663,868 shares outstanding as of September 30, 2009) or the average weekly trading volume of shares during the four calendar weeks preceding such sale. Sales under Rule 144 are subject to certain manner of sale provisions, notice requirements and the availability of current public information about us. A person who has not been our affiliate at any time during the three months preceding a sale, and who has beneficially owned his shares for at least six months, is entitled under Rule 144 to sell such shares without regard to any manner of sale, notice provisions or volume limitations described above. Any such sales must comply with the public information provision of Rule 144.

Rule 701

Rule 701 of the Securities Act, as currently in effect, permits resales of shares in reliance upon Rule 144 but without compliance with some of the restrictions of Rule 144, including the holding period requirement. Most of our employees, officers, directors or consultants who purchased shares under a written compensatory plan or contract (such as our current stock option plans) may be entitled to rely on the resale provisions of Rule 701, but all holders of Rule 701 shares are required to wait until 90 days after the date of this prospectus before selling their shares.

106

Lock-up Agreements

The holders of 6,107,636 shares of common stock, including all of our officers, directors and the selling stockholders, have agreed that they will not offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock, enter into a transaction that would have the same effect, or enter into any swap, hedge or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of our common stock, whether any of these transactions are to be settled by delivery of our common stock or other securities, in cash or otherwise, or publicly disclose the intention to make any offer, sale, pledge or disposition, or to enter into any transaction, swap, hedge or other arrangement, without, in each case, the prior written consent of the representatives of the underwriters for a period of 90 days after the date of this prospectus. These agreements are described below under Underwriting.

In connection with our IPO, all of our directors and officers and substantially all of our stockholders signed lock-up agreements under which they agreed not to sell, transfer or dispose of, directly or indirectly, any shares of our common stock or any securities into or exercisable or exchangeable for shares of our common stock without the prior written consent of the underwriters of our IPO until December 21, 2009, subject to a possible extension under certain circumstances. The holders of 3,486,430 shares of common stock will not be subject to the new 90-day restricted period but are subject to lock-up agreements expiring December 21, 2009, subject to a possible extension under certain circumstances. These agreements are described below under Underwriting.

Registration Rights

After the completion of this offering the holders of approximately 2,154,223 shares of our common stock, or their transferees, are entitled to certain rights with respect to the registration of those shares under the Securities Act. For a description of these registration rights, please see Description of Capital Stock Registration Rights. After these shares are registered, they will be freely tradable without restriction under the Securities Act.

Registration of Shares in Connection with Long-Term Incentive Plan

On July 7, 2009, we filed a registration statement on Form S-8 under the Securities Act covering shares of common stock to be issued pursuant to our Amended and Restated 2000 Stock Option Plan, our 2009 Long-Term Incentive Plan, our 2009 Employee Stock Purchase Plan and the Fast Track Systems Inc. 1999 Incentive Stock Plan. The registration statement covered approximately 2,687,246 shares, 2,329,405 shares, 500,000 and 45,246 shares for the Amended and Restated 2000 Stock Option Plan, the 2009 Long-Term Incentive Plan, the 2009 Employee Stock Purchase Plan and the Fast Track Systems Inc. 1999 Incentive Stock Plan, respectively. The shares of common stock covered by the registration statement on Form S-8 are eligible for sale in the open market immediately, subject to complying with Rule 144 volume limitations applicable to affiliates, with applicable lock-up agreements, and with the vesting requirements and restrictions on transfer affecting any shares that are subject to restricted stock awards.

107

UNDERWRITING

Citigroup Global Markets Inc. and Credit Suisse Securities (USA) LLC are acting as joint book-running managers of the offering, and together with Jefferies & Company, Inc. and Needham & Company, LLC, are acting as representatives of the underwriters named below. Subject to the terms and conditions stated in the underwriting agreement dated the date of this prospectus, each underwriter named below has severally agreed to purchase, and the selling stockholders have agreed to sell to that underwriter, the number of shares of common stock set forth opposite the underwriter s name.

Underwriter
Citigroup Global Markets Inc.
Credit Suisse Securities (USA) LLC

Jefferies & Company, Inc.

Needham & Company, LLC

Total 5,000,000

The underwriting agreement provides that the obligations of the underwriters to purchase the shares included in this offering are subject to approval of legal matters by counsel and to other conditions. The underwriters are obligated to purchase all the shares of common stock (other than those covered by the over-allotment option described below) if they purchase any of the shares.

Shares sold by the underwriters to the public will initially be offered at the public offering price set forth on the cover of this prospectus. Any shares sold by the underwriters to securities dealers may be sold at a discount from the public offering price not to exceed \$ per share. The underwriters may allow, and dealers may reallow, a concession not to exceed \$ per share on sales to other dealers. If all the shares are not sold at the offering price, the underwriters may change the offering price and the other selling terms.

If the underwriters sell more shares than the total number set forth in the table above, the selling stockholders have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase up to 750,000 additional shares at the public offering price less the underwriting discount. The underwriters may exercise the option solely for the purpose of covering over-allotments, if any, in connection with this offering. To the extent the option is exercised, each underwriter must purchase a number of additional shares approximately proportionate to that underwriter s initial purchase commitment. Any shares issued or sold under the option will be issued and sold on the same terms and conditions as the other shares that are the subject of this offering.

We, our officers and directors, and the selling stockholders have agreed that, for a period of 90 days from the date of this prospectus, we and they will not, without the prior written consent of the representatives, dispose of or hedge any shares of common stock or any securities convertible into or exchangeable for our common stock. The representatives in their sole discretion may release any of the securities subject to these lock-up agreements at any time without notice. Notwithstanding the foregoing, if (i) during the last 17 days of the 90-day restricted period, we issue an earnings release or material news or a material event relating to our company occurs; or (ii) prior to the expiration of the 90-day restricted period, we announce that we will release earnings results during the 16-day period beginning on the last day of the 90-day restricted period, the restrictions described above shall continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event.

The shares are listed on The Nasdaq Global Market under the symbol MDSO.

108

The following table shows the underwriting discounts and commissions that the selling stockholders are to pay to the underwriters in connection with this offering. These amounts are shown assuming both no exercise and full exercise of the underwriters—over-allotment option.

	Stockho	olders
		Full
	No Exercise	Exercise
Per share	\$	\$
Total	\$	\$

Paid by Selling

In connection with the offering, the underwriters may purchase and sell shares of common stock in the open market. Purchases and sales in the open market may include short sales, purchases to cover short positions, which may include purchases pursuant to the over-allotment option, and stabilizing purchases.

Short sales involve secondary market sales by the underwriters of a greater number of shares than they are required to purchase in the offering.

Covered short sales are sales of shares in an amount up to the number of shares represented by the underwriters over-allotment option.

Naked short sales are sales of shares in an amount in excess of the number of shares represented by the underwriters over-allotment option.

Covering transactions involve purchases of shares either pursuant to the over-allotment option or in the open market after the distribution has been completed in order to cover short positions.

To close a naked short position, the underwriters must purchase shares in the open market after the distribution has been completed. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.

To close a covered short position, the underwriters must purchase shares in the open market after the distribution has been completed or must exercise the over-allotment option. In determining the source of shares to close the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option.

Stabilizing transactions involve bids to purchase shares so long as the stabilizing bids do not exceed a specified maximum. The underwriters also may impose a penalty bid. Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the underwriters, in covering short positions or making stabilizing purchases, repurchase shares originally sold by that syndicate member. Purchases to cover short positions and stabilizing purchases, as well as other purchases by the underwriters for their own accounts, may have the effect of preventing or retarding a decline in the market price of the shares. They may also cause the price of the shares to be higher than the price that would otherwise exist in the open market in the absence of these transactions. The underwriters may conduct these transactions on The NASDAQ Global Market, in the over-the-counter market or otherwise. If the underwriters commence any of these transactions, they may discontinue them at any time.

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

In addition, in connection with this offering, some of the underwriters (and selling group members) may engage in passive market making transactions in the shares on The NASDAQ Global Market, prior to the pricing and completion of the offering. Passive market making consists of displaying bids on The NASDAQ Global Market no higher than the bid prices of independent market makers and making purchases at prices no higher

109

than those independent bids and effected in response to order flow. Net purchases by a passive market maker on each day are limited to a specified percentage of the passive market maker s average daily trading volume in the shares during a specified period and must be discontinued when that limit is reached. Passive market making may cause the price of the shares to be higher than the price that otherwise would exist in the open market in the absence of those transactions. If the underwriters commence passive market making transactions, they may discontinue them at any time.

The underwriters have performed investment banking and advisory services for us from time to time for which they have received customary fees and reimbursement of expenses. The underwriters may, from time to time, engage in transactions with and perform services for us in the ordinary course of business for which they may receive customary fees and reimbursement of expenses.

A prospectus in electronic format may be made available on the websites maintained by one or more of the underwriters. The representatives may agree to allocate a number of shares to underwriters for sale to their online brokerage account holders. The representatives will allocate shares to underwriters that may make Internet distributions on the same basis as other allocations. In addition, shares may be sold by the underwriters to securities dealers who resell shares to online brokerage account holders.

We and the selling stockholders have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make because of any of those liabilities.

Notice to Prospective Investors in the European Economic Area

In relation to each member state of the European Economic Area that has implemented the Prospectus Directive (each, a relevant member state), with effect from and including the date on which the Prospectus Directive is implemented in that relevant member state (the relevant implementation date), an offer of shares described in this prospectus may not be made to the public in that relevant member state prior to the publication of a prospectus in relation to the shares that has been approved by the competent authority in that relevant member state or, where appropriate, approved in another relevant member state and notified to the competent authority in that relevant member state, all in accordance with the Prospectus Directive, except that, with effect from and including the relevant implementation date, an offer of securities may be offered to the public in that relevant member state at any time:

to any legal entity that is authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;

to any legal entity that has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than 43,000,000 and (3) an annual net turnover of more than 50,000,000, as shown in its last annual or consolidated accounts:

to fewer than 100 natural or legal persons (other than qualified investors as defined below) subject to obtaining the prior consent of the representatives for any such offer; or

in any other circumstances that do not require the publication of a prospectus pursuant to Article 3 of the Prospectus Directive. Each purchaser of shares described in this prospectus located within a relevant member state will be deemed to have represented, acknowledged and agreed that it is a qualified investor within the meaning of Article 2(1)(e) of the Prospectus Directive.

For purposes of this provision, the expression an offer to the public in any relevant member state means the communication in any form and by any means of sufficient information on the terms of the offer and the securities to be offered so as to enable an investor to decide to purchase or subscribe the securities, as the

Table of Contents

153

expression may be varied in that member state by any measure implementing the Prospectus Directive in that member state, and the expression Prospectus Directive means Directive 2003/71/EC and includes any relevant implementing measure in each relevant member state.

The sellers of the shares have not authorized and do not authorize the making of any offer of shares through any financial intermediary on their behalf, other than offers made by the underwriters with a view to the final placement of the shares as contemplated in this prospectus. Accordingly, no purchaser of the shares, other than the underwriters, is authorized to make any further offer of the shares on behalf of the sellers or the underwriters.

Notice to Prospective Investors in the United Kingdom

This prospectus is only being distributed to, and is only directed at, persons in the United Kingdom that are qualified investors within the meaning of Article 2(1)(e) of the Prospectus Directive that are also (i) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the Order) or (ii) high net worth entities, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (each such person being referred to as a relevant person). This prospectus and its contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other persons in the United Kingdom. Any person in the United Kingdom that is not a relevant person should not act or rely on this document or any of its contents.

Notice to Prospective Investors in France

Neither this prospectus nor any other offering material relating to the shares described in this prospectus has been submitted to the clearance procedures of the *Autorité des Marchés Financiers* or of the competent authority of another member state of the European Economic Area and notified to the *Autorité des Marchés Financiers*. The shares have not been offered or sold and will not be offered or sold, directly or indirectly, to the public in France. Neither this prospectus nor any other offering material relating to the shares has been or will be:

released, issued, distributed or caused to be released, issued or distributed to the public in France; or

used in connection with any offer for subscription or sale of the shares to the public in France. Such offers, sales and distributions will be made in France only:

to qualified investors (*investisseurs qualifiés*) and/or to a restricted circle of investors (*cercle restreint d investisseurs*), in each case investing for their own account, all as defined in, and in accordance with articles L.411-2, D.411-1, D.411-2, D.734-1, D.744-1, D.754-1 and D.764-1 of the French *Code monétaire et financier*;

to investment services providers authorized to engage in portfolio management on behalf of third parties; or

in a transaction that, in accordance with article L.411-2-II-1°-or-2°-or 3° of the French *Code monétaire et financier* and article 211-2 of the General Regulations (*Règlement Général*) of the *Autorité des Marchés Financiers*, does not constitute a public offer (*appel public à l épargne*).

The shares may be resold directly or indirectly, only in compliance with articles L.411-1, L.411-2, L.412-1 and L.621-8 through L.621-8-3 of the French *Code monétaire et financier*.

Notice to Prospective Investors in Hong Kong

The shares may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong), or (ii) to professional investors within the meaning of the Securities and

Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a prospectus within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong) and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to professional investors within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

Notice to Prospective Investors in Japan

The shares offered in this prospectus have not been registered under the Securities and Exchange Law of Japan. The shares have not been offered or sold and will not be offered or sold, directly or indirectly, in Japan or to or for the account of any resident of Japan, except (i) pursuant to an exemption from the registration requirements of the Securities and Exchange Law and (ii) in compliance with any other applicable requirements of Japanese law.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the SFA), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to compliance with conditions set forth in the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

shares, debentures and units of shares and debentures of that corporation or the beneficiaries rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:

to an institutional investor (for corporations, under Section 274 of the SFA) or to a relevant person defined in Section 275(2) of the SFA, or to any person pursuant to an offer that is made on terms that such shares, debentures and units of shares and debentures of that corporation or such rights and interest in that trust are acquired at a consideration of not less than S\$200,000 (or its equivalent in a foreign currency) for each transaction, whether such amount is to be paid for in cash or by exchange of securities or other assets, and further for corporations, in accordance with the conditions specified in Section 275 of the SFA;

where no consideration is or will be given for the transfer; or

where the transfer is by operation of law.

Table of Contents 156

112

LEGAL MATTERS

The validity of the shares of common stock offered by this prospectus will be passed upon for us by Fulbright & Jaworski L.L.P., New York, New York. The underwriters have been represented by Ropes & Gray LLP, Boston, Massachusetts.

EXPERTS

The consolidated financial statements of Medidata Solutions, Inc. and subsidiaries as of December 31, 2007 and 2008 and for each of the three years in the period ended December 31, 2008 included in this prospectus and the related financial statement schedule included elsewhere in the registration statement have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report appearing herein (which report expresses an unqualified opinion on the consolidated financial statements and financial statement schedule and includes an explanatory paragraph referring to the restatement of our consolidated financial statements as of December 31, 2007 and 2008 and for each of the three years in the period ended December 31, 2008), and have been so included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

The financial statements of Fast Track Systems, Inc. as of December 31, 2006 and 2007, and for each of the two years in the period ended December 31, 2007 included in this prospectus and related registration statement have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report appearing herein, and have been so included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act to register the shares offered by this prospectus by the selling stockholders. The term registration statement means the original registration statement and any and all amendments thereto, including the schedules and exhibits to the original registration statement or any amendment. This prospectus is part of that registration statement. This prospectus does not contain all of the information set forth in the registration statement or the exhibits to the registration statement. For further information with respect to us and the shares we are offering pursuant to this prospectus, you should refer to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract, agreement or other document referred to are not necessarily complete, and you should refer to the copy of that contract or other document filed as an exhibit to the registration statement. You may read or obtain a copy of the registration statement at the SEC s public reference room at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the public reference room and its copy charges by calling the SEC at 1-800-SEC-0330. The SEC maintains a website that contains registration statements, reports, proxy information statements and other information regarding registrants that file electronically with the SEC. The address of the website is www.sec.gov.

We are subject to the information and periodic reporting requirements of the Exchange Act and, in accordance with this law, we file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information are available for inspection and copying at the SEC spublic reference facilities and the website of the SEC referred to above.

We intend to furnish holders of the shares of common stock offered in this offering with written annual reports containing audited consolidated financial statements together with a report by our independent certified public accountants, and make available to our stockholders quarterly reports for the first three quarters of each year containing unaudited interim financial statements.

113

MEDIDATA SOLUTIONS, INC.

INDEX TO FINANCIAL STATEMENTS

	PAGE
UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS OF MEDIDATA SOLUTIONS INC. AND SUBSIDIARIES	
Condensed Consolidated Balance Sheet as of September 30, 2009	F-2
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2008 (AS RESTATED) AND 2009	F-3
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY (DEFICIT) FORTHE NINE MONTHS ENDED SEPTEMBER 30, 2008 (AS RESTATED)	
<u>AND 2009</u>	F-4
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2008 (AS RESTATED) AND 2009	F-5
Notes to Condensed Consolidated Financial Statements	F-7
CONSOLIDATED FINANCIAL STATEMENTS OF MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES	
Report of Independent Registered Public Accounting Firm	F-21
Consolidated Balance Sheets as of December 31, 2007 and 2008 (As Restated)	F-22
Consolidated Statements of Operations for the Years Ended December 31, 2006, 2007 and 2008 (As Restated)	F-24
Consolidated Statements of Stockholders Deficitor the Years Ended December 31, 2006, 2007 and 2008 (As Restated)	F-25
CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2006, 2007 AND 2008 (AS RESTATED)	F-26
Notes to Consolidated Financial Statements	F-27
Schedule II Valuationand Qualifying Accounts	F-56
FINANCIAL STATEMENTS OF FAST TRACK SYSTEMS, INC.	
Report of Independent Registered Public Accounting Firm	F-57
BALANCE SHEETS AS OF DECEMBER 31, 2006 AND DECEMBER 31, 2007	F-58
STATEMENTS OF OPERATIONS FOR THE YEARS ENDED DECEMBER 31, 2006 AND 2007	F-59
STATEMENTS OF STOCKHOLDERS DEFICIFOR THE YEARS ENDED DECEMBER 31, 2006 AND 2007	F-60
STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2006 AND 2007	F-61
NOTES TO FINANCIAL STATEMENTS	F-62

F-1

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

UNAUDITED CONDENSED CONSOLIDATED BALANCE SHEET

AS OF SEPTEMBER 30, 2009

(Amounts in thousands, except per share data)

ASSETS	
CURRENT ASSETS:	
Cash and cash equivalents	\$ 86,900
Accounts receivable, net of allowance for doubtful accounts of \$400	19,566
Prepaid commission expense	3,270
Prepaid expenses and other current assets	2,906
Deferred income taxes	303
Deterred income taxes	303
Total current assets	112,945
Restricted cash	532
Furniture, fixtures and equipment, net	11,840
Goodwill	9,799
Intangible assets, net	4,860
Other assets	481
TOTAL ASSETS	\$ 140,457
LIABILITIES AND STOCKHOLDERS EQUITY	
CURRENT LIABILITIES:	
Accounts payable	\$ 1,787
Accrued payroll and other compensation	8,668
Accrued expenses and other	3,853
Deferred revenue	81,636
Capital lease obligations	3,508
Total current liabilities	99,452
NONCURRENT LIABILITIES:	
Deferred revenue, less current portion	22,603
Capital lease obligations, less current portion	1,080
Other long-term liabilities	446
Total noncurrent liabilities	24,129
Total liabilities	123,581
COMMITMENTS AND CONTINGENCIES	
STOCKHOLDERS EQUITY:	
Common stock, par value \$0.01 per share; 100,000 shares authorized, 22,664 shares issued and outstanding.	227
Additional paid-in capital	111,942
Accumulated other comprehensive loss	(198)
Accumulated deficit	(95,095)
	14.0=4
Total stockholders equity	16,876

TOTAL LIABILITIES AND STOCKHOLDERS EQUITY

\$ 140,457

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

F-2

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2008 AND 2009

(Amounts in thousands, except per share data)

	Septe	nths Ended mber 30,
Revenues	2008(1)	2009
Application services	\$ 52,029	\$ 74,145
Professional services	22,513	28,702
1 10 10 0 0 1 1 1 0 0 0	22,616	20,702
Total revenues	74,542	102,847
Cost of revenues(2)(3)	74,342	102,647
Application services	14,590	17,521
Professional services	23,815	19,910
Totessional services	23,013	17,710
Total cost of revenues	38,405	37,431
Gross profit	36,137	65,416
Gioss pioni	30,137	05,410
OPERATING COSTS AND EXPENSES:		
Research and development(2)	14,632	16,894
Sales and marketing(2)(3)	17,654	20,167
General and administrative(2)	20,047	22,672
Total operating costs and expenses	52,333	59,733
OPERATING (LOSS) INCOME	(16,196)	5,683
INTEREST AND OTHER EXPENSE (INCOME):		
Interest expense	1,493	1,747
Interest income	(99)	(73)
Other income, net	(212)	(36)
Total interest and other expense, net	1,182	1,638
(LOSS) INCOME BEFORE INCOME TAXES	(17,378)	4,045
PROVISION FOR INCOME TAXES	481	602
NET (LOSS) INCOME	\$ (17,859)	\$ 3,443
(+ (=1,9=5)	7 2,112
(LOSS) EARNINGS PER SHARE:		
Basic	\$ (2.72)	\$ 0.26
Busic	Ψ (2.72)	Ψ 0.20
Diluted	\$ (2.72)	\$ 0.17
WEIGHTED AVERAGE COMMON SHARES OUTSTANDING:		
Basic	6,712	12,318
Diluted	6,712	19,693

⁽¹⁾ As restated, see Note 2, Restatement of Consolidated Financial Statements, to the condensed consolidated financial statements.

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

(2) Stock-based compensation expense included in cost of revenues and operating costs and expenses is as follows:

Total amortization of intangible assets

Cost of revenues	\$ 210	\$ 280
Research and development	334	397
Sales and marketing	470	844
General and administrative	1,221	1,907
Total stock-based compensation	\$ 2,235	\$ 3,428
(3) Amortization expense of intangible assets included in cost of revenues and operating costs and expenses is as follows:		
Cost of revenues	\$ 826	\$ 1,262
Sales and marketing	54	108

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

\$ 880

\$ 1,370

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

${\bf UNAUDITED\ CONDENSED\ CONSOLIDATED\ STATEMENTS\ OF\ STOCKHOLDERS\quad EQUITY\ (DEFICIT)}$

FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2008 AND 2009

(Amounts in thousands, except per share data)

	Seri Conve Preferre	ertib	le	Commo	n St	ock		lditional Paid-in	Treasu	ry Stock	Comp	mulated Other orehensiv ocome	ve	cumulated	
	Shares	An	nount	Shares	An	ount		Capital	Shares	Amount		Loss)		Deficit	Total
BALANCE January 1, 2008								•			Ì	ĺ			
(As previously reported)	2,385	\$	24	6,571	\$	66	\$	2,288	497	\$ (6,000) \$	65	\$	(35,406)	\$ (39,023)
Prior period adjustments														(38,865)	(38,865)
BALANCE January 1, 2008															
(As Restated(1))	2,385		24	6,571		66		2,288	497	(6,000)	65		(74,271)	(77,888)
Comprehensive loss:															
Net loss(1)														(17,859)	(17,859)
Foreign currency translation adjustment												(163)			(163)
Total comprehensive loss(1)												(163)		(17,859)	(18,022)
•												, ,			
Common stock issuance for acquisition				864		8		16,987							16,995
Stock options and warrants exchanged in				004		O		10,707							10,773
connection with acquisition								459							459
Stock options exercised				96		1		59							60
Stock-based compensation				, ,				2,235							2.235
Accrued preferred stock dividends								(336)							(336)
Accretion of preferred stock issuance								()							(0.0.0)
costs								(38)							(38)
BALANCE September 30, 2008(1)	2,385	\$	24	7,531	\$	75	\$	21,594	497	\$ (6,000) \$	(98)	\$	(92,130)	\$ (76,535)
BALANCE January 1, 2009	2,385	\$	24	7,532	\$	75	\$	22,433	497	\$ (6,000) \$	(389)	\$	(92,543)	\$ (76,400)
Comprehensive income:	2,303	Ψ	27	1,332	Ψ	13	Ψ	22,733	771	Ψ (0,000) ψ	(307)	Ψ	(72,343)	\$ (70,400)
Net income														3,443	3,443
Foreign currency translation adjustment												191		3,113	191
r oreign currency transaction adjustment												1,71			
T-4-1												191		2 442	2 (24
Total comprehensive income												191		3,443	3,634
Net proceeds from initial public offering				6,300		63		75,168							75,231
Conversion of convertible preferred															
stock to common stock	(2,385)		(24)	9,015		90		11,140							11,206
Retirement of treasury stock				(497)		(5)			(497)	6,000				(5,995)	
Stock options exercised				17		1		19							20
Stock-based compensation						_		3,428							3,428
Restricted stock awards granted				297		3		(3)							(222)
Accrued preferred stock dividends								(222)							(222)
Accretion of preferred stock issuance								(0.1)							(21)
costs								(21)							(21)
BALANCE September 30, 2009		\$		22,664	\$	227	\$	111,942		\$	\$	(198)	\$	(95,095)	\$ 16,876

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

(1) As restated, see Note 2, Restatement of Consolidated Financial Statements , to the unaudited condensed consolidated financial statements.

