



Filed Pursuant to Rule 433
Issuer Free Writing Prospectus
Relating to Preliminary Prospectus dated June 9, 2009
Registration No. 333-156935

This free writing prospectus relates only to the offering referenced below and should be read together with the preliminary prospectus dated June 9, 2009, or Preliminary Prospectus, included in Amendment No. 4 to the Registration Statement on Form S-1 (File No. 333-156935) relating to the initial public offering of common stock of Medidata Solutions, Inc. The most recent amendment to such Registration Statement can be accessed through the following link: <http://www.sec.gov/cgi-bin/browse-idea?action=getcompany&CIK=0001453814&owner=exclude&count=40>. All references in this free writing prospectus to “our company,” “Medidata,” “we,” “us” and “our” refer to Medidata Solutions, Inc. and its consolidated subsidiaries and their predecessors.

The following information supplements and updates the information contained in the Preliminary Prospectus:

The disclosure set forth in the Preliminary Prospectus under “Risk Factors—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.” has been updated to read in substance as follows:

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 in an aggregate amount 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. Although we plan to deny these allegations and 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. In addition, two of our ASPIre 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.

The disclosure set forth in the Preliminary Prospectus under “Risk Factors—Current and future litigation against us, which may arise in the ordinary course of our business, could be costly and time consuming to defend.” has been updated to read in substance as follows:

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. 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 in an aggregate amount 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. Although we plan to deny these allegations and 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.

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 disclosure set forth in the Preliminary Prospectus under “Business—Our Solutions—Intellectual Property” has been updated to read in substance as follows:

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 additional trademarks and service marks. Our principal trademarks are “Medidata,” “Medidata Rave” and “ASPIre to Win.” We have filed trademark applications for “Medidata Designer,” “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 in an aggregate amount 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. Although we plan to deny these allegations and defend the 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.

The disclosure set forth in the Preliminary Prospectus under “Business—Our Solutions—Legal Proceedings” has been updated to read in substance as follows:

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. At December 31, 2008, we accrued approximately \$0.7 million with respect to this claim. A hearing was held in November 2008 and the court rendered its decision on January 15, 2009, which awarded approximately \$0.1 million to the plaintiff. While we believe this decision was favorable to us, it may be appealed by the plaintiff. In the event that this decision is appealed, we intend to continue to vigorously defend this claim until it is finally resolved.

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 in an aggregate amount 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. Although we plan to deny these allegations and defend the 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.

Medidata has filed a registration statement (including a prospectus) with the SEC for the offering to which this communication relates. Before you invest, you should read the prospectus in that registration statement and other documents Medidata has filed with the SEC for more complete information about Medidata and this offering. You may get these documents for free by visiting EDGAR on the SEC website at www.sec.gov. Alternatively, Medidata, any underwriter or any dealer participating in the offering will arrange to send you the prospectus if you request it by calling Citi toll-free at 1-800-831-9146 or Credit Suisse Securities (USA) LLC toll-free at 1-800-221-1037.