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

F-4

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2008 AND 2009

(Amounts in thousands)

	Nine Months End 2008(1)	ed September 30, 2009
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net (loss) income	\$ (17,859)	\$ 3,443
Adjustments to reconcile net (loss) income to net cash provided by operating activities:		
Depreciation and amortization	6,470	7,810
Stock-based compensation	2,235	3,428
Write-off of acquired research and development costs	700	
Deferred income taxes		42
Amortization of debt issuance costs	181	420
Changes in operating assets and liabilities:		
Accounts receivable	(2,470)	5,632
Prepaid commission expense	(817)	60
Prepaid expenses and other current assets	326	(212)
Other assets	37	(54)
Accounts payable	(4,769)	(885)
Accrued payroll and other compensation	1,721	766
Accrued expenses and other	1,692	632
Deferred revenue	19,971	2,618
Other long-term liabilities	125	7
Net cash provided by operating activities	7,543	23,707
CASH FLOWS FROM INVESTING ACTIVITIES: Purchases of furniture, fixtures and equipment	(2,913)	(3,442)
Decrease in restricted cash		13
Fast Track acquisition related costs	(625)	
Cash and cash equivalents acquired through acquisition	1,049	
Net cash used in investing activities	(2,489)	(3,429)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from exercise of stock options	60	20
Repayment of obligations under capital leases	(3,059)	(3,658)
Proceeds from initial public offering, net of underwriting discounts and commissions		82,026
Payment of costs associated with initial public offering	(1,773)	(4,288)
Payment of preferred stock accumulated accrued dividends		(2,282)
Proceeds from debt obligation	15,000	
Repayment of debt obligation	(10,958)	(15,000)
Payment of debt issuance costs	(552)	
Net cash (used in) provided by financing activities	(1,282)	56,818
NET INCREASE IN CASH AND CASH EQUIVALENTS	3,772	77,096
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	(39)	20
CASH AND CASH EQUIVALENTS Beginning of period	7,746	9,784

CASH AND CASH EQUIVALENTS End of period

\$ 11,479

\$ 86,900

F-5

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED)

FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2008 AND 2009

(Amounts in thousands)

		e Months E 008(1)	•	mber 30, 2009
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:	_	000(1)		_003
Cash paid during the period for:				
Interest	\$	1,243	\$	1,320
Income taxes	\$	397	\$	739
NONCASH ACTIVITIES:				
Furniture, fixtures and equipment acquired through capital lease obligations	\$	2,921	\$	1,186
Furniture, fixtures and equipment acquired but not yet paid for at period-end	\$	488	\$	222
Accrued costs associated with initial public offering	\$	455	\$	4
Conversion of convertible redeemable preferred stock to common stock	\$		\$	11,206
Accrued preferred stock dividends	\$	336	\$	
Accretion of preferred stock issuance costs	\$	38	\$	21
Common stock issuance for acquisition	\$	16,995	\$	
Stock options and warrants exchanged in connection with acquisition	\$	459	\$	

⁽¹⁾ As restated, see Note 2, Restatement of Consolidated Financial Statements , to the unaudited condensed consolidated financial statements.

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

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2008 AND 2009

1. ORGANIZATION

Medidata Solutions, Inc. (Medidata or the Company) provides hosted clinical development solutions that enhance the efficiency of its customers clinical development processes and optimize their research and development investments. The Company s solutions allow its customers to achieve clinical results by streamlining the design, planning and management of key aspects of the clinical development process, including protocol development, contract research organization negotiation, investigator contracting, the capture and management of clinical trial data and the analysis and reporting of that data on a worldwide basis.

2. RESTATEMENT OF CONSOLIDATED FINANCIAL STATEMENTS

Subsequent to the issuance of the 2008 consolidated financial statements, the Company reviewed its practice regarding the timing of revenue recognition. Specifically, the Company examined its treatment of certain customer arrangements in which application services and professional services were sold in the same single-study or multi-study arrangement.

Application services include software licenses that provide the customer with a right to use the software, as well as hosting and other support services, to be provided over a specific term. Professional services include various offerings that customers have the ability to utilize on an as-needed basis.

Historically, when application services and professional services were sold in the same single-study or multi-study arrangement, the Company allocated arrangement consideration to professional services based on fair value and recognized such professional services revenues as services were performed. The remaining arrangement consideration was allocated to application services and recognized as revenue ratably over the term of the arrangement, beginning with the commencement of the arrangement term, which correlates with the activation of the hosting services, assuming all other revenue recognition criteria were met. This accounting practice assumed that application services had been delivered upon the activation of the hosting services, and that professional services were delivered at various times subsequent to the activation of the hosting services, during the term of the arrangement.

However, given that the Company has a continuing obligation to provide hosting services throughout the arrangement term, the Company is not able to determine fair value for hosting services, and since professional services are performed at various times during the term of an arrangement, the Company determined that recognition of application services and professional services as a combined single unit of accounting is appropriate. As a result, when application services and professional services are sold in the same single-study or multi-study arrangement, the related revenues are recognized ratably beginning with the commencement of the arrangement term, assuming all other revenue recognition criteria are met. The restatement resulted in the deferral to future periods of \$50.9 million of revenues previously recognized through September 30, 2008.

For arrangements where revenue is recognized over the relevant contract period, the Company continues to capitalize the related paid sales commissions and recognizes these commissions as expense as it recognizes the related revenue. As a result of the restatement of revenues, the Company adjusted the timing of commission expense to correlate with its restated revenues in each restated period. Sales commission expense is captured as a component of sales and marketing in the Company s operating costs and expenses.

In addition, the Company made a correction to the condensed consolidated statement of cash flows for the nine months ended September 30, 2008 to appropriately reflect all costs accrued associated with the initial public offering.

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2008 AND 2009

As a result of the above, the Company has restated its consolidated statements of operations, stockholders deficit and cash flows for the nine months ended September 30, 2008 presented in these condensed consolidated financial statements.

A summary of the significant effects of the restatement is as follows (in thousands, except per share data):

	Nine Mon As	Nine Months Ended September 30, 2008 As			
	Previously Reported	Restatement Adjustments	As Restated		
Condensed Consolidated Statement of Operations:					
Application services revenues	\$ 54,446	\$ (2,417)	\$ 52,029		
Professional services revenues	30,353	(7,840)	22,513		
Total revenues	84,799	(10,257)	74,542		
Gross profit	46,394	(10,257)	36,137		
Sales and marketing	18,095	(441)	17,654		
Total operating cost and expenses	52,774	(441)	52,333		
Operating loss	(6,380)	(9,816)	(16,196)		
Loss before income taxes	(7,562)	(9,816)	(17,378)		
Net loss	(8,043)	(9,816)	(17,859)		
Basic and diluted loss per share	(1.25)	(1.47)	(2.72)		
Condensed Consolidated Statement of Cash Flow:					
Cash flows from operating activities:					
Net loss	(8,043)	(9,816)	(17,859)		
Changes in operating assets and liabilities:	` ' '	, i	, , ,		
Prepaid commission expense	(376)	(441)	(817)		
Accounts payable	(4,408)	(361)	(4,769)		
Accrued expenses and other	1,786	(94)	1,692		
Deferred revenue	9,714	10,257	19,971		
Net cash provided by operating activities	7,998	(455)	7,543		
Cash flows from financing activities:					
Payment of costs associated with initial public offering	(2,228)	455	(1,773)		
Net cash used in financing activities	(1,737)	455	(1,282)		
Noncash activities:					
Accrued costs associated with initial public offering		455	455		

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Company s significant accounting policies as of September 30, 2009 are similar to those at December 31, 2008, which are included elsewhere in this prospectus.

Basis of Presentation The accompanying interim condensed consolidated balance sheet as of September 30, 2009, the condensed consolidated statements of operations for the nine months ended September 30, 2008 and 2009, the condensed consolidated statements of stockholders equity (deficit) for the nine months ended September 30, 2008 and 2009, and the condensed consolidated statements of cash flows for the nine months ended September 30, 2008 and 2009 are unaudited and have been prepared in accordance with accounting principles generally accepted in

F-8

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2008 AND 2009

the United States of America (GAAP) and applicable rules and regulations of the SEC for interim financial reporting. Accordingly, certain information and footnote disclosures have been condensed or omitted pursuant to SEC rules that would ordinarily be required by GAAP for complete financial statements. These unaudited interim condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and accompanying notes thereto for the years ended December 31, 2006, 2007 and 2008 included elsewhere in this prospectus.

The unaudited interim condensed consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements and, in the opinion of management, reflect all adjustments consisting of normal recurring accruals considered necessary to present fairly the Company s financial position as of September 30, 2009 and results of its operations for the nine months ended September 30, 2008 and 2009, and cash flows for the nine months ended September 30, 2008 and 2009. The results of operations for the nine months ended September 30, 2009 are not necessarily indicative of the results that may be expected for the year ending December 31, 2009.

Prepaid Commission Expense For arrangements where revenue is recognized over the relevant contract period, the Company capitalizes related sales commissions that have been paid and recognizes these expenses over the period the related revenue is recognized. Commissions are payable to the Company s sales representatives upon payment from the customer. The Company amortized prepaid commissions of \$3.3 million and \$4.4 million for the nine months ended September 30, 2008 and 2009, respectively, which are included within sales and marketing expense in the condensed consolidated statements of operations.

Income Taxes The Company uses the asset and liability method of accounting for income taxes, as prescribed by Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 740, Income Taxes, which recognizes deferred tax assets and liabilities for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized.

In addition, the Company follows ASC 740-10 for the determination of whether tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements. Under ASC 740-10, the Company may recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position.

For the provision for income taxes at interim periods, the Company follows ASC 740-270, *Income Taxes Interim Reporting*, and has developed an estimate of the annual effective tax rate based upon the facts and circumstances known at the time. The Company s effective tax rate is based on expected income, statutory rates and permanent differences applicable to the Company in the various jurisdictions in which the Company operates.

Stock-Based Compensation The Company follows ASC 718, Compensation Stock Compensation, to account for all of its stock-based compensation plans. The fair value of each option grant is estimated on the date of grant using the Black-Scholes pricing model. The Company estimates its future stock price volatility based upon observed option-implied volatilities for a group of peer companies, taking into account the stage of the Company as compared to its peers. As a result of the Company s initial public offering (IPO) (see Note 4), the Company also considers the closing prices of its publicly traded stock as a factor in estimating total volatility. Management

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2008 AND 2009

believes this is the best estimate of the expected volatility over the weighted-average expected life of its option grants. The Company estimates its weighted-average useful life based on the likely date of exercise as opposed to the actual life of the options. The risk-free interest rate is based on the United States Treasury yield curve in effect at the time of the option grant with a maturity tied to the expected life of the options. No dividends are expected to be declared by the Company at this time. The fair value of each nonvested restricted stock award grant is measured as if the nonvested restricted stock was vested and issued on the grant date. Prior to the IPO, the Company used an independent third-party specialist to perform the valuation of its common stock as part of the stock options calculations. The fair value of all stock-based compensation awards is amortized to expense on a straight-line basis over the vesting period.

Indemnifications The Company indemnifies its customers against claims that software or documentation purchased from or made available by the Company infringes upon a copyright, patent or the proprietary rights of others. Such indemnification provisions are disclosed in accordance with ASC 460-10-50-4, Disclosure About a Guarantor s Obligation, as further interpreted by ASC 460-10-55-31 34. In the event of a claim, the Company agrees to obtain the rights for continued use of the software for the customer, to replace or modify the software or documentation to avoid such claim or to provide a credit to the customer for the unused portion of the software license. A liability may be recognized under ASC 450-20, Loss Contingencies, if information prior to the issuance of the consolidated financial statements indicates that it is probable that a liability has been incurred at the balance sheet date and the amount of the loss can be reasonably estimated.

Segment Information As defined by ASC 280, *Segment Reporting*, the Company operates as a single segment, as management makes operating decisions and assesses performance based on one single operating unit. The Company recorded revenues for the nine months ended September 30, 2008 and 2009 in the following geographic areas, based on the country in which revenues were generated (in thousands):

		nths Ended nber 30,
	2008	2009
Revenues:		
United States of America	\$ 50,051	\$ 68,675
Japan	7,329	10,859
United Kingdom	7,686	8,668
Other	9,476	14,645
Total	\$ 74,542	\$ 102,847

The following table summarizes long-term assets by geographic area as of September 30, 2009 (in thousands):

	Sep	ptember 30, 2009
Long-term assets:		
United States of America	\$	26,177
United Kingdom		953
Japan		382
Total	\$	27,512

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

Recently Issued Accounting Pronouncements In December 2007, the FASB issued Statement of Financial Accounting Standards (SFAS) No. 141(R), *Business Combinations*, (currently under ASC 805), and SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements an amendment of ARB No. 51*, (currently

F-10

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2008 AND 2009

under ASC 810-10-65-1). SFAS No. 141(R) is required to be adopted concurrently with SFAS No. 160 and is effective for business combination transactions for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. Early adoption is prohibited. Application of SFAS No. 141(R) and SFAS No. 160 is required to be adopted prospectively, except for certain provisions of SFAS No. 141(R) and SFAS No. 160, which are required to be adopted retrospectively. Business combination transactions accounted for before adoption of SFAS No. 141(R) should be accounted for in accordance with SFAS No. 141, *Business Combinations*, and that accounting previously completed under SFAS No. 141 should not be modified as of or after the date of adoption of SFAS No.141(R). The Company adopted SFAS No. 141(R) and SFAS No. 160 on January 1, 2009 and the adoption did not have an impact on the Company s results of operations, financial position and cash flows.

In May 2009, the FASB issued SFAS No. 165, *Subsequent Events*, (currently under ASC 855-10), which provides guidance on management s assessment of subsequent events and establishes general standards of accounting for and disclosure of events that occur after the balance sheet date but before financial statements are issued or are available to be issued. SFAS No. 165 is effective prospectively for interim or annual financial periods ended after June 15, 2009. The Company adopted SFAS No. 165 in the second quarter of 2009. The Company has evaluated the subsequent events through December 2, 2009, the filing date of these condensed consolidated financial statements in the registration statement of which this prospectus forms a part.

In June 2009, the FASB issued SFAS No. 166, *Accounting for Transfers of Financial Assets an amendment of SFAS No. 140*, and SFAS No. 167, *Amendment to FASB Interpretation No. 46(R)*. SFAS No. 166 amends the derecognition guidance and eliminates the exemption from consolidation for qualifying special-purpose entities (QSPEs) in ASC 860, *Transfer and Servicing*. As a result, a transferor will need to evaluate all existing QSPEs to determine whether they must now be consolidated in accordance with SFAS No.167, which amends the consolidation guidance applicable to variable interest entities. The amendments will significantly affect the overall consolidation analysis under ASC 810-10, *Consolidation*, and all entities and enterprises currently within the scope of ASC 810-10, as well as QSPEs that are currently excluded from the scope of ASC 810-10. SFAS No. 166 is effective for financial asset transfers occurring after the beginning of an entity s first fiscal year that begins after November 15, 2009. SFAS No. 167 is effective as of the beginning of the first fiscal year that begins after November 15, 2009. The adoption of these statements is not expected to have a material impact on the Company s results of operations, financial position and cash flows.

In June 2009, the FASB issued SFAS No. 168, *The FASB Accounting Standards Codification and the Hierarchy of Generally Accepted Accounting Principles a replacement of SFAS No. 162*, (currently under ASC 105-10). SFAS No. 168 establishes the ASC as the source of authoritative accounting principles recognized by the FASB to be applied by nongovernmental entities in the preparation of financial statements in conformity with GAAP. Rules and interpretive releases of the SEC under authority of federal securities laws are also sources of authoritative GAAP for SEC registrants. SFAS No. 168 is effective for financial statements issued for interim and annual periods ending after September 15, 2009. The Company adopted SFAS No. 168 in the third quarter of 2009 and quoted the accounting literature references contained in these condensed consolidated financial statements in accordance with the ASC.

In October 2009, the FASB issued Accounting Standards Update (ASU) No. 2009-13, *Multiple-Deliverable Revenue Arrangements*. ASU No. 2009-13 amends the current guidance on arrangements with multiple deliverables under ASC 605-25, *Revenue Recognition Multiple-Element Arrangements*, to (a) eliminate the separation criterion that requires entities to establish objective and reliable evidence of fair value for undelivered elements; (b) establish a selling price hierarchy to help entities allocate arrangement consideration to the separate units of account;

F-11

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2008 AND 2009

(c) eliminate the residual allocation method which will be replaced by the relative selling price allocation method for all arrangements; and (d) significantly expand the disclosure requirements. ASU No. 2009-13 is effective for new or materially modified arrangements in fiscal years beginning on or after June 15, 2010. Early adoption is permitted. If early adoption is elected and the period of adoption is not the beginning of the fiscal year, retrospective application from the beginning of the fiscal year of adoption and additional disclosure are required. Retrospective application for all prior periods presented in the financial statements is also permitted, but not required. The Company is currently evaluating the impact, if any, of these provisions of ASU No. 2009-13 on our consolidated financial statements.

In October 2009, the FASB also issued ASU No. 2009-14, *Certain Revenue Arrangements that Include Software Elements*. ASU No. 2009-14 amends the scoping guidance for software arrangements under ASC 985-605, *Software Revenue Recognition*, to exclude tangible products that contain software elements and nonsoftware elements that function together to interdependently deliver the product s essential functionality. Such tangible products being excluded from ASU No. 2009-14 will instead fall under the scope of ASU No. 2009-13. The FASB also provided several considerations and examples for entities applying this guidance. The effective date for ASU No. 2009-14 is consistent with ASU No. 2009-13 as stated above. The Company is currently evaluating the impact, if any, of these provisions of ASU No. 2009-14 on our consolidated financial statements.

4. STOCKHOLDERS EQUITY

In January 2009, the Company amended its certificate of incorporation to increase the authorized common stock by 5.0 million shares to 25.0 million shares. As part of the amendment, the Company also increased the authorized shares to provide for an additional 0.5 million shares under the 2000 Stock Option Plan to approximately 3.9 million shares.

In June 2009, the Company completed an IPO, issuing 6.3 million shares of common stock at a public offering price of \$14.00 per share. As a result of the offering, the Company received net proceeds of \$75.2 million, after deducting underwriting discounts and commissions of \$6.2 million and offering expenses of \$6.8 million. In addition, the underwriters exercised in full their over-allotment option to purchase an additional 0.9 million shares of common stock from certain selling stockholders. The Company did not receive any proceeds from the sale of shares by the selling stockholders.

As a result of the IPO, all outstanding convertible preferred stock was automatically converted into 9.0 million shares of common stock. In addition, the Company paid out all accumulated accured dividends of \$2.3 million to preferred stockholders at conversion.

Upon completion of the IPO, the fourth amended and restated certificate of incorporation was filed to increase the Company s authorized capital stock to 105.0 million shares, comprised of 100.0 million shares of common stock and 5.0 million shares of preferred stock.

In June 2009, the Company also retired approximately 0.5 million shares of treasury stock acquired in October 2007 from certain executive officers and directors within the Company in connection with the Company s stock repurchase agreement. The excess of the repurchase price over par value of common stock of approximately \$6.0 million was charged to accumulated deficit upon the retirement of the treasury stock.

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2008 AND 2009

Changes to convertible redeemable preferred stock and certain accounts in stockholders equity for the nine months ended September 30, 2009 are included in the following table (in thousands):

	Serie	es A		ies B ertible		es C ertible		ies D ertible					
	Conver Prefer	rtible rred	Redee Prefe	emable erred ock		mable erred	Redeo Pref	emable erred ock	Comi Sto		Additional Paid-in		nsury ock
		Amount		Amount		Amount		Amount	Shares			Shares	Amount
Balance at January 1, 2009	2,385	\$ 24	1,336	\$ 1,099	181	\$ 179	2,752	\$ 11,967	7,532	\$ 75	\$ 22,433	497	\$ (6,000)
Net proceeds from initial public offering	·	·	Í				Í		6,300	63	75,168		
Accrued preferred stock dividends				19		2		201			(222)		
Accretion of preferred stock issuance costs				1		1		19			(21)		
Conversion of convertible preferred stock to common stock	(2,385)	(24)	(1,336)	(930)	(181)	(151)	(2,752)	(10,125)	9,015	90	11,140		
Payment of preferred stock accumulated accrued dividends	(=,000)	(= 1)	(1,223)	(189)	(101)	(31)	(=,,,,=)	(2,062)	,,,,,,,,		22,212		
Stock based compensation				(107)		(31)		(2,002)			3,428		
Stock options exercised									17	1	19		
Restricted stock awards granted									297	3	(3)		
Retirement of treasury stock									(497)	(5)		(497)	6,000
Balance at September 30, 2009		\$		\$		\$		\$	22,664	\$ 227	\$ 111,942		\$

5. ACQUISITION

On March 17, 2008, the Company acquired Fast Track Systems, Inc. (Fast Track), a provider of clinical trial planning solutions. With this acquisition, the Company extended its ability to serve customers throughout the clinical research process with solutions that improve efficiencies in protocol development and trial planning, contracting and negotiation. The Company paid total consideration of approximately \$18.1 million, which consisted of the issuance of approximately 864 thousand shares of the common stock in exchange for all of Fast Track s existing preferred stock and common stock as well as approximately 26 thousand shares of common stock reserved for the exercise of outstanding warrants and vested employee stock options. The Company utilized an independent third-party specialist to perform a valuation of its common stock at the date of the acquisition, which resulted in a value of \$19.66 per share. Fast Track s operations have been included in the Company s consolidated financial statements after the March 17, 2008 acquisition date.

In allocating the purchase price based on estimated fair values, the Company recorded \$9.8 million of goodwill, \$7.5 million of identifiable intangible assets, \$0.1 million of net tangible assets and \$0.7 million of in-process research and development which was written off subsequent to the acquisition in March 2008 because its technological feasibility had not been established.

F-13

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2008 AND 2009

6. GOODWILL AND INTANGIBLE ASSETS

There was no change in the carrying amount of goodwill for the nine months ended September 30, 2009.

Intangible assets are summarized as follows (in thousands):

		As of September 30, 2009			
	Gross	Accumulated Amortization			Net
	Carrying Amount			Carrying Amount	
Acquired technology	\$ 2,400	\$	(740)	\$	1,660
Database	1,900		(586)		1,314
Customer relationships	1,600		(188)		1,412
Customer contracts	1,600		(1,126)		474
Total	\$ 7,500	\$	(2,640)	\$	4,860

Annual amortization for the next five years is expected to be as follows (in thousands):

Remainder of year ending December 31, 2009	\$ 456
Years ending December 31,	
2010	1,459
2011	1,377
2012	1,308
2013	260

7. DEBT

In November 2003, the Company entered into a Note Purchase Agreement, as subsequently amended at various dates through June 2005 (collectively, the Term Note A) with one of its preferred shareholders (the Lender). In December 2005, the Company entered into an Amended and Restated Note Purchase Agreement with the Lender extending the maturity date of Term Note A and issuing a second note (Term Note B). In October 2007, the Company entered into an Amended and Restated Note Purchase Agreement extending the maturity of Term Note A and Term Note B and issuing a third note (Term Note C). Term Note A, Term Note B and Term Note C were secured by all of the Company s assets.

In September 2008, the Company entered into a new senior secured credit facility (New Credit Facility) with an unrelated lender that included a \$15.0 million term loan (New Term Loan), which was fully drawn at closing, and a \$10.0 million revolving credit line (Revolving Credit Line), all of which was undrawn at inception. The New Credit Facility was secured effectively by all of the assets of the Company. Proceeds of the New Term Loan were used to repay all outstanding notes payable, which included Term Note A of \$1.5 million, Term Note B of \$1.5 million, and Term Note C of \$8.0 million, and the remaining \$4.0 million was used for general corporate purposes. The New Term Loan and Revolving Credit Line matures in September 2013 and the outstanding principal of the New Term Loan amortizes in quarterly installments of \$375 thousand that began on March 31, 2009 up through the date of maturity at which time a lump sum payment of any remaining unpaid balance would be due. In addition, the New Term Loan also includes an excess cash flow recapture feature which may require the Company to make additional principal payments beginning in April 2010.

F-14

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2008 AND 2009

The New Term Loan and Revolving Credit Line bear interest at prime rate plus 2.5% until March 31, 2009 and, thereafter, will bear interest at prime rate plus 2.25%. In December 2008, the New Credit Facility was amended to define prime rate as 4.5% or the lender s most recently announced prime rate, whichever is greater. However, if the Company can satisfy the minimum fixed charge coverage ratio covenant as of December 31, 2009 or March 31, 2010, the applicable margin thereafter will be reduced to 1.5%. As of September 30, 2009, such effective interest rate was 6.75%. In addition, any undrawn Revolving Credit Line is subject to a quarterly unused fee at an annual rate of 0.5% of the average undrawn balance. The Company is entitled to prepay the New Credit Facility at its option, subject to a payment of a premium on such prepayments during the first three years after closing, which decreases over the three-year period from 3% of the amount prepaid to 1%. The New Credit Facility is also subject to mandatory prepayment under certain specified circumstances.

Due to the lock-box arrangement and the subjective acceleration clause contained in the New Credit Facility agreement, borrowings, if any, under the Revolving Credit Line will be classified as a current liability in accordance with ASC 470-10-45-5, *Classification of Revolving Credit Agreements Subject to Lock-Box Arrangement and Subjective Acceleration Clauses*.

In July 2009, the Company used a portion of its net proceeds from the IPO to prepay the entire outstanding indebtedness of the New Term Loan. The total payoff amount of \$14.7 million included the outstanding principal balance of \$14.3 million, as well as accrued interest and termination fees of \$0.4 million. Also in July 2009, the Company executed a standby letter of credit of approximately \$0.2 million in connection with an office lease with the lender, which resulted in a reduction of the available amount under the Revolving Credit Line. As of September 30, 2009, approximately \$9.8 million of the Revolving Credit Line was still available for future borrowings.

In connection with the New Credit Facility, the Company incurred legal and other costs of approximately \$0.7 million, which have been deferred and amortized over the term of the New Credit Facility. As a result of the prepayment of New Term Loan in July 2009, approximately \$0.3 million of the unamortized debt issuance costs was written off, representing the proportional decrease in borrowing capacity of the New Credit Facility. As of September 30, 2009, the remaining unamortized balance was approximately \$0.2 million and is now classified in other long-term liabilities on the accompanying condensed consolidated balance sheet.

The following table summarizes the interest expense incurred on long-term debt for the nine months ended September 30, 2008 and 2009 (in thousands):

		Nine Months Ended September 30,		
	2008	2009		
Term Note A	\$ 104	\$		
Term Note B	101			
Term Note C	556			
New Term Loan	59	533		
New Term Loan prepayment termination fees		429		
Unused Revolving Credit Line fee	3	38		
Total	\$ 823	\$ 1,000		

The New Credit Facility requires quarterly compliance with certain financial covenants, as amended, which include minimum profitability, liquidity, maximum allowable capital expenditures, and fixed charge coverage ratio.

F-15

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2008 AND 2009

8. STOCK-BASED COMPENSATION

In 2000, the Company adopted the 2000 Stock Option Plan (the 2000 Plan) under which 0.5 million shares of the Company s common stock were reserved for issuance to employees, directors, consultants and advisors. Since such date, the Company had amended the 2000 Plan to provide for approximately 3.9 million authorized shares. Options granted under the 2000 Plan may be incentive stock options, nonqualified stock options or restricted stock options. Incentive stock options may be granted only to employees. Options generally vest 25% one year from the grant date and 75% ratably over the next three years and expire after ten years. Stock options were issued at the current estimated market price on the date of the grant. Prior to the Company s IPO in June 2009 (see Note 4), the Company used an independent third-party specialist to perform the valuation of its common stock as part of the stock options valuation. Following the IPO, the Company does not intend to grant any additional stock options under the 2000 Plan.

In May 2009, the Company adopted the 2009 Long-Term Incentive Plan (the 2009 Plan) which became effective upon the completion of the IPO in June 2009. The 2009 Plan is a comprehensive incentive compensation plan under which the Company can grant equity-based and other incentive awards to employees, directors, consultants and advisors. A total of 2.5 million shares of common stock are reserved for issuance under the 2009 Plan which may be in the form of stock options, restricted stock awards and other forms of stock-based incentives, including stock appreciation rights and deferred stock rights. Stock option awards are issued with an exercise price equal to the current market price on the date of the grant and generally vest over four years. During the restriction period, unvested restricted stock awards are not eligible for disposition but entitle the holder to all rights of a holder of common stock, including dividends and voting rights. Unvested restricted stock awards and their associated dividends are subject to forfeiture under certain circumstances.

Also in May 2009, the Company adopted the 2009 Employee Stock Purchase Plan (the ESPP) which became effective upon the completion of IPO in June 2009. A total of 0.5 million shares of common stock are reserved for issuance to eligible employees as defined under the ESPP. Under the ESPP, eligible employees are allowed to purchase shares of the Company s common stock at a 5% discount from the share price at the end of the offering period. The ESPP qualifies for favorable tax treatment under Section 423 of the Internal Revenue Code and meets the requirements of non-compensatory plan in accordance with ASC 718-50-25, *Employee Share Purchase Plans*. The enrollment of ESPP has not begun and therefore there was no activity associated with the ESPP during the nine months ended September 30, 2009.

The Company accounts for the stock-based compensation in accordance with ASC 718. For the nine months ended September 30, 2008 and 2009, the components of stock-based compensation expense were summarized in the following table (in thousands):

		Nine Months Ended September 30,			
	2008	2009			
Stock options	\$ 2,235	\$ 3,035			
Restricted stock awards		393			
Total stock-based compensation	\$ 2,235	\$ 3,428			

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2008 AND 2009

The fair value of each stock option grant is estimated on the date of grant using the Black-Scholes pricing model with the following weighted-average assumptions:

	Nine Montl Septemb	
	2008	2009
Expected volatility	59%	63%
Expected life	6 years	6 years
Risk-free interest rate	3.06%	2.53%
Dividend yield		

The following table summarizes the activity under the stock option plans as of September 30, 2009, and changes during the nine months then ended (in thousands, except per share data):

	Number of Shares	Av Ex	ighted- erage ercise Price	Weighted- Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Outstanding at January 1, 2009	2,432	\$	6.63		
Granted	682		14.71		
Canceled	(14)		13.29		
Exercised	(17)		1.15		
Outstanding at September 30, 2009	3,083	\$	8.42	6.93	\$ 22,470
Exercisable at September 30, 2009	1,907	\$	4.70	5.73	\$ 20,497

The weighted-average grant-date fair value of stock options granted during the nine months ended September 30, 2008 and 2009 was \$11.59 and \$8.59, respectively. The total intrinsic value of stock options exercised during the nine months ended September 30, 2008 and 2009 was \$1.9 million and \$0.3 million, respectively.

The following table summarizes the status of the Company s nonvested restricted stock awards as of September 30, 2009, and changes during the nine months then ended (in thousands, except per share data):

	Number of Shares	Gran	l- Average t-Date Value
Nonvested at January 1, 2009		\$	
Granted	297		14.02
Vested			
Cancelled			

Nonvested at September 30, 2009

297

\$

14.02

As of September 30, 2009, there was a total of \$14.1 million of unrecognized compensation cost related to all non-vested stock-based compensation awards granted, as recorded in accordance with ASC 718. This cost is expected to be recognized over a weighted-average remaining period of 1.66 years. The total fair value of shares vested during the nine months ended September 30, 2008 and 2009 was \$1.7 million and \$3.3 million, respectively.

F-17

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2008 AND 2009

9. EARNINGS PER SHARE

The Company follows ASC 260, *Earnings Per Share*, in calculating earnings per share. Basic earnings (loss) per share is calculated by dividing net income (loss) available to common stockholders by the weighted-average number of shares outstanding during the period. Diluted earnings (loss) per share includes the determinants of basic net income (loss) per share and, in addition, gives effect to the potential dilution that would occur if securities or other contracts to issue common stock are exercised, vested or converted into common stock unless they are anti-dilutive. For the nine months ended September 30, 2008, the diluted loss per share excluded the impact of the conversion of all preferred stock and stock options since their effect would have been anti-dilutive.

A reconciliation of the numerators and denominators of basic earnings per share and diluted earnings per share for the nine months ended September 30, 2008 and 2009 are shown in the following table (in thousands, except per share data):

	Nine Mont Septemb	ber 30,
	2008	2009
Numerator		
Numerator for basic (loss) earnings per share:		
Net (loss) income	\$ (17,859)	\$ 3,443
Preferred stock dividends and accretion	(374)	(243)
Net (loss) income available to common stockholders	(18,233)	3,200
Numerator for diluted (loss) earnings per share:		
Effect of dilutive preferred stock		243
Net (loss) income available to common stockholders with assumed conversion	\$ (18,233)	\$ 3,443
Denominator		
Denominator for basic (loss) earnings per share:		
Weighted average common shares outstanding	6,712	12,318
Denominator for diluted (loss) earnings per share:		
Dilutive potential common shares:		
Preferred stock		5,977
Stock options		1,381
Restricted stock awards		17
Weighted average common shares outstanding with assumed conversion	6,712	19,693
Basic (loss) earnings per share	\$ (2.72)	\$ 0.26
Diluted (loss) earnings per share	\$ (2.72)	\$ 0.17

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2008 AND 2009

The following common stock equivalents were excluded from the calculation of diluted earnings (loss) per share since the effects are anti-dilutive (in thousands):

	Nine Months September	
	2008	2009
Number of potential shares that are antidilutive:		
Preferred stock	9,015	
Stock options	1,970	1,017
Total	10,985	1,017

10. COMMITMENTS AND CONTINGENCIES

Legal Matters The Company is subject to legal proceedings and claims which have arisen in the ordinary course of business. The Company records an estimated liability for these matters when an adverse outcome is considered to be probable and can be reasonably estimated.

In 2006, it was claimed that certain applications offered to the Company s customers potentially infringed on intellectual property rights held by a third party (the Claimant). As a result of negotiations with the Claimant, the Company entered into a license and settlement agreement in June 2007, pursuant to which the Company licensed the intellectual property held by the Claimant for use in its future sales to customers and settled all past infringement claims. The Company paid a settlement amount of \$2.2 million to the Claimant in 2007. In June 2009, the Claimant initiated a lawsuit against the Company claiming breach of contract. The complaint includes allegations that the Company has failed to pay unspecified royalties relating to sales of the Company s products. The Company believes that the allegations in this lawsuit are without merit. The Company filed an answer in July 2009, denying all material allegations and asserting affirmative defenses. The Company also asserted counterclaims for a declaratory judgment that no royalties are owed with respect to sales of the Company s products, as well as a counterclaim for Claimant s breach of the license and settlement agreement. The parties are now engaged in the discovery process. Since the probable outcome and the future economic impact of this litigation on the Company remain uncertain, the Company is unable to develop an estimate of its potential liability, if any, as it relates to this litigation. As a result, the Company did not record a liability as of September 30, 2009. The Claimant also filed the patent infringement lawsuits against two of the Company s customers. See Indemnifications section below for details.

In 2006, a former employee of the Company made a claim seeking compensation of approximately \$1.6 million in relation to a wrongful dismissal lawsuit. Subsequently, the claim was reduced to approximately \$1.4 million as of December 31, 2008. The court rendered its decision on January 15, 2009, which awarded approximately \$0.1 million to the plaintiff. The plaintiff filed a notice of appeal in September 2009, which remains pending. The Company will continue to vigorously defend this claim until it is resolved. The Company has an accrual of approximately \$0.7 million which is included in accrued payroll and other compensation on the accompanying condensed consolidated balance sheet as of September 30, 2009.

Indemnification In 2008, two customers requested the Company to indemnify them in connection with patent infringement lawsuits filed by the Claimant who also filed a lawsuit against the Company in June 2009 as discussed above. The Company has agreed to defend and indemnify one of these customers with respect to the allegations, claims, and defenses relating to its use of the Company s software. As the estimated indemnification obligation concerning this claim was determined to be probable and could be reasonably estimated, the Company

F-19

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2008 AND 2009

has accrued \$0.2 million which was included in accrued expenses and other on the accompanying condensed consolidated balance sheet as of September 30, 2009 and in general and administrative expenses on the accompanying condensed consolidated statements of operations for the nine months ended September 30, 2009. This estimate was based upon the Company s analysis of the customer s defense costs relating to its use of the Company s software.

Contractual Warranties The Company typically provides contractual warranties to its customers covering its product and services. To date, any refunds provided to customers have been immaterial.

Change in Control Agreements The Company has entered into change in control agreements with its chief executive officer and certain other executive officers. These agreements provide for payments to be made to such officers upon involuntary termination of their employment by the Company without cause or by such officers for good reason as defined in the agreements, within a two-year period following a change in control. The agreements provide that, upon a qualifying termination event, such officers will be entitled to (a) a severance payment equal to the officer s base salary plus target bonus amount; (b) continuation of health benefits for 12 months; (c) immediate vesting of any remaining unvested equity awards; and (d) a tax gross up payment under Section 280G of the Code sufficient to reimburse the officer for 50% of any excise tax payable as a result of any termination payments following a change in control, if applicable.

F-20

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors of Medidata Solutions, Inc. and Subsidiaries New York, New York

We have audited the accompanying consolidated balance sheets of Medidata Solutions, Inc. and Subsidiaries (the Company) as of December 31, 2007 and 2008, and the related consolidated statements of operations, stockholders deficit and cash flows for each of the three years in the period ended December 31, 2008. Our audits also included the information included in the financial statement schedule listed in the Index at page F-1. These consolidated financial statements and financial statement schedule are the responsibility of the Company s management. Our responsibility is to express an opinion on the consolidated financial statements and financial statement schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall consolidated financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2007 and 2008, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2008, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

As discussed in Note 2 to the consolidated financial statements, the accompanying 2006, 2007 and 2008 consolidated financial statements have been restated.

/s/ Deloitte & Touche LLP

New York, New York

March 23, 2009 (May 15, 2009 as to the effect

of the restatement in Note 2)

F-21

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

AS OF DECEMBER 31, 2007 AND 2008

(Amounts in thousands, except share and per share data)

	2007(1)	2008(1)
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$ 7,746	\$ 9,784
Accounts receivable, net of allowance for doubtful accounts of \$32 and \$309 in 2007 and 2008, respectively	15,685	25,198
Prepaid commission expense	3,258	3,330
Prepaid expenses and other current assets	2,699	5,950
Deferred income taxes	168	303
Total current assets	29,556	44,565
RESTRICTED CASH	387	545
FURNITURE, FIXTURES AND EQUIPMENT, NET	14,061	13,599
GOODWILL		9,799
INTANGIBLE ASSETS, NET		6,230
OTHER ASSETS	475	452
TOTAL ASSETS	\$ 44,479	\$ 75,190

 $(1) \quad \text{As restated, see Note 2,} \quad \text{Restatement of Consolidated Financial Statements} \quad \text{, to the consolidated financial statements.} \\ \quad \text{The accompanying notes are an integral part of the consolidated financial statements.}$

F-22

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS (CONTINUED)

AS OF DECEMBER 31, 2007 AND 2008

(Amounts in thousands, except share and per share data)

	2007(1)	2008(1)
LIABILITIES AND STOCKHOLDERS DEFICIT		
CURRENT LIABILITIES:		
Accounts payable	\$ 6,849	\$ 3,316
Accrued payroll and other compensation	5,102	7,902
Accrued expenses and other	2,549	3,469
Deferred revenue	48,819	69,834
Capital lease obligations	3,655	4,388
Current portion of debt obligation		1,500
Total current liabilities	66,974	90,409
NONCURRENT LIABILITIES:		
Deferred revenue, less current portion	26,816	31,787
Capital lease obligations, less current portion	4,872	2,672
Long-term debt	10,781	12,866
Other long-term liabilities	177	611
Total noncurrent liabilities	42,646	47,936
Total liabilities	109,620	138,345
	,.	/
CONVERTIBLE REDEEMABLE PREFERRED STOCK:		
Series B, par value \$0.01 per share; liquidation value \$1,063 and \$1,101 in 2007 and 2008, respectively;		
1,335,807 shares authorized, issued and outstanding in 2007 and 2008	1,059	1,099
Series C, par value \$0.01 per share; liquidation value \$173 and \$179 in 2007 and 2008 respectively; 180,689		
shares authorized, issued and outstanding in 2007 and 2008	171	179
Series D, par value \$0.01 per share; liquidation value \$11,581 and \$11,986 in 2007 and 2008, respectively;		
2,752,333 shares authorized, issued and outstanding in 2007 and 2008	11,517	11,967
COMMITMENTS AND CONTINGENCIES		
STOCKHOLDERS DEFICIT:		
Convertible preferred stock, Series A, par value \$0.01 per share; liquidation value \$1,193 in 2007 and 2008;		
2,385,000 shares authorized, issued and outstanding in 2007 and 2008	24	24
Common stock, par value \$0.01 per share; 20,000,000 shares authorized; 6,571,119 shares and 7,531,911		
shares issued in 2007 and 2008, respectively; 6,074,308 shares and 7,035,100 shares outstanding in 2007 and		
2008, respectively	66	75
Additional paid-in capital	2,228	22,433
Treasury stock, 496,811 shares	(6,000)	(6,000)
Accumulated other comprehensive income (loss)	65	(389)
Accumulated deficit	(74,271)	(92,543)
Total stockholders deficit	(77,888)	(76,400)
TOTAL LIABILITIES AND STOCKHOLDERS DEFICIT	\$ 44,479	\$ 75,190

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

(1) As restated, see Note 2, Restatement of Consolidated Financial Statements , to the consolidated financial statements.

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

F-23

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(Amounts in thousands, except share and per share data)

	2006(1) 2007(1)		2008(1)
Revenues			
Application services	\$ 25,406	\$ 44,592	\$ 73,820
Professional services	10,851	18,391	31,904
m . 1	26.257	(2.002	105 704
Total revenues	36,257	62,983	105,724
Cost of revenues	7.200	12.170	10.647
Application services	7,288	13,170	19,647
Professional services	20,462	33,035	30,801
Total cost revenues	27,750	46,205	50,448
Gross profit	8,507	16,778	55,276
OPERATING COSTS AND EXPENSES:	-,	-,	
Research and development	5,905	10,716	19,340
Sales and marketing	12,768	15,484	24,190
General and administrative	8,335	13,361	27,474
Total operating costs and expenses	27,008	39,561	71,004
ODED LEWIS LOSS	(10.501)	(22.502)	(15.720)
OPERATING LOSS	(18,501)	(22,783)	(15,728)
INTEREST AND OTHER EXPENSE (INCOME):	241	7.0	1.024
Interest expense	341	769	1,934
Interest income	(200)	(327)	(115)
Other expense (income), net	54	(78)	(195)
Total interest and other expense, net	195	364	1,624
LOSS BEFORE INCOME TAXES	(18,696)	(23,147)	(17,352)
PROVISION FOR INCOME TAXES	306	515	920
NET LOSS	(19,002)	(23,662)	(18,272)
PREFERRED STOCK DIVIDENDS AND ACCRETION	(19,002)	(23,002)	498
FREFERRED STOCK DIVIDENDS AND ACCRETION	490	490	490
NET LOSS AVAILABLE TO COMMON STOCKHOLDERS	\$ (19,500)	\$ (24,160)	\$ (18,770)
BASIC AND DILUTED LOSS PER SHARE	\$ (3.10)	\$ (3.78)	\$ (2.76)
WEIGHTED AVERAGE BASIC AND DILUTED COMMON SHARES OUTSTANDING	6,296,830	6,384,557	6,793,596
UNAUDITED PRO FORMA (Notes 3 and 16):			
PRO FORMA BASIC AND DILUTED LOSS PER SHARE			\$ (1.16)
PRO FORMA WEIGHTED AVERAGE BASIC AND DILUTED COMMON SHARES OUTSTANDING			15,808,254

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

(1) As restated, see Note 2, Restatement of Consolidated Financial Statements , to the consolidated financial statements. The accompanying notes are an integral part of the consolidated financial statements.

F-24

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF STOCKHOLDERS DEFICIT

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(Amounts in thousands, except shares and per share data)

Paid-in Shares Amount Shares Amount Capital Capita		Serie Conve Preferre	rtible	Commo	n Stock	Additional	Treasu		Accumulate Other Comprehensi		
BALANCE January 1, 2006 (As previously reported) 2,385,000 \$ 24 6,152,780 \$ 62 \$ 882 \$ 1 \$ (28,625) \$ (27,656) \$ (29,82) Prior period adjustments 2,385,000 \$ 24 6,152,780 62 882 \$ 1 \$ (31,607) (30,638) \$ (29,82) BALANCE January 1, 2006 (As Restated(1)) 2,385,000 24 6,152,780 62 882 \$ 1 \$ (19,002) (19,002) (19,002) \$ (1						Paid-in			Income		
reported)		Shares	Amou	nt Shares	Amoun	t Capital	Shares	Amount	(Loss)	Deficit	Total
BALANCE January 1, 2006 (As Restated(1)) 2,385,000 24 6,152,780 62 882 1 (31,607) (30,638)	reported)	2,385,000) \$ 24	6,152,780	0 \$ 62	\$ 882		\$	\$ 1	\$ (28,625)	\$ (27,656)
Comprehensive income (loss): Net loss(1)	Prior period adjustments									(2,982)	(2,982)
Net loss(1) Congreen currency translation adjustment Congreen currency currency translation adjustment Congreen currency cu		2,385,000) 24	6,152,780	0 62	882			1	(31,607)	(30,638)
Foreign currency translation adjustment 21 21 21 21 21 21 21 2	•									(19,002)	(19.002)
Stock options exercised 342,071 3 206 209 719									21	(17,002)	
Stock options exercised 342,071 3 206 209	Torongh currency translation adjustment								21		21
Stock-based compensation 719 719 Accrued preferred stock dividends (448) (448) Accretion of preferred stock issuance costs (50) (50) BALANCE December 31, 2006(1) 2,385,000 24 6,494,851 65 1,309 22 (50,609) (49,189) Comprehensive income (loss): Net loss(1) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,619) 43 43 43 43 43 44 Stock options exercised 69,643 1 43 44 44 Stock-based compensation 1,294 1,294 1,294 1,294 50 80 <td>Total comprehensive income (loss)(1)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>21</td> <td>(19,002)</td> <td>(18,981)</td>	Total comprehensive income (loss)(1)								21	(19,002)	(18,981)
Stock-based compensation 719 719 Accrued preferred stock dividends (448) (448) Accretion of preferred stock issuance costs (50) (50) BALANCE December 31, 2006(1) 2,385,000 24 6,494,851 65 1,309 22 (50,609) (49,189) Comprehensive income (loss): Net loss(1) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,619) 43 43 43 43 43 44 Stock options exercised 69,643 1 43 44 44 Stock-based compensation 1,294 1,294 1,294 1,294 50 80 <td></td>											
Accrued preferred stock dividends				342,071	1 3						
Accretion of preferred stock issuance costs (50) (50) BALANCE December 31, 2006(1) 2,385,000 24 6,494,851 65 1,309 22 (50,609) (49,189) Comprehensive income (loss): Net loss(1) (23,662) (23,662) Foreign currency translation adjustment 43 43 Total comprehensive income (loss)(1) 43 (23,662) (23,619) Stock options exercised 69,643 1 43 44 Stock-based compensation 1,294 1,294 1,294 Stock issued for payment of services 6,625 80 80 Accrued preferred stock dividends (448) Accretion of preferred stock issuance costs (50) Acquisition of treasury stock 496,811 (6,000) (6,000)	-										
BALANCE December 31, 2006(1) 2,385,000 24 6,494,851 65 1,309 22 (50,609) (49,189) Comprehensive income (loss): Net loss(1) (23,662) (23,662) Foreign currency translation adjustment 43 43 Total comprehensive income (loss)(1) 43 (23,662) (23,619) Stock options exercised 69,643 1 43 44 Stock-based compensation 1,294 1,294 Stock issued for payment of services 6,625 80 80 Accrued preferred stock dividends (448) (448) Accretion of preferred stock issuance costs (50) Acquisition of treasury stock 496,811 (6,000) (6,000)	•										
Comprehensive income (loss): (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,619) Stock options exercised 69,643 1 43 44	Accretion of preferred stock issuance costs					(50)					(50)
Comprehensive income (loss): (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,619) Stock options exercised 69,643 1 43 44 </td <td></td>											
Comprehensive income (loss): (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,662) (23,619) Stock options exercised 69,643 1 43 44	BALANCE December 31, 2006(1)	2,385,000) 24	6,494,851	1 65	1,309			22	(50,609)	(49,189)
Foreign currency translation adjustment 43 43 Total comprehensive income (loss)(1) 43 (23,662) (23,619) Stock options exercised 69,643 1 43 44 Stock-based compensation 1,294 1,294 1,294 Stock issued for payment of services 6,625 80 80 Accrued preferred stock dividends (448) (448) Accretion of preferred stock issuance costs (50) (50) Acquisition of treasury stock 496,811 (6,000) (6,000)											
Total comprehensive income (loss)(1) 43 (23,662) (23,619) Stock options exercised 69,643 1 43 44 Stock-based compensation 1,294 1,294 Stock issued for payment of services 6,625 80 80 Accrued preferred stock dividends (448) (448) Accretion of preferred stock issuance costs (50) (50) Acquisition of treasury stock 496,811 (6,000) (6,000)	Net loss(1)									(23,662)	(23,662)
Stock options exercised 69,643 1 43 44 Stock-based compensation 1,294 1,294 Stock issued for payment of services 6,625 80 80 Accrued preferred stock dividends (448) (448) Accretion of preferred stock issuance costs (50) (50) Acquisition of treasury stock 496,811 (6,000) (6,000)	Foreign currency translation adjustment								43		43
Stock options exercised 69,643 1 43 44 Stock-based compensation 1,294 1,294 Stock issued for payment of services 6,625 80 80 Accrued preferred stock dividends (448) (448) Accretion of preferred stock issuance costs (50) (50) Acquisition of treasury stock 496,811 (6,000)											
Stock options exercised 69,643 1 43 44 Stock-based compensation 1,294 1,294 Stock issued for payment of services 6,625 80 80 Accrued preferred stock dividends (448) (448) Accretion of preferred stock issuance costs (50) (50) Acquisition of treasury stock 496,811 (6,000)	Total comprehensive income (loss)(1)								13	(23,662)	(23,610)
Stock-based compensation 1,294 1,294 Stock issued for payment of services 6,625 80 80 Accrued preferred stock dividends (448) (448) Accretion of preferred stock issuance costs (50) (50) Acquisition of treasury stock 496,811 (6,000)	Total comprehensive meonic (loss)(1)								43	(23,002)	(23,019)
Stock-based compensation 1,294 1,294 Stock issued for payment of services 6,625 80 80 Accrued preferred stock dividends (448) (448) Accretion of preferred stock issuance costs (50) (50) Acquisition of treasury stock 496,811 (6,000)											
Stock issued for payment of services 6,625 80 80 Accrued preferred stock dividends (448) (448) Accretion of preferred stock issuance costs (50) (50) Acquisition of treasury stock 496,811 (6,000) (6,000)				69,643	3 1						
Accrued preferred stock dividends (448) (448) Accretion of preferred stock issuance costs (50) Acquisition of treasury stock 496,811 (6,000) (6,000)											
Accretion of preferred stock issuance costs Acquisition of treasury stock (50) 496,811 (6,000) (6,000)				6,625	5						
Acquisition of treasury stock 496,811 (6,000) (6,000)	•										
	1					(50)					
	Acquisition of treasury stock						496,811	(6,000)			(6,000)
	DALANGE D	2 205 000	2.4	6 571 116	2 ((2 220	406.011	(6,000)		(74.071)	(77,000)
BALANCE December 31, 2007(1) 2,385,000 24 6,571,119 66 2,228 496,811 (6,000) 65 (74,271) (77,888)		2,385,000) 24	6,571,119	9 66	2,228	496,811	(6,000)	65	(74,271)	(77,888)
Comprehensive income (loss):										(10.070)	(10.070)
Net loss(1) (18,272) (18,272)									7.4.5.4°		
Foreign currency translation adjustment (454)	Foreign currency translation adjustment								(454))	(454)
Total comprehensive income (loss)(1) (454) (18,272) (18,726)	Total comprehensive income (loss)(1)								(454)	(18 272)	(18.726)
Total comprehensive income (1052/2) (10,720)	Total completensive income (1033)(1)								(454)	(10,272)	(10,720)
Common stock issuance for acquisition 864,440 8 16,987 16,995	Common stock issuance for acquisition			864.440) 8	16.987					16.995
Stock options and warrants exchanged in	•			001,110	, ,	10,507					10,775
connection with acquisition 459 459						459					459
Stock options exercised 96,352 1 60 61	1			96 353	2. 1						
Stock-based compensation 3,197 3,197	•			70,332							
Accrued preferred stock dividends (448) (448)	-										
Accretion of preferred stock issuance costs (50) (50)	•										

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

BALANCE December 31, 2008(1)

2,385,000 \$ 24 7,531,911 \$ 75 \$ 22,433 496,811 \$ (6,000) \$ (389) \$ (92,543) \$ (76,400)

(1) As restated, see Note 2, Restatement of Consolidated Financial Statements , to the consolidated financial statements.

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

F-25

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(Amounts in thousands)

CACH ELONG EDON ODED ATTING A CENTRE	2006(1)	2007(1)	2008(1)
CASH FLOWS FROM OPERATING ACTIVITIES:	¢ (10,002)	e (22 ((2)	e (10.070)
Net loss	\$ (19,002)	\$ (23,662)	\$ (18,272)
Adjustments to reconcile net loss to net cash provided by operating activities:	1.056	1616	9 705
Depreciation and amortization	1,956	4,616	8,705
Amortization of debt issuance costs	719	14	212
Stock-based compensation	/19	1,294	3,197
Professional fees paid in common stock		80	700
Vrite-off of acquired research and development costs Deferred income taxes	(240)	81	700 156
	(249)	81	130
hanges in operating assets and liabilities:	(2.525)	(6.702)	(9.015
ccounts receivable	(3,525)	(6,792)	(8,915
repaid commission expense	(535)	(1,494)	(48
repaid expenses and other current assets	(846)	(1,548)	187
ther assets	(93)	(362)	59
ccounts payable	1,982	3,142	(4,182
ccrued payroll and other compensation	3,664	(1,379)	2,619
ccrued expenses and other	1,745	(1,321)	364
eferred revenue	17,720	33,298	24,648
ther long-term liabilities	(50)	63	107
let cash provided by operating activities	3,486	6,030	9,537
ASH FLOWS FROM INVESTING ACTIVITIES:			
urchases of furniture, fixtures and equipment	(1,458)	(3,673)	(4,563
crease in restricted cash		(82)	
ast Track acquisition related costs			(625
ash and cash equivalents acquired through acquisition			1,049
let cash used in investing activities	(1,458)	(3,755)	(4,139)
ASH FLOWS FROM FINANCING ACTIVITIES:			
roceeds from exercise of stock options	209	44	61
epayment of obligations under capital leases	(1,184)	(2,842)	(4,218
ayment of costs associated with initial public offering			(2,503
roceeds from notes payable		8,000	15,000
epayment of notes payable	(486)	(555)	(10,958
ayment of debt issuance costs	(/	(192)	(669
cquisition of treasury stock		(6,000)	(111
et cash used in financing activities	(1,461)	(1,545)	(3,287
ET INCREASE IN CASH AND CASH EQUIVALENTS	567	730	2.111
FFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	(1)	750	(73
ASH AND CASH EQUIVALENTS Beginning of year	6,450	7,016	7,746
ASH AND CASH EQUIVALENTS End of year	\$ 7,016	\$ 7,746	\$ 9,784
UPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:			
ash naid during the year for:			

Cash paid during the year for:

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

Interest	\$ 333	\$ 708	\$ 1,652
Income taxes	\$ 141	\$ 539	\$ 389
NONCASH ACTIVITIES:			
Common stock issuance for acquisition	\$	\$	\$ 16,995
Stock options and warrants exchanged in connection with acquisition	\$	\$	\$ 459
Furniture, fixtures and equipment acquired through capital lease obligations	\$ 2,958	\$ 9,088	\$ 2,741
Furniture, fixtures and equipment acquired but not yet paid for at period-end	\$ 307	\$ 593	\$ 268
Accrued costs associated with initial public offering	\$	\$	\$ 778
Accrued preferred stock dividends	\$ 448	\$ 448	\$ 448
Accretion of preferred stock issuance costs	\$ 50	\$ 50	\$ 50

⁽¹⁾ As restated, see Note 2, Restatement of Consolidated Financial Statements , to the consolidated financial statements.

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

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

1. ORGANIZATION

Medidata Solutions, Inc. (Medidata or the Company) provides hosted clinical development solutions that enhance the efficiency of its customers clinical development processes and optimize their research and development investments. The Company s solutions allow its customers to achieve clinical results by streamlining the design, planning and management of key aspects of the clinical development process, including protocol development, contract research organization negotiation, investigator contracting, the capture and management of clinical trial data and the analysis and reporting of that data on a worldwide basis.

For purposes of these financial statements, the years ended December 31, 2006, 2007 and 2008, are referred to as 2006, 2007 and 2008, respectively.

2. RESTATEMENT OF CONSOLIDATED FINANCIAL STATEMENTS

Subsequent to the issuance of the 2008 consolidated financial statements, the Company reviewed its practice regarding the timing of revenue recognition. Specifically, the Company examined its treatment of certain customer arrangements in which application services and professional services were sold in the same single-study or multiple study arrangement.

Application services include software licenses that provide the customer with a right to use the software, as well as hosting and other support services, to be provided over a specific term. Professional Services include various offerings that customers have the ability to utilize on an as-needed basis.

Historically, when application services and professional services were sold in the same single-study or multiple study arrangement, the Company allocated arrangement consideration to professional services based on fair value and recognized such professional services revenues as services were performed. The remaining arrangement consideration was allocated to application services and recognized as revenue ratably over the term of the arrangement, beginning with the commencement of the arrangement term, which correlates with the activation of the hosting services, assuming all other revenue recognition criteria were met. This accounting practice assumed that application services had been delivered upon the activation of the hosting services, and that professional services were delivered at various times subsequent to the activation of the hosting services, during the term of the arrangement.

However, given that the Company has a continuing obligation to provide hosting services throughout the arrangement term, the Company is not able to determine fair value for hosting services, and since professional services are performed at various times during the term of an arrangement, the Company determined that recognition of application services and professional services as a combined single unit of accounting is appropriate. As a result, when application services and professional services are sold in the same single-study or multiple study arrangement, the related revenues are recognized ratably beginning with the commencement of the arrangement term, assuming all other revenue recognition criteria are met. The restatement resulted in the deferral to future periods of \$52,017 of revenues previously recognized through December 31, 2008.

For arrangements where revenue is recognized over the relevant contract period, the Company continues to capitalize the related paid sales commissions and recognizes these commissions as expense as it recognizes the related revenue. As a result of the restatement of revenues, the Company adjusted the timing of commission expense to correlate with its restated revenues in each restated period. Sales commission expense is captured as a component of sales and marketing in the Company s operating costs and expenses.

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

As a result of the above, the Company has restated its consolidated balance sheets as of December 31, 2007 and 2008 and the related consolidated statements of operations, stockholders—deficit and cash flows for the years ended December 31, 2006, 2007 and 2008. In addition, the impact of the restatement was reflected as an increase to accumulated deficit of \$2,982 as of January 1, 2006.

A summary of the significant effects of the restatement is as follows:

		2006				2007			2008	
	As		As			As				
	Previously	Restatement	As	Previously		statement	As	Previously		As
	Reported	Adjustments	Restated	Reported	Adj	justments	Restated	Reported	Adjustments	Restated
As of December 31,										
Consolidated Balance Sheet:					_					
Prepaid commission expense				\$ 1,512	\$	1,746	\$ 3,258	\$ 1,093	\$ 2,237	\$ 3,330
Total current assets				27,810		1,746	29,556	42,328	2,237	44,565
Total assets				42,733		1,746	44,479	72,953	2,237	75,190
Deferred revenue current portion				26,644		22,175	48,819	38,800	31,034	69,834
Total current liabilities				44,799		22,175	66,974	59,375	31,034	90,409
Deferred revenue, less current										
portion				8,380		18,436	26,816	10,804	20,983	31,787
Total noncurrent liabilities				24,210		18,436	42,646	26,953	20,983	47,936
Total liabilities				69,009		40,611	109,620	86,328	52,017	138,345
Accumulated deficit	\$ (34,034)	\$ (16,575)	\$ (50,609)	(35,406)		(38,865)	(74,271)	(42,763)	(49,780)	(92,543)
Total stockholders deficit	(32,614)	(16,575)	(49,189)	(39,023)		(38,865)	(77,888)	(26,620)	(49,780)	(76,400)
For the year ended December 31,										
Consolidated Statement of										
Operations:										
Application services revenues	31,953	(6,547)	25,406	48,378		(3,786)	44,592	76,770	(2,950)	73,820
Professional services revenues	18,508	(7,657)	10,851	37,896		(19,505)	18,391	40,360	(8,456)	31,904
Total revenues	50,461	(14,204)	36,257	86,274		(23,291)	62,983	117,130	(11,406)	105,724
Gross profit	22,711	(14,204)	8,507	40,069		(23,291)	16,778	66,682	(11,406)	55,276
Sales and marketing	13,379	(611)	12,768	16,485		(1,001)	15,484	24,681	(491)	24,190
Total operating cost and expenses	27,619	(611)	27,008	40,562		(1,001)	39,561	71,495	(491)	71,004
Operating loss	(4,908)	(13,593)	(18,501)	(493)		(22,290)	(22,783)	(4,813)	(10,915)	(15,728)
Loss before income taxes	(5,103)	(13,593)	(18,696)	(857)		(22,290)	(23,147)	(6,437)	(10,915)	(17,352)
Net loss	(5,409)	(13,593)	(19,002)	(1,372)		(22,290)	(23,662)	(7,357)	(10,915)	(18,272)
Net loss available to common										
stockholders	(5,907)	(13,593)	(19,500)	(1,870)		(22,290)	(24,160)	(7,855)	(10,915)	(18,770)
Basic and diluted loss per share	(0.94)	(2.16)	(3.10)	(0.29)		(3.49)	(3.78)	(1.16)	(1.60)	(2.76)
Consolidated Statement of Cash										
Flow:										
Net loss	(5,409)	(13,593)	(19,002)	(1,372)		(22,290)	(23,662)	(7,357)	(10,915)	(18,272)
Changes in operating assets and		. , , , , ,				. , ,				` ' '
liabilities:										
Prepaid commission expense	76	(611)	(535)	(493)		(1,001)	(1,494)	443	(491)	(48)
Deferred revenue	3,516	14,204	17,720	10,007		23,291	33,298	13,242	11,406	24,648
	- /	,	. ,	.,		-, -	,	- , .=	,	,

F-28

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation The accompanying consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries prepared in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP). All intercompany balances and transactions have been eliminated in consolidation.

Unaudited Pro Forma Information Unaudited pro forma basic and diluted earnings per share were calculated using a calculation of pro forma weighted average shares outstanding as if such adjustment occurred on January 1, 2008 (See Note 16).

Use of Estimates The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, including deferred revenue, and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from those estimates.

Revenue Recognition The Company derives its revenue from the sale of application services and the rendering of professional services. The Company recognizes revenue when all of the following conditions are satisfied: (1) persuasive evidence of an arrangement exists; (2) service has been delivered to the customer; (3) amount of the fees to be paid by the customer is fixed or determinable; and (4) collection of the fees is reasonably assured or probable.

Application Services

The Company typically enters into multi-study and single-study arrangements that include the sale of software licenses that provide the customer the right to use the software, as well as hosting and other support services, to be provided over a specified term. Multiple study arrangements grant the customer the right to manage a predetermined number of clinical trials simultaneously for a term typically ranging from three to five years. Single-study arrangements allow customers to use the Company s technology on a per trial basis.

The Company provides its software as a service and recognizes revenues in accordance with Securities and Exchange Commission (SEC) Staff Accounting Bulletin No. 104, *Revenue Recognition*. Revenue from application service arrangements is recognized ratably over the term of the arrangement, beginning with the commencement of the arrangement term, which correlates with the activation of the hosting services, assuming all other revenue recognition criteria are met. The term of the arrangement includes optional renewal periods, if such renewal periods are likely to be exercised.

Revenue for multiple study arrangements where the customer has the ability to self host, or the customer has the contractual right to take possession of the software at any time during the hosting period without significant penalty and it is feasible for the customer to either run the software on its own hardware or contract with another unrelated party to host the software, is recognized in accordance with Statement of Position (SOP) 97-2, Software Revenue Recognition.

F-29

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

Professional Services

The Company also provides a range of professional services that its customers have the ability to utilize on an as-needed basis. These services generally include training, implementation, interface creation, trial configuration, data testing, reporting, procedure documentation and other customer-specific services. Professional services do not result in significant alterations to the underlying software.

Arrangements that include both application services and professional services are evaluated under Emerging Issues Task Force (EITF) Issue No. 00-21, Revenue Arrangements with Multiple Deliverables (EITF 00-21). The Company applies EITF 00-21 when the customer does not have the right to take possession of the software or cannot do so without incurring a significant penalty as specified in EITF Issue No. 00-3, Application of AICPA Statement of Position 97-2, Software Revenue Recognition, to Arrangements That Include the Right to Use Software Stored on Another Entity s Hardware (EITF 00-3), otherwise these arrangements are evaluated under SOP 97-2. The Company accounts for arrangements that include both application services and professional services as a combined single unit of accounting and the related revenues are recognized ratably beginning with the commencement of the arrangement term, assuming all other remaining revenue recognition criteria are met.

In certain situations, when professional services are sold separate and apart from application services, they are recognized as services are rendered.

Management s estimate of fair value for professional services is used to derive a reasonable approximation for presenting application services and professional services separately in its consolidated financial statements.

In accordance with EITF Issue No. 01-14, *Income Statement Characterization of Reimbursements Received for Out-of-Pocket Expenses Incurred*, the Company included \$532, \$875 and \$1,541 of reimbursable out-of-pocket expenses in Professional services revenue in 2006, 2007 and 2008, respectively.

Deferred Revenue

Deferred revenue consists of billings or payments received in advance of revenue recognition and is recognized as the revenue recognition criteria are met. Amounts that have been invoiced are initially recorded in accounts receivable and deferred revenue. The Company invoices its customers in accordance with the terms of the underlying contract, usually in installments in advance of the related service period. Accordingly, the deferred revenue balance does not represent the total contract value of outstanding arrangements. Payment terms are net 30 to 45 days. Deferred revenue that will be recognized during the subsequent 12-month period is recorded as current deferred revenue and the remaining portion as non-current deferred revenue.

In some instances, customers elect to renew their application services arrangements prior to the original termination date of the arrangement. The renewed application services agreement provides support for in-process clinical trials, and includes the right to use the software for initial clinical studies. As such, the unrecognized portion of the deferred revenue associated with the initial arrangement is aggregated with the consideration received upon renewal and recognized as revenues over the renewed term of the application services arrangements.

Cost of Revenues Cost of revenues primarily consists of costs related to hosting, maintaining and supporting the Company s application suite and delivering professional services and support. These costs include

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

salaries, benefits, bonuses and stock-based compensation for the Company s data center and professional services staffs. Cost of revenues also includes outside service provider costs, data center and networking expenses, and allocated overhead. Overhead, such as depreciation expense, rent and utilities, is allocated to all departments based on relative headcount. As such, general overhead expenses are reflected in cost of revenues and each operating expense category. These costs are expensed as incurred.

Software Development Costs Costs incurred in the research and development of new software products and enhancements to existing software products are expensed as incurred under Statement of Financial Accounting Standards (SFAS) No. 2, Accounting for Research and Development Costs. Internally developed software costs are capitalized under SFAS No. 86, Accounting for the Costs of Computer Software to Be Sold, Leased or Otherwise Marketed, when technological feasibility is reached which is not until a working model is developed, and the functionality is tested and determined to be compliant with all federal and international regulations. As such, no internally developed software costs have been capitalized during 2006, 2007 or 2008.

Prepaid Commission Expense For arrangements where revenue is recognized over the relevant contract period, the Company capitalizes related sales commissions that have been paid and recognizes these expenses over the period the related revenue is recognized. Commissions are payable to the Company s sales representatives upon payment from the customer. The Company amortized prepaid commissions of \$1,850, \$2,732 and \$4,661 for the years ended December 31, 2006, 2007, and 2008, respectively, which are included within sales and marketing expense in the consolidated statements of operations.

Goodwill and Intangible Assets On March 17, 2008, the Company acquired Fast Track Systems, Inc. (Fast Track) (See Note 4) which generated significant goodwill and intangible assets. Goodwill represents the excess of consideration paid over the fair value of net assets acquired in business combinations. Under SFAS No. 142, Goodwill and Other Intangible Assets, goodwill is no longer amortized and is instead evaluated for impairment using a two-step process that is performed at least annually on October 1 of each year, or whenever events or circumstances indicate that impairment may have occurred. The first step is a comparison of the fair value of an internal reporting unit with its carrying amount, including goodwill. If the fair value of the reporting unit exceeds its carrying value, goodwill of the reporting unit is not considered impaired and the second step is unnecessary. If the carrying value of the reporting unit exceeds its fair value, a second test is performed to measure the amount of impairment by comparing the carrying amount of the goodwill to a determination of the implied value of the goodwill. If the carrying amount of the goodwill is greater that the implied value, an impairment loss is recognized for the difference. The Company determined that there was no impairment of goodwill as of December 31, 2008.

The implied value of goodwill is determined as of the test date by performing a purchase price allocation, as if the reporting unit had just been acquired, using currently estimated fair values of the individual assets and liabilities of the reporting unit, together with an estimate of the fair value of the reporting unit taken as a whole. The estimate of the fair value of the reporting unit is based upon information available regarding prices of similar groups of assets, or other valuation techniques including present value techniques based upon estimates of future cash flow.

The definite-lived intangible assets are recorded at cost less accumulated amortization. Amortization of acquired technology and database is computed using the straight-line method over five years and amortization of customer relationships and customer contracts is computed using an accelerated method which reflects the pattern in which the economic benefits derived from the related intangible assets are consumed or utilized.

F-31

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

Impairment of Long-Lived Assets Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such asset may be impaired. The Company subjects long-lived assets to a test of recoverability based on undiscounted cash flows expected to be generated by such assets while utilized by the Company and cash flows expected from disposition of such assets. If the assets are impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. Management determined that there is no impairment of long-lived assets as of December 31, 2007 or 2008.

Cash and Cash Equivalents The Company considers all money market accounts and other highly liquid investments purchased with original maturities of three months or less to be cash and cash equivalents. The fair value of cash and cash equivalents approximates the amounts shown on the financial statements.

Restricted Cash Restricted cash represents deposits made to fully collateralize certain standby letters of credit issued in connection with office lease arrangements.

Accounts Receivable Accounts receivable are recorded at original invoice amount less an allowance that management believes will be adequate to absorb estimated losses on existing accounts receivable. The allowance is based on an evaluation of the collectibility of accounts receivable and prior bad debt experience. Accounts receivable are written off when deemed uncollectible.

Furniture, Fixtures and Equipment Furniture, fixtures and equipment consists of furniture, computers, other office equipment, purchased software for internal use, and leasehold improvements recorded at cost. Depreciation is computed on the straight-line method over five years for furniture and fixtures, and three to five years for computer equipment and software. Leasehold improvements are amortized on a straight-line basis over the shorter of the lease term or their estimated useful lives. Improvements are capitalized while expenditures for repairs and maintenance are charged to expense as incurred.

Income Taxes The Company uses the asset and liability method of accounting for income taxes, as prescribed by SFAS No. 109, Accounting for Income Taxes, which recognizes deferred tax assets and liabilities for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized.

On January 1, 2007, the Company elected to early adopt Financial Accounting Standards Board (FASB) Interpretation No. 48, Accounting for Uncertainty in Income Taxes an interpretation of FASB Statement No. 109, or FIN 48. FIN 48 addresses the determination of whether tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements. Under FIN 48, the Company may recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The impact of the adoption of FIN 48 did not have a material effect on the Company s financial position, results of operations or cash flows.

Convertible Redeemable Preferred Stock At the time of issuance, preferred stock is recorded at gross proceeds received less issuance costs. The carrying value is increased to the redemption value using the straight-

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

line method, which approximates the effective interest method, over the period from the date of issuance to the earliest date of redemption. The carrying value is also increased by cumulative unpaid dividends.

Treasury Stock Shares of the Company s common and preferred stock that are repurchased are recorded as treasury stock at cost and included as a component of stockholders deficit.

Comprehensive Income SFAS No. 130, *Reporting Comprehensive Income*, established standards for reporting and displaying comprehensive income into its components (revenue, expenses, gains and losses) in a full set of general-purpose financial statements. The Company s other comprehensive income component results from foreign currency translation adjustments.

Stock-Based Compensation The Company follows SFAS No. 123(R), Share-Based Payment, to account for the stock option plan. The fair value of each option grant is estimated on the date of grant using the Black-Scholes pricing model. The Company estimated its future stock price volatility based upon observed option-implied volatilities for a group of peer companies, taking into account the stage of the Company as compared to its peers. Management believes this is the best estimate of the expected volatility over the weighted-average expected life of its option grants. The Company estimated its weighted-average useful life based on the likely date of exercise as opposed to the actual life of the options. The risk-free interest rate is based on the United States Treasury yield curve in effect at the time of the option grant with a maturity tied to the expected life of the options. No dividends are expected to be declared by the Company at this time. The Company uses an independent third-party specialist to perform the valuation of its common stocks as part of the stock options calculations.

Fair Value of Financial Instruments The carrying amounts of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximate fair value because of the short maturity of these instruments. Amounts outstanding under long-term debt agreements are considered to be carried at their estimated fair values because they bear interest at rates which approximate market. All methods of assessing fair value result in a general approximation of value, and such value may never actually be realized.

Concentration of Credit Risk Financial instruments which potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents, accounts receivable and notes payable. The Company has policies that limit the amount of credit exposure to any one issuer. The Company performs ongoing credit evaluations of its customers and maintains an allowance for potential losses, but does not require collateral or other security to support customers receivables. The Company s credit risk is further mitigated because its customer base is diversified both geographically and by industry sector.

Cash and cash equivalents and restricted cash are deposited with major financial institutions and, at times, such balances with any one financial institution may be in excess of FDIC-insured limits. In September 2008, the FDIC-insured limits were temporarily increased from \$100 to \$250. The limit will revert back to \$100 on December 31, 2009. As of December 31, 2008, \$10,433 in cash and cash equivalents and restricted cash were deposited in excess of FDIC-insured limits.

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

As of December 31, 2007 and 2008 and for the three years then ended, total revenues recognized and total accounts receivable balance due related to the following significant customers are as follows:

	For	ercentage of Revenues the year ende ecember 31,	ed	Percenta Accou Receiv As o Decemb	ints able of
	2006	2007	2008	2007	2008
Customer A	10%	12%	10%	9%	6%
Customer B	6	9	11	16	5
Customer C	11	13	9	6	3
Customer D	12	5	3	4	5
Total (Customers A to D)	39%	39%	33%	35%	19%

Foreign Currency Translation The financial statements of the Company s foreign subsidiaries are translated in accordance with SFAS No. 52, Foreign Currency Translation. The reporting currency for the Company is the U.S. dollar. The functional currencies of the Company s subsidiaries in the United Kingdom and Japan are the British Pound Sterling and the Japanese yen, respectively. Accordingly, the assets and liabilities of the Company s foreign subsidiaries are translated into U.S. dollars using the exchange rate in effect at each balance sheet date. Revenue and expense accounts of the Company s foreign subsidiaries are translated using an average rate of exchange during the period. Foreign currency translation adjustments are accumulated as a component of other comprehensive income (loss) as a separate component of stockholders deficit. Gains and losses arising from transactions denominated in foreign currencies are primarily related to intercompany accounts that have been determined to be temporary in nature and accordingly, are recorded directly to the statement of operations.

Segment Information As defined by SFAS No. 131, *Disclosures about Segments of an Enterprise and Related Information*, the Company operates as a single segment, as management makes operating decisions and assesses performance based on one single operating unit. The Company recorded revenues in 2006, 2007 and 2008 in the following geographic areas, based on the country in which revenue is generated:

	2006	2007	2008
Revenues:			
United States of America	\$ 26,692	\$ 42,249	\$ 71,762
United Kingdom	2,912	5,624	10,612
Japan	3,927	8,029	10,370
Others	2,726	7,081	12,980
Total	\$ 36,257	\$ 62,983	\$ 105,724

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

The following table summarizes long-term assets by geographic area as of December 31, 2007 and 2008, respectively:

	2007	2008
Long-term assets:		
United States of America	\$ 13,026	\$ 29,136
United Kingdom	1,422	982
Japan	475	507
Total	\$ 14,923	\$ 30,625

Recently Issued Accounting Pronouncements In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements*, which enhances existing guidance for measuring assets and liabilities at fair value. SFAS No. 157 defines fair value, establishes a framework for measuring fair value and expands disclosure about fair value measurements. SFAS No. 157 is effective for fiscal years beginning after November 15, 2007, except for the fair value measurement on nonfinancial assets and nonfinancial liabilities which has been delayed in accordance with FASB Staff Position FAS 157-2, *Effective Date of FASB Statement No. 157*. The Company adopted this statement on January 1, 2008 and the adoption did not have an impact on the Company s results of operations, financial position, and cash flows.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities*, which permits entities to measure the value of certain financial assets and liabilities and report the unrealized gain or loss thereon at each subsequent reporting period. SFAS No. 159 is effective for fiscal years beginning after November 15, 2007. The Company elected not to adopt the fair value option for valuation of those assets and liabilities which are eligible under this statement and therefore there was no impact to the Company s results of operations, financial position, and cash flows.

On December 4, 2007, the FASB issued SFAS No. 141(R), *Business Combinations*, and SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements an amendment of ARB No. 51*. SFAS No. 141(R) is required to be adopted concurrently with SFAS No. 160 and is effective for business combination transactions for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. Early adoption is prohibited. Application of SFAS No. 141(R) and SFAS No. 160 is required to be adopted prospectively, except for certain provisions of SFAS No. 160, which are required to be adopted retrospectively. Business combination transactions accounted for before adoption of SFAS No. 141R should be accounted for in accordance with SFAS No. 141, *Business Combinations*, and that accounting previously completed under SFAS No. 141 should not be modified as of or after the date of adoption of SFAS No.141(R). The adoption of SFAS No. 141(R) and SFAS No. 160 is not expected to have a material impact on the Company s financial position or results of operations.

4. ACQUISITION

On March 17, 2008, the Company acquired Fast Track, a provider of clinical trial planning solutions. With this acquisition, the Company extended its ability to serve customers throughout the clinical research process with solutions that improve efficiencies in protocol development and trial planning, contracting and negotiation. The Company paid total consideration of approximately \$18,100, which consisted of the issuance of 864,440 shares of common stock in exchange for all Fast Track s existing preferred stock and common stock as well as 444 and 25,242 shares of common stock reserved for the exercise of outstanding warrants and vested employee stock options, respectively.

F-35

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

The Company utilized an independent third-party specialist to perform a valuation of its common stock at the date of the acquisition, which resulted in a value of \$19.66 per share.

Fair market value of common stock issued (864,440 shares)	\$ 16,995
Fair market value of warrants and stock options exchanged (444 and 25,242 shares underlying the	
warrants and options, respectively)	459
Transaction costs	625
Total purchase price	\$ 18,079

The fair value of the 25,242 shares of fully vested exchanged stock options and 20,004 shares of unvested exchanged stock options (See Note 11) issued in connection with the acquisition was estimated using the Black-Scholes pricing model based on the following weighted-average assumptions:

Expected volatility	59%
Expected life	2.4 years
Risk-free interest rate	2.61%
Dividend yield	

The Company paid a premium (i.e. goodwill) over the fair value of the net tangible and identified intangible assets acquired for a number of reasons, including the following:

The acquisition allows the Company to provide customers with a more complete technology solution for use in clinical trials and to improve effectiveness of key trial planning and execution activities through the products offered by the combined company.

By acquiring Fast Track, the Company now has additional resources and skills to innovate and more quickly deliver to customers the next generation of technology in clinical trial solutions and to compete in the marketplace.

The Company will be able to realize cost savings and revenue synergies.

The value reflected in these elements of the purchase price does not meet the definition of an intangible asset under SFAS No. 141 and is therefore reflected as goodwill.

Fast Track s operations have been included in the Company s consolidated financial statements after the March 17, 2008 acquisition date.

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

The Company completed its allocation of purchase price on this acquisition as of December 31, 2008. The following table summarizes the estimated fair values of the assets acquired and liabilities assumed at the date of acquisition.

Assets acquired	
Cash and cash equivalents	\$ 1,049
Other current assets	778
Restricted cash	158
Furniture, fixtures and equipment	232
Intangible assets subject to amortization:	
Acquired technology	2,400
Database	1,900
Customer relationships	1,600
Customer contracts	1,600
In-process research and development	700
Goodwill	9,799
Total assets acquired	20,216
Liabilities assumed	
Current liabilities, excluding deferred revenue	(798)
Deferred revenue	(1,338)
Other long-term liabilities	(1)
Total liabilities assumed	(2,137)
	(=,)
Net assets acquired	\$ 18,079
-	

The significant assumptions used in the valuation included factors affecting the duration, growth rates and amounts of future cash flows for each income stream, specifically the future economic outlook for the industry, risks involved in the business, and the input of competition and technological changes.

In connection with the purchase price allocation, the Company estimated the fair value of the legal performance obligation associated with acquired deferred revenue in accordance with EITF Issue No. 01-3, *Accounting in a Business Combination for Deferred Revenue of an Acquiree* (EITF 01-3). The Company concluded that the fair value of the legal performance obligation represented the direct costs to fulfill such obligation plus an expected profit margin. As a result, the acquired deferred revenue had been reduced by approximately \$839 to \$1,338.

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

The following table provides the details of acquired intangible assets and their weighted-average useful lives:

	Estimated Fair Value	Weighted- average Useful Life (in years)
Acquired technology	\$ 2,400	5.00
Database	1,900	5.00
Customer relationships	1,600	5.00
Customer contracts	1,600	3.00
In-process research and development	700	None
	4 0 200	4.40
Total acquired intangible assets	\$ 8,200	4.18

Of the \$8,200 of acquired intangible assets, \$700 was assigned to in-process research and development projects. Subsequent to the date of acquisition, the Company determined that technological feasibility had not been established for any of these projects and, as a result, these projects were written off subsequent to the acquisition in March 2008.

For the remaining acquired intangible assets, acquired technology represents Fast Track s three principal clinical trial planning software products. Database represents Fast Track s existing database relating to the past finalized protocols, negotiated grants and contract research organization engagements. Customer relationships represent the underlying relationships associated with Fast Track s existing customer base. Customer contracts pertain to the contractual revenues from Fast Track s current customers that have not yet been invoiced, paid, and realized as of the acquisition date.

The assessment of the fair value and useful life of these acquired intangible assets was based on the estimated future cash flows expected to be generated from these acquired intangible assets. The Company determined that technology and database will be amortized using a straight-line method and customer relationships and customer contracts will be amortized using an accelerated method which reflects the pattern in which the economic benefits derived from the related intangible assets are consumed or utilized.

The fair value of customer contracts was calculated based on the present value of projected future cash flows from those identified contractual revenues less expected fulfillment costs, which represented the necessary costs to complete these contracts. The amortization of customer contracts has been charged to cost of revenues over the periods consistent with those contractual revenues expected to be recognized.

In accordance with SFAS No. 109, *Accounting for Income Taxes*, the Company has provided for net deferred tax assets of \$3,470 representing the difference between the currently estimated book and tax basis of the net assets acquired. Based on the Company s lack of a history of profits and uncertainty of future profitability, it is more likely than not that such tax benefit will not be realized and therefore a valuation allowance of \$3,470 was recognized to fully offset such net deferred tax assets. The excess of the purchase price over the estimated fair values of the assets acquired and liabilities assumed was allocated to goodwill, which is not expected to be deductible for tax purposes. In addition, the Company did not recognize a deferred tax asset relating to the future tax distribution that will arise when the Fast Track employee rollover options are exercised.

F-38

210

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

The following table summarizes unaudited pro forma financial information for the years ended December 31, 2007 and 2008 assuming the acquisition of Fast Track had occurred on January 1 of each period.

	Year ended I	December 31,
	2007	2008
Revenues	\$ 67,716	\$ 106,976
Operating loss	(25,949)	(16,661)
Net loss	(26,840)	(19,207)
Net loss per share:		
Basic and diluted	\$ (3.77)	\$ (2.83)

5. GOODWILL AND INTANGIBLE ASSETS

Changes in carrying amount of goodwill for the year ended December 31, 2008 are as follows:

Balance as of January 1, 2008	\$
Goodwill from acquisition of Fast Track	9,799
Balance as of December 31, 2008	\$ 9,799

Intangible assets are summarized as follows:

		As of December 31, 2008		
	Gross Carrying Amount		umulated ortization	Net Carrying Amount
Acquired technology	\$ 2,400	\$	(380)	\$ 2,020
Database	1,900		(301)	1,599
Customer relationships	1,600		(80)	1,520
Customer contracts	1,600		(509)	1,091
Total	\$ 7,500	\$	(1,270)	\$ 6,230

Amortization expense for intangible assets was \$0, \$0 and \$1,270 for the years ended December 31, 2006, 2007 and 2008, respectively. Annual amortization for the next five years is expected to be as follows:

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

Years ending December 31,	
2009	\$ 1,826
2010	1,459
2011	1,377
2012	1,308
2013	260

F-39

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

6. FURNITURE, FIXTURES, AND EQUIPMENT

Furniture, fixtures and equipment consists of the following:

	As of December 31,	
	2007	2008
Computer equipment and purchased software	\$ 19,366	\$ 25,935
Leasehold improvements	1,336	1,555
Furniture and fixtures	781	951
Total furniture, fixtures, and equipment	21,483	28,441
Less accumulated depreciation and amortization	(7,422)	(14,842)
Net furniture, fixtures, and equipment	\$ 14,061	\$ 13,599

Included in net furniture, fixtures and equipment as of December 31, 2007 and 2008 are computer equipment and purchased software under capital leases of approximately \$9,247 and \$7,214, respectively, net of related accumulated depreciation of \$4,358 and \$9,133, respectively. Depreciation and amortization expense for furniture, fixtures, and equipment, including assets under capital leases, was \$1,956, \$4,616 and \$7,435 for the years ended December 31, 2006, 2007 and 2008, respectively. Depreciation of equipment under capital leases was \$970, \$3,085 and \$4,776 for the years ended December 31, 2006, 2007 and 2008, respectively.

7. DEBT

In November 2003, the Company entered into a Note Purchase Agreement, as subsequently amended at various dates through June 2005 (collectively, the Term Note A) with one of its preferred shareholders (the Lender). In December 2005, the Company entered into an Amended and Restated Note Purchase Agreement with the Lender extending the maturity date of Term Note A and issuing a second note (Term Note B). In October 2007, the Company entered into an Amended and Restated Note Purchase Agreement extending the maturity of Term Note A and Term Note B and issuing a third note (Term Note C). Term Note A, Term Note B and Term Note C were secured by all of the Company s assets.

In September 2008, the Company entered into a new senior secured credit facility (New Credit Facility) with an unrelated lender that included a \$15,000 term loan (New Term Loan), which was fully drawn at closing, and a \$10,000 revolving credit line (Revolving Credit Line), all of which remains undrawn and available for future borrowings. The New Credit Facility was secured by all of the Company s assets. Proceeds of the New Term Loan were used to repay all outstanding notes payable, which included Term Note A of \$1,500, Term Note B of \$1,458, and Term Note C of \$8,000, and the remaining \$4,000 will be used for general corporate purposes. The New Term Loan and Revolving Credit Line will mature in September 2013 and the outstanding principal of the New Term Loan will amortize in quarterly installments of \$375 beginning on March 31, 2009 up through the date of maturity at which time a lump sum payment of any remaining unpaid balance will be due. In addition, the New Term Loan also includes an excess cash flow recapture feature which may require the Company to make additional principal payments beginning in April 2010.

The New Term Loan and Revolving Credit Line bear interest at prime rate plus 2.5% until March 31, 2009 and, thereafter, will bear interest at prime rate plus 2.25%. In December 2008, the New Credit Facility was amended to define prime rate as 4.5% or the lender s most recently announced prime rate, whichever is greater. However, if the Company can satisfy the minimum fixed charge coverage ratio covenant as of December 31, 2009 or March 31, 2010, the applicable margin thereafter will be reduced to 1.5%. As of December 31, 2008, the

F-40

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

effective interest rate on the New Term Loan was 7.0%. In addition, any undrawn Revolving Credit Line is subject to a quarterly unused fee at an annual rate of 0.5% of the average undrawn balance. The Company is entitled to prepay the New Credit Facility at its option, subject to a payment of a premium on such prepayments during the first three years after closing, which decreases over the three-year period from 3% of the amount prepaid to 1%. The New Credit Facility is also subject to mandatory prepayment under certain specified circumstances.

Due to the lock-box arrangement and the subjective acceleration clause contained in the New Credit Facility agreement, borrowings, if any, under the Revolving Credit Line will be classified as a current liability in accordance with EITF No. 95-22, *Balance Sheet Classification of Borrowings Outstanding under Revolving Credit Agreements That Include both a Subjective Acceleration Clause and a Lock-Box Arrangement.*

In connection with the New Credit Facility, the Company incurred legal and other costs of approximately \$669, which have been deferred and will be amortized over the term of the credit facility. As of December 31, 2008, the remaining unamortized balance is \$634. The remaining unamortized debt issuance costs of \$139 associated with the fully repaid term notes were written off in September 2008 and included within interest expense in the consolidated statement of operations for the year ended December 31, 2008.

The following table summarizes the interest expense incurred on long-term debt for the three years ended December 31, 2008:

	2006	2007	2008
Term Note A	\$ 91	\$ 135	\$ 104
Term Note B	146	149	101
Term Note C		242	556
New Term Loan			317
Unused Revolving Credit Line fee			15
Total	\$ 237	\$ 526	\$ 1 093

The New Credit Facility requires quarterly compliance with certain financial covenants, as amended, which include minimum profitability, liquidity, maximum allowable capital expenditures, and fixed charge coverage ratio.

Scheduled repayments of balances outstanding under the New Term Loan at December 31, 2008 are as follows:

Years ending December 31,	
2009	\$ 1,500
2010	1,500
2011	1,500
2012	1,500
2013	9,000
	\$ 15,000

F-41

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

8. CAPITAL LEASES

The Company leases certain equipment under noncancelable capital lease agreements which provide for total future minimum annual lease payments as follows:

Years ending December 31,	
2009	\$ 4,728
2010	2,452
2011	310
Total minimum lease payments	7,490
Less amount representing interest	430
Present value of net minimum capital lease payments	7,060
Less current portion	4,388
Capital lease obligations, excluding current portion	\$ 2,672

9. PREFERRED STOCK

In June 2000, the Company issued 2,385,000 shares of Series A Convertible Preferred Stock (Series A) in exchange for cash proceeds of \$1,192. In January and February 2002, the Company issued 1,436,636 shares of Series B Convertible Redeemable Preferred Stock (Series B) in exchange for cash proceeds of \$1,000. In February 2003, the Company issued 596,374 shares of Series C Convertible Redeemable Preferred Stock (Series C) in exchange for cash proceeds of \$500. The Company incurred legal and other fees associated with the issuance of the Series A, B, and C preferred stock of \$8,\$24 and \$12, respectively.

In May 2004, the Company amended and restated its certificate of incorporation to increase the number of authorized shares of Common Stock and Preferred Stock. The total number of shares of all classes of capital stock which the Company is authorized to issue is 27,170,343, divided into two classes: 20,000,000 shares of Common Stock at \$0.01 par value and 7,170,343 shares of Preferred Stock at \$0.01 par value.

In May 2004, the Company entered into a Securities Purchase Agreement to increase the capitalization of the Company. Pursuant to this agreement, the investors purchased 2,752,333 shares of the Company s Series D Convertible Redeemable Preferred Stock (Series D) at a price of \$3.68 per share. Simultaneous with the issuance of the Series D shares, the Company also redeemed and retired 100,829 Series B shares and 415,685 Series C shares for an aggregate of \$1,909. The total proceeds from the issuance of Series D shares (net of issuance costs of \$229) were \$9.896.

Certain of the rights, preferences and privileges of the Preferred Stock are listed below:

Dividends The holders of the Series A Preferred Stock will be entitled to receive dividends when, as and if declared by the Board of Directors.

The holders of Series B, C and D Senior Preferred Stock (Senior Preferred Stock) will be entitled to receive cumulative dividends, on a pari passu basis, at the per annum rate of \$0.0278 per share, \$0.0335 per share, and \$0.1471 per share in respect of the Series B Preferred Stock,

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

Series C Preferred Stock, and the Series D Preferred Stock, respectively, payable: (i) if declared by the Board of Directors, (ii) upon the occurrence of a

F-42

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

Liquidation, (iii) upon redemption of any Senior Preferred Stock, (iv) upon automatic conversion of any Senior Preferred Stock upon a Qualified Public Offering of securities of the Company, or (v) upon the voluntary conversion of any of the Senior Preferred Stock into common stock, if such conversion is in connection with a public offering of securities by the Company. Dividends that are declared by the Board will be paid in cash or, at the option of at least 66% of the outstanding Series D Preferred Stock, in shares of the Company s common stock with the number of shares of common stock determined based on the fair value of common stock on the dividend payment date.

A Qualified Public Offering as it relates to Senior Preferred Stock dividend rights is defined as the closing of the Company s first underwritten public offering on a firm commitment basis by a nationally recognized investment banking organization or organizations pursuant to an effective registration statement under the Securities Act, covering the offer and sale of Common Stock (i) at a price per share of Common Stock of not less than \$3.48 for Series B and Series C Preferred Stock or \$11.04 for Series D Preferred Stock (which numbers are to be appropriately adjusted for stock splits, stock dividends, combinations, recapitalizations and the like, if any), (ii) with respect to which the Company receives aggregate gross proceeds attributable to sales for the account of the Company of not less than \$20,000 for Series B and Series C Preferred Stock or \$50,000 for Series D Preferred Stock, and (iii) with respect to which such Common Stock is listed for trading on either the New York Stock Exchange or The NASDAQ National Market (now known as The NASDAQ Global Market). As a result of a two-for-one stock split of the common stock in August 2004 in the form of a common stock dividend (August 2004 Stock Split), the price per share of common stock for the Qualified Public Offering requirement has been adjusted to \$1.74 for the Series B Preferred Stock and the Series C Preferred Stock and \$5.52 for the Series D Preferred Stock.

To date, no dividends have been declared by the Company. At December 31, 2007 and 2008, there were aggregate unpaid cumulative dividends of \$1,612 and \$2,060, respectively, which have been accreted to the carrying value of the Senior Preferred Stock.

Accretion of the carrying value of Senior Preferred Stock to redemption value is recorded as a reduction to retained earnings over the period from the date of issuance to the earliest redemption date of the security. In the absence of retained earnings, accretion is recorded as a decrease in additional paid-in capital.

Liquidation The Company s Articles of Incorporation define liquidation to include: (i) voluntary or involuntary liquidation or dissolution, or (ii) any sale of the Company (i.e., via merger, consolidation, sale of substantially all of the Company s assets, or any other transaction or series of transactions in which another party or group of parties acquires capital stock from the Company representing a majority of the Company s outstanding voting power).

Upon a liquidation, after payment or provision for payment of debts and other liabilities of the Company, the holders of the Senior Preferred Stock shall be entitled to receive out of the remaining assets of the Company the following amounts:

- (i) Each share of the Series D Preferred Stock, on a pari passu basis with each share of the other series of Senior Preferred Stock, shall be entitled to the payment of its original issue price of \$3.6787 per share plus accumulated but unpaid dividends applicable to the Series D Preferred Stock (which numbers are to be appropriately adjusted for stock splits, stock dividends, combinations, recapitalizations, if any).
- (ii) Each share of the Series C Preferred Stock, on a pari passu basis with each share of the other series of Senior Preferred Stock, shall be entitled to the payment of its original issue price of \$0.8384 per share

F-43

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

plus accumulated but unpaid dividends applicable to the Series C Preferred Stock (which numbers are to be appropriately adjusted for stock splits, stock dividends, combinations, recapitalizations, if any).

(iii) Each share of the Series B Preferred Stock, on a pari passu basis with each share of the other series of Senior Preferred Stock, shall be entitled to the payment of its original issue price of \$0.69614 per share plus accumulated but unpaid dividends applicable to the Series B Preferred Stock (which numbers are to be appropriately adjusted for stock splits, stock dividends, combinations, recapitalizations, if any).

If upon a liquidation the holders of outstanding shares of the Senior Preferred Stock would receive more than the aggregate amount calculated above had the shares of their Senior Preferred Stock been converted into shares of common stock, then each holder of outstanding shares of Senior Preferred Stock in connection with such liquidation shall be entitled to be paid cash as if their Senior Preferred Shares had been converted into common stock immediately before the liquidation.

Upon a liquidation, and after the payment in full of the Senior Preferred Stock, the Series A Preferred Stock shall be entitled to \$0.50 per share plus any declared but unpaid dividends.

Conversion The Series A Preferred Stock was initially convertible into common stock at a rate of one share of Series A Preferred Stock for one share of common stock, subject to adjustment for stock dividends, combinations of stock or reorganizations. As a result of a one-for-ten reverse stock split of the common stock in January 2002, the conversion was adjusted to ten shares of Series A Preferred Stock for one share of common stock. As a result of the August 2004 Stock Split, the conversion rate has been adjusted to five shares of Series A Preferred Stock for one share of common stock. The Series A Preferred Stock is (a) optionally convertible into common stock upon the approval of at least two-thirds of the holders of the Series A Preferred Stock or (b) automatically convertible into common stock upon the effective date of a Qualified Public Offering of the Company s common stock. Series A Preferred Stock will be automatically converted upon the effective date of a registration statement under the Securities Act of 1933 for the sale of common stock to the public.

The Senior Preferred Stock was initially voluntarily convertible into common stock upon the written election of a holder of the Series D Preferred Stock, the Series C Preferred Stock, or the Series B Preferred Stock at a conversion rate of one to one, with adjustments provided for anti-dilution protection and preference amounts eligible to the Senior Preferred Stock. As a result of the August 2004 Stock Split, the conversion rate has been adjusted to one share of Senior Preferred Stock for two shares of common stock.

The Series B Preferred Stock and the Series C Preferred Stock are automatically converted into common stock upon the occurrence of a Qualified Public Offering at a price per share of common stock of not less than \$3.48 (which numbers are to be appropriately adjusted for stock splits, stock dividends, combinations and recapitalizations, if any) where the Company receives aggregate gross proceeds of not less than \$20,000 to which the common stock is listed either on the New York Stock Exchange or The NASDAQ Global Market.

The Series D Preferred Stock is automatically converted into common stock upon the occurrence of a Qualified Public Offering at a price per share of common stock of not less than \$11.04 (which numbers are to be appropriately adjusted for stock splits, stock dividends, combinations and recapitalizations, if any) where the Company receives aggregate gross proceeds of not less than \$50,000 to which the common stock is listed either on the New York Stock Exchange or The NASDAQ Global Market.

As a result of the August 2004 Stock Split, the price per share of common stock for the Qualified Public Offering requirement has been adjusted to \$1.74 for the Series B Preferred Stock and the Series C Preferred Stock and \$5.52 for the Series D Preferred Stock.

F-44

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

Upon the automatic conversion of the Senior Preferred Stock in connection with a Qualified Public Offering, the holders of the Senior Preferred Stock will be entitled to payment of all accumulated accrued dividends on such preferred stock in cash, unless the holders of at least 66% of the outstanding Series D Preferred Stock elect to have such dividends paid in shares of the Company s common stock at the then fair market value.

Voting Rights Each share of Series A Preferred Stock shall entitle the holder to one vote per share of each share of common stock into which each share of Series A Preferred Stock is then convertible.

Each share of Senior Preferred Stock shall be entitled to a number of votes equal to the number of shares of common stock into which such share of Senior Preferred Stock is then convertible, voting with the holders of common stock as a single class upon all matters submitted to a vote of stockholders.

Redemption The Series A Preferred Stock has no redemption rights.

At any time on or after May 27, 2009, upon 90 days advance written notice, the holders of at least a majority of all the then-outstanding shares of Series D Preferred Stock may elect to have all (but not less than all) of the then-outstanding shares of Senior Preferred Stock redeemed for cash in two equal installments. In such an event, the Company will redeem for cash one half of each holder s shares of Senior Preferred Stock 90 days after written notice and the other half of the shares of the Senior Preferred Stock one year thereafter.

The redemption price for each of the Series D Preferred Stock, the Series C Preferred Stock, and the Series B Preferred Stock are equal to \$3.6787, \$0.8384, and \$0.69614, respectively. Redemption of the Series B and C Preferred Stock is contingent upon the Series D Preferred Stock holders exercising their redemption rights described above.

If the Company has insufficient funds to redeem all of the Senior Preferred Stock, the Company must use any funds legally available to it to redeem the maximum possible number of such shares pro rata in accordance with the respective redemption price. All shares required to be redeemed but which are not, due to insufficient funds, shall accrue interest at a rate of 12% per annum, compounded annually, from their respective redemption date until redeemed. Such unredeemed shares of Senior Preferred Stock shall also be entitled to dividends thereon as described above until the respective shares are redeemed.

As a result of the redemption features associated with the Series B, C and D convertible preferred stock, the Company has classified these securities outside of stockholders deficit. The Company is accreting the related issuance costs incurred over the stated redemption period.

Sale Right Starting May 27, 2009, the holders of at least 66% of the outstanding Series D Preferred Stock (or the common stock issued upon conversion of the Series D Preferred Stock) will have the right to request that the Company effect a sale of all or substantially all of the Company s assets or a merger or other business combination on terms satisfactory to the holders of a majority of the Series D Preferred Stock. However, holders of more than 66% of the outstanding Series D Preferred Stock have agreed not to exercise this right until after May 27, 2010. This right will terminate upon the completion of a Qualified Public Offering.

Anti-Dilution Protection The Senior Preferred Stock have weighted-average anti-dilution provisions.

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

10. STOCKHOLDERS DEFICIT

Common Stock The Company is authorized to issue 20,000,000 shares of common stock at \$0.01 par value. Common shares outstanding were 6,074,308 and 7,035,100 in 2007 and 2008, respectively. Common stockholders are entitled to one vote for each share of common stock held. Common stockholders may receive dividends only after the payment in full of all preferential dividends of the Senior Preferred stockholders and if and when the Board of Directors determines in its sole discretion.

In 2007, the Company issued 6,625 shares of common stock for payment of professional fees with an estimated value of \$80 to a non-related party.

Treasury Stock Transaction with Related Parties In October 2007, the Company entered into a Stock Repurchase Agreement with certain executive officers and directors of the Company. Pursuant to this agreement, the Company repurchased 496,811 shares of the Company s common stock from the executive officers and directors of the Company at a price of \$12.077 per share. The Company accounted for the treasury stock under the cost method.

11. STOCK OPTIONS

In 2000, the Company adopted the 2000 Stock Option Plan (the Plan) under which 500,000 shares of the Company s common stock were reserved for issuance to employees, directors, consultants and advisors. Since such date, the Company has amended the Plan to provide for 3,353,906 authorized shares. Options granted under the Plan may be incentive stock options, nonqualified stock options or restricted stock options. Incentive stock options may be granted only to employees. Options generally vest 25% one year from the grant date and 75% ratably over the next three years and expire after ten years. Stock options are issued at the current market price on the date of the grant. The Company uses an independent third-party specialist to perform the valuation of its common stocks as part of the stock options calculations.

In connection with the Fast Track acquisition, a total of 358,883 shares of pre-acquisition stock options held by Fast Track s employees were exchanged into 45,246 shares of Company s stock options based on the conversion rate of 0.12616. The Company valued the exchanged stock options using the Black-Scholes pricing model and based on the fair value of Company s common stock of \$19.66 at acquisition. Of the 45,246 shares of exchanged stock options, 25,242 shares were fully vested at acquisition and therefore included as part of the purchase price of acquisition (See Note 4). The remaining 20,004 shares of unvested stock options will vest based on the original stock option contracts with an accelerated vesting at the first anniversary of the acquisition in accordance with the acquisition agreement.

The Company accounted for the Plan in accordance with SFAS No. 123(R). The fair value of each option grant is estimated on the date of grant using the Black-Scholes pricing model with the following weighted-average assumptions:

	2006	2007	2008
Expected volatility	74%	62%	59%
Expected life	6 years	6 years	6 years
Risk-free interest rate	4.82%	4.26%	3.06%
Dividend yield			

F-46

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

During 2006, the Company amended certain options granted in November 2005 and February 2006 under the transition rules in accordance with IRS guidance for Internal Revenue Code Section 409A. The options were originally granted with an exercise price of \$0.62 per share and were subsequently amended such that the exercise price was increased to \$2.00 per share for November 2005 grants and \$3.20 per share for February 2006 grants. No other terms of the options were amended. This modification resulted in no additional stock-based compensation expense.

The following table summarizes the stock options activity under the Plan as of December 31, 2008, and changes during the year then ended:

	Number of Shares	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Term	Aggregate Intrinsic Value (\$000)
Outstanding at January 1, 2008	2,276,018	\$ 4.61		
Granted	324,026	19.73		
Fast Track exchanged options	45,246	2.38		
Canceled	(117,388)	6.88		
Exercised	(96,352)	0.64		
Outstanding at December 31, 2008	2,431,550	\$ 6.63	6.93	\$ 23,458
Exercisable at December 31, 2008	1,548,350	\$ 2.86	5.95	\$ 19,934

The weighted-average grant-date fair value of options granted during the years ended December 31, 2006, 2007 and 2008 was \$3.52, \$9.86 and \$11.56, respectively. The total intrinsic value of options exercised during the years ended December 31, 2006, 2007 and 2008 was \$1,117, \$1,255 and \$1,923, respectively.

The following table summarizes the status of the Company s nonvested stock options as of December 31, 2008, and changes during the year then ended:

	Number of Shares	Av Gra	eighted- verage ant-date ir Value
Nonvested at January 1, 2008	1,046,539	\$	7.13
Granted	324,026		11.56
Fast Track exchanged options	20,004		18.52
Vested	(453,864)		6.01
Cancelled	(53,505)		7.94
Nonvested at December 31, 2008	883,200	\$	9.54

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

As of December 31, 2008, there was a total of \$7,632 of unrecognized compensation cost related to non-vested share-based compensation awards granted, as recorded in accordance with SFAS No. 123(R). This cost is expected to be recognized over a weighted-average remaining period of 1.43 years. The total fair value of shares vested during the years ended December 31, 2006, 2007 and 2008 was \$1,023, \$1,078 and \$2,727, respectively.

F-47

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

For the years ended December 31, 2006, 2007, and 2008, the stock-based compensation expense was included in the following costs and expenses:

	2006	2007	2008
Cost of revenues	\$ 108	\$ 172	\$ 291
Research and development	89	183	503
Sales and marketing	304	448	640
General and administrative	218	491	1,763
Total stock-based compensation	\$ 719	\$ 1,294	\$ 3,197

The followings are the details of stock options granted in each quarter during the year ended December 31, 2008. The Company used contemporaneous valuations performed by an independent third-party specialist to determine the fair value of the stock options.

		Qua	rter Ended	
	March 31, 2008	June 30, 2008	September 30, 2008	December 31, 2008
Number of options granted	167,000	52,066	99,960	5,000
Weighted average exercise price	\$ 19.85	\$ 19.23	\$ 19.75	\$ 20.58
Weighted average fair value of common stock at grant	\$ 20.03	\$ 19.48	\$ 20.15	\$ 17.70
Weighted average intrinsic value	\$ 1.67	\$ 0.25	\$ 0.40	\$

The exercise price of certain granted stock options was less than the fair value of the common stock at the date of grant. As a result, the Company recorded an increased stock-based compensation expense due to the intrinsic value associated with these grants.

12. INCOME TAXES

The components of income tax expense (benefit) for 2006, 2007 and 2008 are as follows:

	2006	2007	2008
Current expense:			
Federal and state	\$	\$	\$
Foreign	555	434	764
Current expense	555	434	764
Deferred expense (benefit):			
Federal and state	(8,518)	(11,130)	(7,687)
Foreign	(249)	81	112

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

Valuation allowance	8,518	11,130	7,731
Net income tax expense (benefit):	\$ 306	\$ 515	\$ 920

F-48

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

A reconciliation of income tax expense and the amount computed by applying the statutory federal income tax rate loss before income taxes is as follows:

	2006	2007	2008
Tax computed at federal statutory rate	\$ (6,357)	\$ (7,869)	\$ (5,900)
Increase (decrease) in income taxes resulting from:			
Permanent differences	912	704	1,648
Valuation allowance	5,753	7,684	5,142
Other, net	(2)	(4)	30
Total	\$ 306	\$ 515	\$ 920

As of December 31, 2007 and 2008, the components of deferred tax assets (liabilities) are as follows:

	5 24,160 160	\$ 32,215
Net operating loss carryforwards \$		\$ 32,215
		\$ 32,215
	160	
Unrealized loss on foreign exchange		
Deferred rent	50	30
Payroll accruals	731	1,315
Allowance for doubtful accounts	127	240
Imputed interest		143
Accrued interest	121	
Stock options	290	831
Deferred revenue	3,905	4,536
Foreign tax credit	989	1,753
Property and equipment	590	
Other	41	85
Gross deferred tax assets	31,164	41,148
Liabilities:		
Foreign exchange translation	(22)	(148)
Unrealized gain on foreign exchange		(128)
Depreciable and amortizable assets		(1,838)
Indefinite life intangible asset		(44)
Other		(273)
Gross deferred tax liabilities	(22)	(2,431)

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

Less valuation allowance	(3	30,974)	(3	8,705)
Net deferred tax assets/(liabilities)	\$	168	\$	12
Net current deferred tax assets	\$	168	\$	303
Net long-term deferred tax assets (included in other assets)				36
Net long-term deferred tax liabilities (included in other long-term liabilities)				(327)
Net deferred tax assets	\$	168	\$	12

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

Income (loss) before income taxes by jurisdiction is as follows:

	2006	2007	2008
U.S loss	\$ (19,647)	\$ (24,724)	\$ (19,234)
Non-U.S. income	951	1,577	1,882
Total loss before income taxes	\$ (18,696)	\$ (23,147)	\$ (17,352)

As of December 31, 2007 and 2008, the Company had approximately \$56,100 and \$83,700, respectively, of federal net operating loss carryforwards available to offset future taxable income expiring from 2019 through 2028. The Company also had net operating loss carryforwards for state income tax purposes of approximately \$60,900 and \$106,000 as of December 31, 2007 and 2008, respectively, available to offset future state taxable income, expiring from 2009 through 2028. Certain net operating loss carryforwards were obtained through the acquisition of Fast Track in 2008.

The future utilization of the net operating loss carryforwards may be subject to significant limitations under the Internal Revenue Code (the Code). Due to these limitations and the likelihood that the Company s future taxable income may be insufficient to utilize these tax benefits, the Company has provided a valuation allowance against the net deferred tax assets as their future utilization is uncertain at this time. The Company has net deferred tax assets relating to its foreign subsidiaries of \$168 and \$56 as of December 31, 2007 and 2008, respectively, which the Company believes are realizable as its foreign subsidiaries are taxpayers in those jurisdictions. The net change in the valuation allowance was an increase of \$8,518 in 2006, an increase of \$11,130 in 2007 and an increase of \$7,731 in 2008.

The Company believes that its income tax positions and deductions will be sustained on audit and does not anticipate adjustments that will result in a material change to its financial position during the next twelve months. Therefore, no reserves for uncertain tax positions have been recorded pursuant to FIN 48 as of December 31, 2008. The Company will recognize accrued interest and penalties, if any, related to uncertain tax positions through income tax expense. The Company s federal tax returns for 2002-2007 remain open to examination by the Internal Revenue Service (IRS) in their entirety. In addition, the Company s state tax returns for 1999-2007 also remain open with respect to state taxing jurisdictions. In February 2009, the Company was notified by the IRS that the 2007 federal tax return will be examined.

13. EARNINGS PER SHARE

The Company follows SFAS No. 128, *Earnings Per Sha*re, in calculating earnings per share. Basic earnings per share is calculated by dividing net income (loss) available to common stockholders by the weighted-average number of shares outstanding during the period. Diluted earnings per share includes the determinants of basic net income (loss) per share and, in addition, gives effect to potentially dilutive common shares. For 2006, 2007, and 2008, the diluted loss per share excluded the impact of the conversion of all preferred stock and stock options because the effect would be anti-dilutive.

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

The following common stock equivalents were excluded from the calculation of diluted net loss per share since the effects are anti-dilutive:

	Year ended December 31,			
	2006	2007	2008	
Number of potential shares that are antidilutive:				
Preferred stock	9,014,658	9,014,658	9,014,658	
Employee stock options and non-vested stock	1,292,675	1,587,938	2,026,282	
Total	10,307,333	10,602,596	11,040,940	

14. RELATED PARTY TRANSACTION

In 2008, one customer whose former chief executive is a member of the Company s board of directors used the Company s products and services. This board member resigned from his position with this customer during the third quarter of 2008 to assume a position with another company. The Company has recognized a total of \$365 of application and professional services revenues from this customer for the year ended December 31, 2008. Accounts receivable relating to this customer was \$5 as of December 31, 2008.

See Note 10, Stockholders Deficit, for a description of treasury stock transactions with related parties.

15. COMMITMENTS AND CONTINGENCIES

Operating Leases The Company leases certain equipment and office space under noncancelable operating lease agreements which provide for total future minimum annual lease payments as follows:

Years ending December 31,	
2009	\$ 2,534
2010	2,010
2011	1,660
2012	1,539
2013	1,185
Thereafter	1,120
Total minimum lease payments	\$ 10,048

Rent expense was approximately \$1,128, \$1,792 and \$2,726 for 2006, 2007 and 2008, respectively. The Company had outstanding standby letters of credit issued in connection with office leases in the amount of \$387 and \$531 as of December 31, 2007 and 2008, respectively. These standby letters of credit are fully collateralized with restricted cash as of December 31, 2007 and 2008.

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

401(k) Plan The Company has a pre-tax savings and profit sharing plan (the Plan) under Section 401(k) of the Internal Revenue Code (the Code) for substantially all employees. Under the Plan, eligible employees are able to contribute up to 15% of their compensation not to exceed the maximum IRS annual deferral amount. Effective January 1, 2008, the Company provides a 50% match of the first 4% of eligible compensation contributed each period by the employees. The maximum match by the Company is 2% of such eligible compensation. Prior to 2008, the Company was not required to and did not make any matching contributions under the Plan. For the year ended December 31, 2008, the Company incurred expense of \$598 relating to matching contributions.

F-51

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

Legal Matters The Company is subject to legal proceedings and claims which have arisen in the ordinary course of business. The Company records an estimated liability for these matters when an adverse outcome is considered to be probable.

In 2006, it was claimed that certain applications offered to the Company s customers potentially infringed on intellectual property rights held by a third party. As a result of negotiations with the third party, the Company entered into a license and settlement agreement in June 2007, pursuant to which the Company licensed the intellectual property held by the third party for use in its future sales to customers and settled all past infringement claims. The Company paid a settlement amount of \$2,200 to the third party in 2007. Such amount was recorded in cost of revenues under application services on the accompanying consolidated statement of operations for the year ended December 31, 2006.

In 2006, a former employee of the Company made a claim seeking compensation of approximately \$1,600 in relation to a wrongful dismissal lawsuit. Subsequently, the claim was reduced to approximately \$1,400 as of December 31, 2008. The court rendered its decision on January 15, 2009, which awarded approximately \$103 to the plaintiff. While the Company believes the decision is favorable to it, the decision may be appealed by the plaintiff. In the event the decision is appealed, the Company will continue to defend this claim until it is ultimately resolved. The Company has accrued \$710 and \$680 which is included in accrued payroll and other compensation on the accompanying consolidated balance sheet as of December 31, 2007 and 2008, respectively.

Contractual Warranties The Company typically provides contractual warranties to its customers covering its product and services. To date, any refunds provided to customers have been immaterial.

Indemnifications The Company indemnifies its customers against claims that software or documentation purchased from or made available by the Company infringes upon a copyright, patent or the proprietary rights of others. Such indemnification provisions are disclosed in accordance with FASB Interpretation No. 45 (FIN 45), Guarantor s Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others, an interpretation of FASB Statements No. 5, 57, and 107 and rescission of FASB Interpretation No. 34, as further interpreted by FASB Staff Position FIN 45-1, Accounting for Intellectual Property Infringement Indemnifications under FASB Interpretation No. 45. In the event of a claim, the Company agrees to obtain the rights for continued use of the software for the customer, to replace or modify the software or documentation to avoid such claim or to provide a credit to the customer for the unused portion of the software license. A liability may be recognized under SFAS No. 5, Accounting for Contingencies, if information prior to the issuance of the consolidated financial statements indicates that it is probable that a liability has been incurred at the balance sheet date and the amount of the loss can be reasonably estimated.

In 2008, two customers requested the Company to indemnify them in connection with patent infringement lawsuits filed by a third party. The Company has not been named as a defendant in either of these lawsuits and agreed to defend and indemnify one of these customers with respect to the allegations, claims, and defenses relating to its use of the Company s software. The lawsuit remains in its preliminary stages and the plaintiff in the lawsuit has not yet claimed a specific damage amount in connection with the use of the Company s software. Since the probable outcome and the future economic impact of these lawsuits on the Company remain uncertain, the Company is unable to develop an estimate of its potential liability, if any, as it relates to this indemnification claim. As a result, the Company did not record an indemnification liability as of December 31, 2008.

Change in Control Agreements The Company has entered into change in control agreements with its chief executive officer and certain other executive officers. These agreements provide for payments to be made

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

to such officers upon involuntary termination of their employment by the Company without cause or by such officers for good reason as defined in the agreements, within a two-year period following a change in control. The agreements provide that, upon a qualifying termination event, such officers will be entitled to (a) a severance payment equal to the officer s base salary plus target bonus amount; (b) continuation of health benefits for 12 months; (c) immediate vesting of any remaining unvested equity awards; and (d) a tax gross up payment under Section 280G of the Code sufficient to reimburse the officer for 50% of any excise tax payable as a result of any termination payments following a change in control, if applicable.

16. UNAUDITED PRO FORMA INFORMATION

The Company is presenting unaudited pro forma information to reflect the pro forma adjustments made to the historical consolidated results of operations for the year ended December 31, 2008. The pro forma effect is related to the automatic conversion of all preferred stock into common stock upon a Qualified Public Offering of securities of the Company and is based on the assumption that the holders of Senior Preferred Stock will receive a cash payment for all accumulated accrued dividends on the preferred stock of \$2,060 from cash on hand, as if it had occurred on January 1, 2008 for the basic and diluted loss per share.

A Qualified Public Offering is defined as the closing of the Company's first underwritten public offering on a firm commitment basis by a nationally recognized investment banking organization or organizations pursuant to an effective registration statement under the Securities Act, covering the offer and sale of Common Stock (i) at a price per share of Common Stock of not less than \$3.48 for Series B and Series C Preferred Stock or \$11.04 for Series D Preferred Stock (which numbers are to be appropriately adjusted for stock splits, stock dividends, combinations, recapitalizations and the like), (ii) with respect to which the Corporation receives aggregate gross proceeds attributable to sales for the account of the Company of not less than \$20,000 for Series B and Series C Preferred Stock or \$50,000 for Series D Preferred Stock, and (iii) with respect to which such Common Stock is listed for trading on either the New York Stock Exchange or The NASDAQ National Market (now known as The NASDAQ Global Market). As a result of a two-for-one stock split of the common stock in August 2004 in the form of a common stock dividend, the price per share of common stock for the Qualified Public Offering requirement has been adjusted to \$1.74 for the Series B Preferred Stock and the Series C Preferred Stock and \$5.52 for the Series D Preferred Stock.

The following table provides the details of the pro forma basic and diluted loss per share (in thousands, except share and per share data):

	Year ended December 31, 200	
Net loss available to common stockholders, as reported	\$	(18,770)
Elimination of preferred stock dividends and accretion		498
Pro forma net loss available to common stockholders	\$	(18,272)
Weighted average basic and diluted common shares outstanding, as reported		6,793,596
Conversion of preferred stock to common stock		9,014,658
Pro forma weighted average basic and diluted common shares outstanding		15,808,254
Pro forma basic and diluted loss per share	\$	(1.16)

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

17. UNAUDITED QUARTERLY CONSOLIDATED RESULTS OF OPERATIONS DATA

The following table presents the Company sunaudited quarterly consolidated results of operations data for the years ended December 31, 2007 and 2008, which have been restated based on a review performed by the Company of its practice regarding the timing of revenue recognition. This information is derived from the Company sunaudited consolidated financial statements, and includes all adjustments, consisting only of normal recurring adjustments, that the Company considers necessary for the fair presentation of the results of operations for the quarters presented. Historical results are not necessarily indicative of the results to be expected in future periods.

	Mar. 31,	Quarter Ended r. 31, Jun. 30, Sept. 30,		Dec. 31,			Sept. 30,	Dec. 31,
	2007	2007	2007	2007	2008	2008	2008	2008
As restated:								
Revenues:								
Application services	\$ 9,706	\$ 10,633	\$ 11,700	\$ 12,553	\$ 14,821	\$ 18,076	\$ 19,132	\$ 21,791
Professional services	3,940	3,339	6,056	5,056	6,158	7,677	8,678	9,391
Total revenues	13,646	13,972	17,756	17,609	20,979	25,753	27,810	31,182
Cost of revenues:	ŕ	·	·	·	·	·	·	·
Application services	2,399	3,504	3,415	3,852	4,475	4,889	5,226	5,057
Professional services	7,656	8,379	8,165	8,835	8,194	8,257	7,364	6,986
Total cost of revenues	10,055	11,883	11,580	12,687	12,669	13,146	12,590	12,043
Gross profit	3,591	2,089	6,176	4,922	8,310	12,607	15,220	19,139
Operating costs and expenses:								
Research and development(2)	2,125	2,462	2,817	3,312	4,872	4,778	4,982	4,708
Sales and marketing	3,577	3,621	3,888	4,398	5,463	6,173	6,018	6,536
General and administrative	2,285	2,718	3,432	4,926	5,807	7,144	7,096	7,427
Total operating costs and expenses	7,987	8,801	10,137	12,636	16,142	18,095	18,096	18,671
	(4.206)	(6.710)	(2.0(1)	(7.714)	(7. 92 2)	(5.400)	(2.976)	460
Loss (income) from operations	(4,396)	(6,712)	(3,961)	(7,714)	(7,832)	(5,488)	(2,876)	468
Interest and other expenses (income), net	(19)	(2)	44	341	563	247	372	442
Loss (income) before provision for income								
taxes	(4,377)	(6,710)	(4,005)	(8,055)	(8,395)	(5,735)	(3,248)	26
Provision for income taxes	91	91	169	164	165	169	147	439
Net loss	\$ (4,468)	\$ (6,801)	\$ (4,174)	\$ (8,219)	\$ (8,560)	\$ (5,904)	\$ (3,395)	\$ (413)

F-54

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2008

(In thousands, except share and per-share data)

	Ouarter Ended				Quarter Ended(1)							
		ar. 31, 2007		un. 30, 2007		ot. 30, 007	Dec. 31, 2007	Mar. 31, 2008	Jun. 30, 2008	Sept. 30, 2008		ec. 31, 2008
As previously reported:												
Revenues:												
Application services	\$ 1	10,987	\$	11,172	\$ 12	2,519	\$ 13,700	\$ 15,698	\$ 18,930	\$ 19,818	\$ 2	22,324
Professional services		7,458		9,661	Ģ	9,838	10,939	9,199	11,519	9,635]	10,007
Total revenues		18,445		20,833	22	2,357	24,639	24,897	30,449	29,453	3	32,331
Cost of revenues:												
Application services		2,399		3,504	3	3,415	3,852	4,475	4,889	5,226		5,057
Professional services		7,656		8,379	8	8,165	8,835	8,194	8,257	7,364		6,986
Total cost of revenues		10,055		11,883	11	1,580	12,687	12,669	13,146	12,590	1	12,043
Gross profit		8,390		8,950	10),777	11,952	12,228	17,303	16,863	2	20,288
Operating costs and expenses:												
Research and development(2)		2,125		2,462	2	2,817	3,312	4,872	4,778	4,982		4,708
Sales and marketing		3,783		3,916	4	4,086	4,700	5,631	6,375	6,089		6,586
General and administrative		2,285		2,718	3	3,432	4,926	5,807	7,144	7,096		7,427
Total operating costs and expenses		8,193		9,096	10	0,335	12,938	16,310	18,297	18,167]	18,721
· · · · · · · · · · · · · · · · · · ·		-,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		- ,	,	- ,	-,	-,		- , .
Income (loss) from operations		197		(146)		442	(986)	(4,082)	(994)	(1,304)		1,567
Interest and other expenses (income), net		(19)		(2)		44	341	563	247	372		442
interest and other expenses (meonie), net		(1))		(2)			511	303	217	372		2
Income (loss) before provision for income												
taxes		216		(144)		398	(1,327)	(4,645)	(1,241)	(1,676)		1,125
Provision for income taxes		91		91		169	164	165	169	147		439
Net income (loss)	\$	125	\$	(235)	\$	229	\$ (1,491)	\$ (4,810)	\$ (1,410)	\$ (1,823)	\$	686

* * * * * *

⁽¹⁾ On March 17, 2008, the Company acquired Fast Track Systems, Inc., a provider of clinical trial planning solutions. The consolidated statements of operations data beginning from the first quarter of 2008 include the impact of the acquisition and operations of Fast Track since the date of acquisition.

⁽²⁾ The Company determined that technological feasibility had not been established for certain in-process research and development projects acquired from Fast Track. These projects were written off, resulting in a \$0.7 million charge to research and development expense for the quarter ended March 31, 2008.

MEDIDATA SOLUTIONS, INC. AND SUBSIDIARIES

Exhibits and Financial Statement Schedules

Schedule II Valuation and Qualifying Accounts

The allowance for doubtful accounts as of December 31, 2007 and 2008 was \$32 and \$309, respectively. The table below details the activity in the account for the past three fiscal years:

	Balanco beginn of peri	ing	Charg costs expe		Ded	uctions	alance at end of period
Year ended December 31,							
2006	\$	15	\$	23	\$	(14)	\$ 24
2007		24		8			32
2008		32		280		(3)	309

F-56

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of

Fast Track Systems, Inc.

Conshohocken, Pennsylvania

We have audited the accompanying balance sheets of Fast Track Systems, Inc. (the Company) as of December 31, 2006 and 2007, and the related statements of operations, stockholders deficit and cash flows for each of the two years in the period ended December 31, 2007. These financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the financial position of Fast Track Systems, Inc. as of December 31, 2006 and 2007, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2007, in conformity with accounting principles generally accepted in the United States of America.

/s/ Deloitte & Touche LLP

Philadelphia, Pennsylvania

November 21, 2008

F-57

FAST TRACK SYSTEMS, INC.

BALANCE SHEETS

AS OF DECEMBER 31, 2006 AND 2007

		2006		2007
ASSETS				
CURRENT ASSETS				
Cash and cash equivalents	\$	1,800,659	\$	1,652,307
Accounts receivable, net of allowance for doubtful accounts of \$620 and \$35,833 for 2006 and				
2007, respectively		593,266		593,366
Prepaid and other current assets		95,148		183,584
Total current assets		2,489,073		2,429,257
RESTRICTED CASH, NONCURRENT		158,000		158,000
PROPERTY AND EQUIPMENT, NET		170,854		181,423
OTHER ASSETS				
Goodwill		1,686,966		1,686,966
Capitalized patent costs		179,360		229,981
Security deposit		17,259		
TOTAL ASSETS	\$	4,701,512	\$	4,685,627
	·	, - ,-		, , .
LIABILITIES AND STOCKHOLDERS DEFICIT				
CURRENT LIABILITIES				
Accrued compensation	\$	271,837	\$	483,347
Other accrued expenses	Ψ	105,526	Ψ	385,103
Deferred revenue		1,759,471		2,070,379
Deferred rent current portion		34,694		34,694
Capital lease obligation current portion		7,942		8,431
cupital leade congation current portion		7,512		0,131
Total current liabilities		2,179,470		2,981,954
Total current incontries		2,179,170		2,701,751
LONG-TERM LIABILITIES				
Deferred rent		124,318		89,624
Deferred taxes		60,146		128,660
Capital lease obligation		11,487		3,056
Capital lease congation		11,407		3,030
m . 11		105.051		221 240
Total long-term liabilities		195,951		221,340
Total liabilities		2,375,421		3,203,294
CONVERTIBLE REDEEMABLE PREFERRED STOCK				
Series 1 1,000,000 shares authorized, \$0.001 par value; 476,581 shares issued and outstanding;				
liquidation value of \$4,587,688 and \$4,909,380 in 2006 and 2007, respectively		4,092,979		4,414,671
Series 2 2,400,000 shares authorized, \$0.001 par value; 886,661 shares issued and outstanding;				
liquidation value of \$899,961 and \$966,461 in 2006 and 2007, respectively		899,961		966,461
COMMITMENTS AND CONTINGENCIES				
CTOCKHOLDERG DEFICIT				
STOCKHOLDERS DEFICIT Common stock \$0.001 per value 7,000,000 shares outhorized 2,500,320 shares issued and				
Common stock \$0.001 par value; 7,000,000 shares authorized, 2,509,329 shares issued and		2.510		2.510
outstanding		2,518		2,518

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

Additional paid in capital	47,463,239	47,092,910
Accumulated deficit	(50,132,606)	(50,994,227)
Total stockholders deficit	(2,666,849)	(3,898,799)
TOTAL LIABILITIES AND STOCKHOLDERS DEFICIT	\$ 4,701,512	\$ 4,685,627

See notes to financial statements.

FAST TRACK SYSTEMS, INC.

STATEMENTS OF OPERATIONS

YEARS ENDED DECEMBER 31, 2006 AND 2007

	2006	2007
REVENUES	\$ 5,112,814	\$ 5,398,675
COST OF REVENUES	924,317	1,071,343
GROSS PROFIT	4,188,497	4,327,332
OPERATING EXPENSES		
Research and development	848,502	886,201
Sales and marketing	1,036,305	1,394,371
General and administrative	2,350,289	2,896,591
Total operating expenses	4,235,096	5,177,163
LOSS FROM OPERATIONS	(46,599)	(849,831)
OTHER INCOME (EXPENSE)		
Interest income	58,333	62,351
Interest expense	(54,662)	(3,672)
Total other income	3,671	58,679
LOSS BEFORE INCOME TAXES	(42,928)	(791,152)
INCOME TAX EXPENSE	(62,101)	(70,469)
NET LOSS	(105,029)	(861,621)
PREFERRED STOCK DIVIDENDS	343,859	388,192
NET LOSS AVAILABLE TO COMMON STOCKHOLDERS	\$ (448,888)	\$ (1,249,813)
BASIC AND DILUTED LOSS PER SHARE	\$ (0.18)	\$ (0.50)
WEIGHTED AVERAGE BASIC AND DILUTED COMMON SHARES OUTSTANDING See notes to financial statements.	2,506,994	2,509,329

FAST TRACK SYSTEMS, INC.

STATEMENTS OF STOCKHOLDERS DEFICIT

YEARS ENDED DECEMBER 31, 2006 AND 2007

	COMMO	COMMON STOCK		ACCUMULATED	TOTAL STOCKHOLDERS
	SHARES	AMOUNT	CAPITAL	DEFICIT	DEFICIT
BALANCE AT JANUARY 1, 2006	2,515,514	\$ 2,515	\$ 47,799,735	\$ (50,027,577)	\$ (2,225,327)
Exercise of options	2,813	3	4,815		4,818
Stock-based compensation			2,548		2,548
Accrued preferred stock dividends			(343,859)		(343,859)
Net loss and comprehensive loss				(105,029)	(105,029)
BALANCE AT DECEMBER 31, 2006	2,518,327	2,518	47,463,239	(50,132,606)	(2,666,849)
Stock-based compensation			17,863		17,863
Accrued preferred stock dividends			(388,192)		(388,192)
Net loss and comprehensive loss				(861,621)	(861,621)
BALANCE AT DECEMBER 31, 2007	2,518,327	\$ 2,518	\$ 47,092,910	\$ (50,994,227)	\$ (3,898,799)

See notes to financial statements.

F-60

FAST TRACK SYSTEMS, INC.

STATEMENTS OF CASH FLOWS

YEARS ENDED DECEMBER 31, 2006 AND 2007

	2006	2007
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$ (105,029)	\$ (861,621)
Adjustments to reconcile net loss to net cash provided by operating activities:	(4.200)	27.212
(Recovery) provision for doubtful accounts	(4,380)	35,213
Depreciation and amortization	80,742	83,648
Deferred rent	(5,207)	(34,694)
Stock-based compensation	2,548	17,863
Deferred taxes	60,146	68,514
Interest on convertible notes	50,529	
Loss on disposal of property and equipment	36,228	388
Increase (decrease) in operating assets and liabilities:		
Accounts receivable	42,891	(35,313)
Prepaid and other current assets	17,199	(71,177)
Accrued compensation	74,992	211,510
Other accrued expenses	2,000	279,577
Deferred revenue	404,239	310,908
Net cash provided by operating activities	656,898	4,816
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property and equipment	(84,249)	(94,705)
Proceeds from sales of property and equipment	2,440	100
Patent costs	(33,504)	(50,621)
Net cash used in investing activities	(115,313)	(145,226)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Payment of capital lease obligation	(7,480)	(7,942)
Proceeds from exercise of options	4,818	()
Net cash used in financing activities	(2,662)	(7,942)
		, ,
NET INCREASE (DECREASE) IN CASH	538,923	(148,352)
CASH AND CASH EQUIVALENTS BEGINNING OF YEAR	1,261,736	1,800,659
CASH AND CASH EQUIVALENTS END OF YEAR	\$ 1,800,659	\$ 1,652,307
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION		
Cash paid for interest	\$ 54,662	\$ 3,672
NONCASH FINANCING ACTIVITIES:		
Conversion of notes payable and accrued interest to preferred stock	\$ 877,794	\$
Accrued preferred stock dividends	\$ 343,859	\$ 388,192

See notes to financial statements.

F-61

FAST TRACK SYSTEMS, INC.

NOTES TO FINANCIAL STATEMENTS

YEARS ENDED DECEMBER 31, 2006 AND 2007

1. ORGANIZATION AND BUSINESS

Fast Track Systems, Inc. (the Company) was incorporated in the state of California in 1999. The Company focuses on improving and expediting the clinical trials process through by providing customers with clinical trial planning software and proprietary contracting data. The Company s TrialSpace suite of products drive more robust and cost-effective clinical results by solving problems associated with trial design, review, and start-up activities at the earliest stages of the clinical development process.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Revenue Recognition The Company generates revenue from fees paid by biotech and pharmaceutical firms for access to the Company s on-demand software tools and data to improve the early-stage clinical development process and the provision of other services, primarily professional services associated with training. The Company recognizes revenue when all of the following conditions are satisfied: (1) persuasive evidence of an arrangement exists; (2) service has been delivered to the customer; (3) amount of the fees to be paid by the customer is fixed or determinable; and (4) collection of the fees is reasonably assured or probable.

The Company provides its software and data access as a service and recognizes revenue in accordance with Securities and Exchange Commission (SEC) Staff Accounting Bulletin No. 104, *Revenue Recognition*, and Emerging Issue Task Force (EITF) Issue No. 00-21, *Revenue Arrangements with Multiple Deliverables* (EITF 00-21). The Company's customers do not have the right to take possession of the software. Instead, the services and data access are provided on an on-demand basis from the Company's hosting facility. Revenues are recognized ratably over the life of the contract. Contractual terms range from one to five years in length.

Deferred revenue consists of billings or payments received in advance of revenue recognition and are recognized as the revenue recognition criteria are met. Amounts that have been invoiced are initially recorded in accounts receivable and deferred revenue. The Company invoices its customers in accordance with the terms of the underlying contract, usually in advance of the related service period. Payment terms are net 30 days.

Other services consist of consulting services, training and related out of pocket expenses and are recognized as services are rendered. In accordance with EITF Issue No. 01-14, *Income Statement Characterization of Reimbursements Received for Out-of-Pocket Expenses Incurred*, the Company included \$11,557 and \$12,296 of reimbursable out-of-pocket expenses in revenues in 2006 and 2007, respectively.

Cost of revenue Cost of revenues consist primarily of salary and benefits associated with direct labor costs, fees to outside contractors, other direct costs in providing services, reimbursable out-of-pocket expenses and depreciation on computer hardware and software. These costs are expensed as incurred.

Use of Estimates The preparation of financial statements in conformity with accounting principles generally accepted in the United States (U.S. GAAP) requires management to make estimates and assumptions that affect the reported amounts in the financial statements and accompanying notes. Actual results could differ materially from those estimates.

Concentrations Financial instruments that potentially subject the Company to concentration of credit risk include cash, restricted cash, and accounts receivable. The Company places its cash and restricted cash with high credit quality financial institutions. Exposure to customer credit risk is controlled through credit approvals and establishment of allowance for doubtful accounts when deemed necessary. The allowance for doubtful accounts is increased when the Company becomes aware of a specific customer s inability to meet its financial obligations

FAST TRACK SYSTEMS, INC.

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

YEARS ENDED DECEMBER 31, 2006 AND 2007

to them. As of December 31, 2006 and 2007, outstanding receivables were amounts due from customers for services. The Company extends reasonably short collection terms but does not require collateral. Concentration of credit risk, with respect restricted cash, and accounts receivable exists to the extent of amounts presented in the financial statements.

One customer accounted for 13% of the Company s total revenue in 2006 and 7% of total revenue in 2007.

The Company maintains its cash in bank deposit accounts which, at times, may exceed insured limits. The Company has not experienced any losses in such accounts. The Company believes it is not exposed to any significant credit risk on cash and cash equivalents.

Cash and Cash Equivalents The Company considers all money market funds and other highly liquid investments purchased with original maturities of three months or less to be cash and cash equivalents. The fair value of cash and cash equivalents approximates the amounts shown on the financial statements.

Restricted Cash Restricted cash represents deposits related to office lease arrangement and to fully collateralize credit card processors.

Accounts Receivable Accounts receivable are recorded at original invoice amount less an allowance that management believes will be adequate to absorb estimated losses on existing accounts receivable. The allowance is based on an evaluation of the collectibility of accounts receivable and prior bad debt experience. Accounts receivable are written off when deemed uncollectible.

Property and Equipment Property and equipment consists of computer hardware and software, office equipment, furniture and fixtures and leasehold improvements recorded at cost. Depreciation is computed on the straight-line method over 3 years for computer hardware and software, and 7 years for office equipment, furniture and fixtures. Leasehold improvements are amortized on a straight-line basis over the shorter of the lease term or their estimated useful lives. (See Note 3)

Impairment of Long-Lived Assets Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such asset may be impaired. The Company subjects long-lived assets to a test of recoverability based on undiscounted cash flows expected to be generated by such assets while utilized by the Company and cash flow expected from disposition of such assets. If the assets are impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. Management has concluded that there is no impairment of long-lived assets as of December 31, 2006 or 2007.

Goodwill The Company s goodwill is reviewed annually (or more frequently if impairment indicators arise) to determine the recoverability of carrying amounts. The Company uses a two-phase process for impairment testing of goodwill. The first phase screens for impairment; the second phase, if necessary, measures the impairment. The Company has determined itself to be a single reporting unit. Accordingly, all of the Company s goodwill is associated with the entire Company. At December 31, 2006 and 2007, the Company performed the required annual impairment analysis and determined that there was no impairment of goodwill. There was no change in the carrying amount of goodwill which was \$1,686,966 during the years ended December 31, 2006 and 2007.

F-63

FAST TRACK SYSTEMS, INC.

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

YEARS ENDED DECEMBER 31, 2006 AND 2007

Capitalized Patent Costs Internally developed patent costs of \$179,360 and \$229,981 at December 31, 2006 and 2007, respectively, are being deferred pending their approval or rejection by the United States Patent Office and the patent offices of certain foreign jurisdictions. If approved, these patent costs will be amortized over their legal life. If rejected, they will be expensed in the year of patent denial.

Internal Use Software The Company capitalizes certain costs related to internal-use software once certain criteria have been met. These costs are amortized over their estimated useful lives (three years), beginning when the computer software is ready for its intended use.

Research and Development Costs incurred by the Company between completion of the working model of internally developed software and the point at which the product is ready for general release have not been material. Therefore, through December 31, 2007, all research and development costs have been expensed as incurred instead of capitalized.

Stock-Based Compensation Effective January 1, 2006, the Company adopted the fair value recognition provisions of Statement of Financial Accounting Standards No. 123 (revised 2004), Share-Based Payment (SFAS 123R), using the prospective transition method and therefore the Company has not restated financial results for prior periods. SFAS 123R requires all share-based payments to employees, including grants of stock options, to be recognized as expense in the statement of operations based on their fair values and vesting periods. Expense for all stock-based compensation awards granted after January 1, 2006 is based on the grant date estimated fair value and recognized on a straight-line basis over the vesting period of the award. Compensation expense related to stock-based compensation of \$2,548 and \$17,863 has been recorded in the accounts of the Company for the years ended December 31, 2006 and 2007, respectively.

Advertising Costs The Company expenses advertising costs as incurred. Advertising expense for the years ended December 31, 2006 and 2007 was \$97,436 and \$104,336, respectively, and is included in sales and marketing expenses.

Income Taxes The Company uses the asset and liability method of accounting for income taxes, as prescribed by SFAS No. 109, Accounting for Income Taxes, which recognizes deferred tax assets and liabilities for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized.

Segment Information As defined by SFAS No. 131, *Disclosures about Segments of an Enterprise and Related Information*, the Company operates as a single segment, as the management makes operating decisions and assesses performance based on one single operating unit. The Company s revenues and long lived assets in 2006 and 2007 were based solely in North America.

Recently Issued Accounting Pronouncements In June 2006, the Financial Accounting Standard Board (FASB) issued FASB Interpretation No. 48, Accounting for Uncertainty in Income Taxes an interpretation of FASB Statement No. 109, or FIN 48. FIN 48 clarifies the accounting for uncertainties in income taxes recognized in an enterprise s financial statements in accordance with SFAS 109, Accounting for Income Taxes. This interpretation prescribes a comprehensive model for the financial statement recognition, measurement, presentation and disclosure of uncertain tax positions taken or expected to be taken in income tax returns. Under

F-64

FAST TRACK SYSTEMS, INC.

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

YEARS ENDED DECEMBER 31, 2006 AND 2007

FIN 48, the tax effects of a position should be recognized only if it is more likely-than-not to be sustained on examination by the taxing authorities, based on its technical merits as of the reporting date. The tax benefits recognized in the financial statements from such a position should be measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement. FIN 48 also provides guidance on de-recognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. The Company adopted FIN 48 on January 1, 2008. If the Company was a public enterprise in 2007, it would have been required to adopt FIN 48 on January 1, 2007. The Company s adoption of FIN 48 did not have a material impact on its financial position and results of operations.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements*, which enhances existing guidance for measuring assets and liabilities at fair value. SFAS No. 157 defines fair value, establishes a framework for measuring fair value and expands disclosure about fair value measurements. SFAS No. 157 is effective for fiscal years beginning after November 15, 2007 for financial instruments, and non-financial instruments beginning after November 15, 2008. The Company is currently assessing the impact, if any, that SFAS No. 157 will have on its results of operations, financial position or cash flows.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities*, which permits entities to measure the value of certain financial assets and liabilities and report the unrealized gain or loss thereon at each subsequent reporting period. SFAS No. 159 is effective for fiscal years beginning after November 15, 2007. The Company is currently evaluating the impact, if any, SFAS No 159 will have on its results of operations, financial position or cash flows. Effective January 1, 2008, the Company elected not to take the fair value options for any of its qualifying financial instruments.

In December 2007, FASB issued Statement No. 141 (revised 2007), *Business Combinations* (SFAS No. 141R) and Statement No. 160, *Accounting and Reporting of Noncontrolling Interests in Consolidated Financial Statements, an amendment of ARB No. 51* (SFAS No. 160). These new standards will significantly change the financial accounting and reporting of business combination transactions and noncontrolling (or minority) interests in consolidated financial statements. SFAS No. 141R is required to be adopted concurrently with Statement No. 160 and is effective for business combination transactions for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. Early adoption is prohibited. Application of SFAS No. 141R and SFAS No. 160 is required to be adopted prospectively, except for certain provisions of SFAS No. 160, which are required to be adopted retrospectively. The adoption of SFAS No. 141R and SFAS No. 160 is not expected to have a material impact on the Company s financial position or results of operations.

3. PROPERTY AND EQUIPMENT

Property and equipment consists of the following:

	Decen	nber 31,
	2006	2007
Computer hardware and software	\$ 215,255	\$ 286,567
Office equipment, furniture, and fixtures	143,459	143,459
Leasehold improvements	4,945	6,145
	363,659	436,171
Less accumulated depreciation and amortization	192,805	254,748
Net property and equipment	\$ 170,854	\$ 181,423

F-65

FAST TRACK SYSTEMS, INC.

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

YEARS ENDED DECEMBER 31, 2006 AND 2007

Included in office equipment, furniture and fixtures as of December 31, 2006 and 2007, is a copier under capital lease with a cost of \$31,653, net of accumulated depreciation of \$17,585 and \$28,136, respectively. Depreciation and amortization expense, including assets under capital lease, was \$80,742 and \$83,648 for the years ended December 31, 2006 and 2007, respectively. Depreciation of equipment under capital lease was \$10,551 for each of the years ended December 31, 2006 and 2007.

4. OTHER ACCRUED EXPENSES

Other accrued expenses consist of the following:

	Decen	December 31,	
	2006	2007	
Professional fees	\$ 15,000	\$ 290,000	
Consulting fees	39,000	2,800	
Sales taxes		6,725	
State and local franchise taxes		13,956	
Other sales and marketing expenses	2,500	578	
Other general and administrative expenses	49,026	71,044	
Total accrued expenses	\$ 105,526	\$ 385,103	

5. COMMITMENTS

The Company leases its office facilities and certain equipment under operating leases that expire at various dates through June 2011. At December 31, 2007, future minimum payments are as follows:

Year ending December 31,	
2008	\$ 251,087
2009	251,087
2010	250,117
2011	24,574
Total	\$ 776,865

In addition to minimum rent, the Company is responsible for taxes, maintenance, and insurance. Rent expense for office facilities for the years ended December 31, 2006 and 2007 was \$296,560 and \$276,474, respectively. Equipment lease rental for the years ended December 31, 2006 and 2007 was \$10,153 and \$1,206, respectively.

In connection with these operating leases, the Company is required to maintain a security deposit in the amount of \$145,000 for its Pennsylvania facility. This amount is included in restricted cash on the accompanying balance sheet at December 31, 2006 and 2007.

F-66

FAST TRACK SYSTEMS, INC.

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

YEARS ENDED DECEMBER 31, 2006 AND 2007

The Company leases certain equipment under noncancelable capital lease agreements which provide for total future minimum annual lease payments as follows:

Year ending December 31,	
2008	\$ 8,891
2009	2,964
Total minimum lease payments	11,855
Less amount representing interest	368
Present value of minimum lease payments	11,487
Current portion	8,431
Capital lease obligation excluding current portion	\$ 3,056

6. RELATED PARTY TRANSACTIONS

A major pharmaceutical company is an investor in the Company and holds a seat on the Board of Directors. In 2006 and 2007, sales to this related party totaled \$264,250 and \$220,000, respectively.

7. CONVERTIBLE REDEEMABLE PREFERRED STOCK

In March 2005, the Company issued convertible 10% promissory notes for principal amounts aggregating \$765,211. The notes and accrued interest were convertible into Series 2 Preferred Stock at \$0.99 per share. On August 29, 2006, the notes and related accrued interest were converted to 886,661 shares of Series 2 Preferred Stock in the amount of \$877,794. The interest expense on the convertible note for the year ended December 31, 2006 was \$50,529.

Warrants In conjunction with the recapitalization and issuance of convertible notes in March 2005, the Company issued two warrants, each to purchase 93,600 shares of common stock at an effective net exercise price of \$0.99 per share. These two warrants expire on the earlier of March 10, 2010; the date of a merger, sale or exchange of all or substantially all of the assets of the Company, or on the date of the Company s initial public offering.

PREFERRED STOCK

The total number of preferred stock the Company has authority to issue is 4,400,000, with par value of \$.001 per share. 1,000,000 shares of Preferred Stock are designated Series 1 and 2,400,000 shares are Series 2 and the remaining Preferred Stock may be issued from time to time in one or more additional series.

Dividends Preferred stockholders are entitled to cumulative dividends at a rate of \$0.675 and \$0.075 per share, per annum, accruing monthly for Series 1 and 2 preferred stock, respectively, when and if declared by the Board of Directors, payable in preference to common stock dividends. No common dividends have been declared or paid by the Company. The Company began to accrue Series 2 preferred dividends subsequent to the conversion in August 2006. As of December 31, 2006, Series 1 and Series 2 dividends in arrears amounted to \$562,961 and \$22,167,

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

respectively. As of December 31, 2007, Series 1 and Series 2 dividends in arrears amounted to \$884,653 and \$88,667, respectively.

F-67

FAST TRACK SYSTEMS, INC.

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

YEARS ENDED DECEMBER 31, 2006 AND 2007

Redemption At any time subsequent to March 22, 2009, the Company, upon request from the holders of the Preferred Stock, may be required to redeem all shares of Series 1 and 2 Preferred Stock. The Company would be required to make a single cash sum equal to the original purchase prices per share of the Series 1 and 2 Preferred Stock (\$4,407,812) plus all accrued or declared and unpaid dividends. See Note 12 for subsequent event.

Conversion Series 1 and 2 preferred stock is convertible at any time at the option of the holder into common stock on a one-for-one basis, subject to adjustment for antidilution, stock dividends, and reorganization. Each series of preferred stock shall be converted into common stock at the then effective conversion rate (i) upon the closing of a firm commitment underwritten public offering with a sales price per share of common stock (as adjusted for combinations, stock dividends, subdivisions, or split-ups) of at least \$6.00 and with an aggregate gross proceeds of at least \$25,000,000 or (ii) upon the approval (by vote or written consent) of the holders of the Requisite Series Preferred Percentage. Requisite Series Preferred Percentage shall mean an aggregate number of shares of Series Preferred, voting together as a single class, greater than 106% of the number of shares of Series Preferred held of record by the largest holder of Series Preferred. See Note 12 for subsequent event.

Liquidation Preferences In the event of any liquidation, dissolution, or winding up of the Company, including a merger, acquisition, or sale of assets where the beneficial owners of the Company s shares own less than 50% of the resulting voting power of the surviving entity, the holders of the preferred stock are entitled to receive cash payments prior and in preference to any distribution of any of the assets or surplus funds of the Company to the holders of common stock. The holders of Series 1 and 2 shares, prior to holders of common stock, are entitled to receive a distribution equal to \$8.445 and \$0.99 per share, respectively, plus all accumulated dividends. After the preferential payments to holders of Series 1 and 2 shares, the remaining assets shall be distributed ratably among the holders of common stock in proportion to the number of shares held by each holder.

Voting Rights Each holder of shares of preferred stock shall be entitled to the number of votes equal to the number of shares of common stock into which their shares would be converted.

8. STOCK OPTION PLAN

In June 1999, the Company adopted the 1999 Stock Option Plan (the Plan) under which the Board of Directors may issue incentive stock options to employees, including officers and members of the Board of Directors who are also employees, and nonqualified stock options to employees, officers, directors, consultants, and advisors of the Company. Under the Plan, incentive options to purchase the Company s common stock may be granted to employees at prices not lower than fair value at the date of grant, as determined by the Board of Directors. Nonqualified options may be granted to key employees, including directors and consultants, at prices not lower than 85% of fair value at the date of grant, as determined by the Board of Directors. Options have a term of 10 years. Shares issued pursuant to the exercise of an unvested option are subject to the Company s right of repurchase which lapse over periods specified by the Board of Directors, generally five years from the date of grant.

For options accounted for under SFAS No. 123R, the fair value of each option grant is estimated on the date of grant using the Black-Scholes pricing model. The Company estimated its future stock price volatility based upon observed option-implied volatilities for a group of peer comparable companies, taking into account the stage of the Company as compared to its peers. Management believes this is the best estimate of the expected volatility over the weighted-average expected life of its option grants. The Company estimated its weighted-average useful life based on the likely date of exercise as opposed to the actual life of the options. The risk-free

F-68

FAST TRACK SYSTEMS, INC.

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

YEARS ENDED DECEMBER 31, 2006 AND 2007

interest rate is based on the United States Treasury yield curve in effect at the time of the option grant. No dividends are expected to be declared by the Company at this time. Forfeiture rate is expected to not be material. The fair value of each option grant is estimated with the following assumptions:

	2006	2007
Weighted-average volatility	70%	63%
Expected dividends		
Expected term	6.5 years	6.5 years
Risk free rate	4.91%	4.46% 4.81%

Activity under the Plan for the years ended December 31, 2006 and 2007 is as follows:

	Number of Shares (Vested and Nonvested)	Weighted- Average Exercise Price Per Share	Average Remaining Contractual Term (in years)
Balance at January 1, 2006	728,524	\$ 0.34	(iii years)
Options granted	43,000	0.10	
Options exercised	(2,813)	1.71	
Options cancelled	(7,912)	0.14	
Options expired	(1,088)	2.85	
Balance at December 31, 2006 Options granted Options exercised Options cancelled Options expired	759,711 152,500 (1,075) (425)	0.32 0.10 0.10 0.10	6.89
Balance at December 31, 2007	910,711	\$ 0.28	6.08
Exercisable at December 31, 2007	426,258	\$ 0.28	6.08

The weighted average grant-date fair value of options granted during the years 2006 and 2007 was \$0.48 and \$0.47, respectively.

	Options Out	standing		Options Exerci	sable
		Remaining	Weighted-		Weighted-
	Shares	Contractual	Average	Shares	Average
Exercise	Outstanding At	Life	Exercise	Exercisable At	Exercise
Price	December 31, 2007	(Years)	Price	December 31, 2007	Price
\$ 0.10	828,541	7.77	\$ 0.10	345,294	\$ 0.10
\$ 1.50	33,031	5.84	1.50	31,825	1.50
\$ 1.65	10,733	2.55	1.65	10,733	1.65
\$ 2.85	38,406	3.77	2.85	38,406	2.85

910,711 6.08 \$ 0.28 426,258 \$ 0.28

F-69

FAST TRACK SYSTEMS, INC.

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

YEARS ENDED DECEMBER 31, 2006 AND 2007

A summary of the status of the Company s nonvested shares as of December 31, 2007 is as follows:

	Number of Shares	Av Gra	ighted- verage int-Date r Value
Nonvested at January 1, 2006	658,444	\$	0.15
Granted	43,000		0.10
Vested	(254,906)		0.18
Forfeited	(9,000)		0.10
Nonvested at December 31, 2006	437,538		0.11
Granted	152,500		0.10
Vested	(104,085)		0.14
Forfeited	(1,500)		0.10
Nonvested at December 31, 2007	484,453	\$	0.10

As of December 31, 2007, there was a total of \$71,619 of unrecognized compensation cost related to non-vested share-based compensation awards granted, as recorded in accordance with SFAS No. 123R. This cost is expected to be recognized over a weighted-average period of three years. The total fair value of shares vested during the years ended December 31, 2006 and 2007 was \$44,098 and \$14,248, respectively.

Under the Plan, the Company also may grant rights to purchase shares subject to repurchase either alone, in addition to, or in tandem with other awards granted under the Plan and/or cash awards granted outside the Plan. Exercise of these share purchase rights are made pursuant to restricted stock purchase agreements containing provisions established by the Board of Directors. These provisions give the Company the right to repurchase the shares at the original sales price.

The right expires at a rate determined by the Board of Directors, generally at a rate of 20% after one year and 1/60 th per month thereafter. See Note 12 for subsequent event.

9. INCOME TAXES

The components of the tax provision for the year ended December 31, 2006 and 2007 are as follows:

	2006	2007
Current		
Federal	\$	\$
State	1,956	1,956
Sub-total	1,956	1,956

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

Deferred		
Federal	51,124	58,236
State	9,021	10,277
Sub-total	60,145	68,513
Total	\$ 62,101	\$ 70,469

FAST TRACK SYSTEMS, INC.

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

YEARS ENDED DECEMBER 31, 2006 AND 2007

Income taxes were at rates different from U.S. federal statutory rates for the following reasons:

	2006	2007
Federal statutory rate	\$ (16,339)	\$ (269,915)
State income taxes, net of federal tax deduction	10,977	12,233
Research and development	(26,494)	(9,255)
Valuation allowance federal	84,928	335,947
Other, net	9,029	1,459
Total	\$ 62,101	\$ 70,469

As of December 31, 2006 and 2007, the components of net deferred tax assets (liabilities) are as follows:

	2006	2007
Net deferred tax assets (liabilities):		
Current:		
Allowance for bad debts	\$ 249	\$ 14,333
Payroll accruals	12,139	8,718
	12,388	23,051
Long-term:		
Property and equipment	(5,938)	(6,420)
Intangibles	488,140	357,775
Research and development credits	811,618	823,645
Net operating loss carryforwards	17,221,762	17,666,671
Capitalized R&D expenses	531,322	442,167
	19,046,904	19,283,838
	(10.110.420)	(10, 125, 5,10)
Less valuation allowance	(19,119,438)	(19,435,549)
Net deferred tax asset (liabilities)	\$ (60,146)	\$ (128,660)

The Company has provided a valuation allowance against the net deferred tax assets as their future utilization is dependent on future taxable income, if any, the amounts and timing of which are uncertain at this time. The net change in the federal and state valuation allowance was an increase of \$74,150 for the year ended December 31, 2006 and an increase of \$316,111 for the year ended December 31, 2007. As of December 31, 2007, the Company had federal and state net operating loss (NOL) carryforwards of approximately \$48,000,000 and \$19,000,000, respectively. The Company also had federal and state research and development (R&D) tax credit carryforwards of approximately \$824,000. The federal and state net operating loss and tax credit carryforwards will expire at various dates through 2027, if not utilized.

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

The Tax Reform Act of 1986 contains provisions that may limit the NOL and R&D credit carryforwards available to be used in any given year upon the occurrence of certain events, including significant changes in ownership interest. Generally, a change in ownership of a company of greater than 50% within a three-year period results in an annual limitation on that company s ability to utilize its NOL carryforwards and tax credits from the tax periods prior to the ownership change, therefore, the NOLs reflected above could be limited to the extent an ownership change occurred prior to December 31, 2007. Subsequent to December 31, 2007, the Company has had a change in ownership that could limit the use of NOL and R&D credit carryforwards. See Note 12 for subsequent event.

F-71

FAST TRACK SYSTEMS, INC.

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

YEARS ENDED DECEMBER 31, 2006 AND 2007

The Company is subject to examination by taxing authorities for the following years:

Federal	1999 through 2007
California	2000 through 2007
Pennsylvania	2003 through 2007
New Jersey	2001 through 2007

10. CONTINGENCIES

From time to time, the Company is subject to litigation in the ordinary course of business. Currently, there are no claims or proceedings against the Company that management believes would be expected to have a material adverse effect on the Company s business or financial condition, results of operations or cash flows.

11. EARNINGS PER SHARE

The Company follows SFAS No. 128, *Earnings Per Share*, in calculating earnings per share. Basic earnings per share is calculated by dividing net income (loss) available to common stockholders by the weighted-average number of shares outstanding during the period. Diluted earnings per share includes the determinants of basic net income (loss) per share and, in addition, gives effect to potentially dilutive common shares. For 2006 and 2007, the diluted income (loss) per share excluded the impact of the conversion of all preferred stock, stock options and warrants because the effect would be anti-dilutive.

The following common stock equivalents were excluded from the calculation of diluted net loss per share since the effects are anti-dilutive:

	2006	2007
Preferred stock	1,363,242	1,363,242
Stock options	759,711	910,711
Warrants	187,200	187,200
	2,310,153	2,461,153

12. SUBSEQUENT EVENT

Effective March 17, 2008, the Company was acquired by Medidata Solutions, Inc. (Medidata), a provider of software and technology solutions for use in the clinical trial component of the Company s customers research and development initiatives. The total consideration paid by Medidata was approximately \$18.1 million, which consisted of the issuance of 864,884 shares of their common stock in exchange for all existing preferred stock, common stock and outstanding warrants issued by the Company and reserve of 25,242 shares of common stock for the exercise of vested stock options.

At the effective date of the business combination, the terms of the outstanding stock options did not terminate but continue to have and be subject to the same terms and conditions that were in effect prior to the business combination, except that the options are exercisable into a

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

calculated equivalent price and number of Medidata s common stock. All unvested stock options at the date of acquisition will be vested based on the original stock option contracts with an accelerated vesting at the 1st anniversary of acquisition in accordance with the acquisition agreement.

* * * * * *

F-72

5,000,000 Shares

Common Stock

PROSPECTUS

, 2009

Citi Credit Suisse

Jefferies & Company Needham & Company, LLC

Item

SEC registration fee

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth the costs and expenses, other than underwriting discounts and commissions, payable in connection with the sale and distribution of the securities being registered. All amounts are estimated except the SEC registration fee and the FINRA filing fee. All the expenses below will be paid by Medidata Solutions, Inc.

SEC registration rec	Ψ 3,310
FINRA filing fee	8,640
Legal fees and expenses	200,000
Accounting fees and expenses	150,000
Printing and engraving expenses	100,000
Transfer agent and registrar fees	3,500
Miscellaneous fees and expenses	52,290

Amount

Total \$ 520,000

Item 14. Indemnification of Directors and Officers

Section 145(a) of the DGCL provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending, or completed action, suit, or proceeding, whether civil, criminal, administrative, or investigative (other than an action by or in the right of the corporation), because he or she is or was a director, officer, employee, or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee, or agent of another corporation, partnership, joint venture, trust, or other enterprise, against expenses (including attorneys fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit, or proceeding, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

Section 145(b) of the DGCL provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending, or completed action or suit by or in the right of the corporation to procure a judgment in its favor because the person is or was a director, officer, employee, or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee, or agent of another corporation, partnership, joint venture, trust, or other enterprise, against expenses (including attorneys fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification shall be made with respect to any claim, issue, or matter as to which he or she shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, he or she is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or other adjudicating court shall deem proper.

Section 145(g) of the DGCL provides, in general, that a corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee, or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee, or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify the person against such liability under Section 145 of the DGCL.

Article IX of our bylaws provides that we will indemnify, to the fullest extent permitted by the DGCL, any person who was or is made or is threatened to be made a party or is otherwise involved in any action, suit, or proceeding, whether civil, criminal, administrative, or investigative, by reason of the fact that he, or a person for whom he is the legal representative, is or was one of our directors or officers or, while serving as one of our directors or officers, is or was serving at our request as a director, officer, employee, or agent of another corporation or of another entity, against all liability and loss suffered and expenses (including attorneys fees) reasonably incurred by such person, subject to limited exceptions relating to indemnity in connection with a proceeding (or part thereof) initiated by such person. Section 9.6 of our bylaws further provides for the advancement of expenses to each of our officers and directors.

Article VII of our charter provides that, to the fullest extent permitted by the DGCL, as the same exists or may be amended from time to time, our directors shall not be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director. Under Section 102(b)(7) of the DGCL, the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty can be limited or eliminated except (i) for any breach of the director s duty of loyalty to the corporation or its stockholders; (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law; (iii) under Section 174 of the DGCL (relating to unlawful payment of dividend or unlawful stock purchase or redemption); or (iv) for any transaction from which the director derived an improper personal benefit.

We also maintain a general liability insurance policy which covers certain liabilities of directors and officers of our company arising out of claims based on acts or omissions in their capacities as directors or officers, whether or not we would have the power to indemnify such person against such liability under the DGCL or the provisions of charter or bylaws.

We have entered into indemnification agreements with each of our directors and our executive officers. These agreements provide that we will indemnify each of our directors and such officers to the fullest extent permitted by law and by our charter and bylaws.

In any underwriting agreement we enter into in connection with the sale of common stock being registered hereby, the underwriters will agree to indemnify, under certain conditions, us, our directors, our officers and persons who control us, within the meaning of the Securities Act, against certain liabilities.

Item 15. Recent Sales of Unregistered Securities

In the three years preceding the filing of this Registration Statement, the registrant has issued the following securities that were not registered under the Securities Act:

On March 17, 2008, in connection with its acquisition of Fast Track by merger, the registrant issued 864,440 shares of common stock to the 75 former stockholders of Fast Track in exchange for all of their shares of Fast Track. In the acquisition, the registrant also assumed 45,246 outstanding options under Fast Track Stock Option Plan (on the same terms and conditions as in effect prior to the merger) and warrants to purchase a total of 444 shares of common stock. The registrant relied on the exemption from federal registration under Section 4(2) of the Securities Act, based on its determination that the issuance of such securities did not involve a public offering. Each of the recipients of securities in the acquisition represented to the registrant that they were either an accredited investor or had, either individually or through a representative acting on their behalf, such knowledge and experience in financial and business matters so that each was capable of evaluating the risks of the investment. The recipients of securities in the acquisition represented their intention to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were affixed to the stock certificates that were issued. The sales of these securities were made without general solicitation or advertising. All recipients either received adequate information about the registrant or had access, through employment or other relationships with the registrant, to such information.

II-2

Between November 16, 2006 and November 16, 2009, the registrant granted options to purchase 1,641,280 shares of common stock to its directors, employees and consultants, at exercise prices ranging from \$12.08 to \$21.55 per share. During the same period, the registrant issued and sold 178,860 unregistered shares of common stock pursuant to option exercises at prices ranging from \$0.62 to \$12.08 per share. In addition, during this period, the registrant issued 294,478 shares of restricted stock to certain of its directors, executive officers and other employees. A portion of these options and the shares of restricted stock were granted pursuant to the exemption from registration under Section 4(2) of the Securities Act based on the registrant s determination that such grants did not involve a public offering. Each of the recipients represented to the registrant that they are accredited investors and each had access to adequate information through their relationship with the registrant. The remainder of these issuances of these options and common stock upon exercise of these options were exempt pursuant to Rule 701, as a transaction pursuant to a compensatory benefit plan or pursuant to of the Securities Act. The shares of common stock issued upon exercise of options are deemed restricted securities for purposes of the Securities Act.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits.

The information required by this item is set forth on the exhibit index that follows the signature page of this Registration Statement.

(b) Financial statement schedules.

Schedule II Valuation and Qualifying Accounts is included in the Consolidated Financial Statements of Medidata Solutions, Inc. and subsidiaries at page F-56. All other financial statement schedules are omitted because they are inapplicable, not required or the information is indicated elsewhere in the consolidated financial statements or the notes thereto.

Item 17. Undertakings.

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted as to directors, officers and controlling persons of the registrant pursuant to the provisions described in Item 14, or otherwise, we have been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

- (1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus as filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
- (2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

II-3

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this Amendment No. 1 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York, on December 2, 2009.

MEDIDATA SOLUTIONS, INC.

By: /s/ Tarek A. Sherif
Tarek A. Sherif

Chairman and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this Amendment No. 1 to the Registration Statement has been signed by the following persons in the capacities indicated on December 2, 2009.

Signature	Title
/s/ Tarek A. Sherif	Chairman, Chief Executive Officer
Tarek A. Sherif	(Principal Executive Officer) and Director
/s/ Bruce D. Dalziel	Chief Financial Officer
Bruce D. Dalziel	(Principal Financial Officer)
/s/ Cory Douglas	Controller
Cory Douglas	(Principal Accounting Officer)
*	Director
Glen M. de Vries	
*	Director
Carlos Dominguez	
*	Director
Neil M. Kurtz, M.D.	
*	Director
George McCulloch	
*	Director
Peter Sobiloff	
*	Director

Edgar Filing: Medidata Solutions, Inc. - Form S-1/A

Robert B. Taylor

*By: /s/ Tarek A. Sherif Tarek A. Sherif

As Attorney-in-fact

II-4

EXHIBIT INDEX

Exhibit No.	Description
1.1*	Form of Underwriting Agreement.
3.1(1)	Fourth Amended and Restated Certificate of Incorporation.
3.2(1)	Amended and Restated Bylaws.
4.1(1)	Specimen common stock certificate.
5.1	Opinion of Fulbright & Jaworski L.L.P.
10.1(2)	Form of Officer and Director Indemnification Agreement.
10.2(2)	Stock Repurchase Agreement, dated October 2, 2007, by and among Medidata Solutions, Inc. and the stockholders listed on Annex I thereto.
10.3(2)	Medidata Solutions, Inc. Amended and Restated 2000 Stock Option Plan.
10.4(2)	Form of Medidata Solutions, Inc. Amended and Restated 2000 Stock Option Plan Option Agreement.
10.5(1)	Medidata Solutions, Inc. 2009 Long-Term Incentive Plan.
10.6(1)	Form of Medidata Solutions, Inc. 2009 Long-Term Incentive Plan Stock Option Agreement.
10.7(1)	Form of Medidata Solutions, Inc. 2009 Long-Term Incentive Plan Restricted Stock Agreement.
10.8(1)	Medidata Solutions, Inc. 2009 Employee Stock Purchase Plan.
10.9(2)	Amended and Restated Registration Rights Agreement, dated as of May 27, 2004, by and among Medidata Solutions, Inc. and the investors named therein.
10.10(2)	Agreement and Plan of Merger, dated as of February 13, 2008, among Medidata Solutions, Inc., FT Acquisition Corp., Fast Track Systems, Inc., and Shareholder Representative Services LLC.
10.11(2)	Loan and Security Agreement, dated as of September 10, 2008, by and among Medidata Solutions, Inc., Medidata FT, Inc. and Silicon Valley Bank.
10.12(2)	First Loan Modification Agreement, dated as of December 31, 2008, by and among Silicon Valley Bank, Medidata Solutions, Inc. and Medidata FT Inc.
10.13(2)	Registration Rights Agreement, dated as of March 14, 2008, by and among Medidata Solutions, Inc., and Shareholder Representative Services LLC.
10.14(2)	Form of Executive Change in Control Agreement.
10.15(3)	Lease between AGBRI Fannin L.P. and Medidata Solutions, Inc., dated March 13, 2006, as amended on March 8, 2007 and June 3, 2008, for space at the premises located at 1301 Fannin Street, Houston, Texas.
10.16(3)	Lease between A&R Kalimian Realty, L.P. and Medidata Solutions, Inc., dated September 23, 2003, as amended on March 13, 2008, for space at the premises located at 79 Fifth Avenue, New York, New York.
21.1(4)	Subsidiaries of Medidata Solutions, Inc.
23.1	Consent of Fulbright & Jaworski L.L.P. (included in Exhibit 5.1).
23.2	Consent of Deloitte & Touche LLP.
23.3	Consent of Deloitte & Touche LLP.
24.1*	Power of Attorney of Tarek A. Sherif.

Exhibit No.	Description
24.2*	Power of Attorney of Bruce D. Dalziel.
24.3*	Power of Attorney of Cory Douglas.
24.4*	Power of Attorney of Glen M. de Vries.
24.5*	Power of Attorney of Carlos Dominguez.
24.6*	Power of Attorney of Neil M. Kurtz, M.D.
24.7*	Power of Attorney of George McCulloch.
24.8*	Power of Attorney of Peter Sobiloff.
24.9*	Power of Attorney of Robert B. Taylor.
99.1*	Consent of Pearl Meyer & Partners.
99.2*	Consent of Financial Strategies Consulting Group LLC.

- (1) Incorporated by reference to the same numbered exhibit to Medidata Solutions, Inc. s Amendment No. 3 to Registration Statement on Form S-1 (SEC File No. 333-156935) filed on June 3, 2009.
- (2) Incorporated by reference to the same numbered exhibit to Medidata Solutions, Inc. s Amendment No. 2 to Registration Statement on Form S-1 (SEC File No. 333-156935) filed on May 15, 2009.
- (3) Incorporated by reference to the same numbered exhibit to Medidata Solutions, Inc. s Amendment No. 1 to Registration Statement on Form S-1 (SEC File No. 333-156935) filed on March 23, 2009.
- (4) Incorporated by reference to the same numbered exhibit to Medidata Solutions, Inc. s Registration Statement on Form S-1 (SEC File No. 333-156935) filed on January 26, 2009.

Indicates a management contract or any compensatory plan, contract or arrangement.

Previously filed.