

FOR IMMEDIATE RELEASE

Investor Contact: Betsy Frank 917-522-4620 bfrank@medidata.com Media Contact: Erik Snider 646-362-2997 esnider@medidata.com

Medidata Reports First Quarter 2019 Results

NEW YORK, N.Y. – Apr. 30, 2019 – <u>Medidata</u> (NASDAQ: MDSO) today announced its financial results for the first quarter of 2019.

"Medidata is at the forefront of driving the digital transformation of life science with our platform, data assets and industry expertise, helping fulfill the mission we set almost 20 years ago to positively impact patients' lives," said Tarek Sherif, chairman and chief executive officer, Medidata. "While we achieved solid results this quarter, importantly we have laid the foundation for the future with the launch of Acorn AI."

First Quarter 2019 Results

- Total revenue was \$173.5 million, an increase of 16% compared with \$149.2 million in the first quarter of 2018
- Subscription revenue was \$146.9 million, an increase of 16% compared with the first quarter of 2018.
 Professional services revenue was \$26.6 million, an increase of 19% compared with the first quarter of 2018
- GAAP operating income was \$5.0 million and non-GAAP operating income was \$35.9 million, representing a GAAP and non-GAAP operating margin of 2.9% and 20.7%, respectively
- GAAP net income was \$11.1 million, or \$0.18 per diluted share, compared with \$10.3 million, or \$0.17 per diluted share, in the first quarter of 2018. Non-GAAP net income was \$27.9 million, or \$0.45 per diluted share, compared with \$24.0 million, or \$0.40 per diluted share, in the first quarter of 2018. See the non-GAAP reconciliation included in this release for full details of the non-GAAP adjustments
- Total cash and marketable securities were \$206.1 million at the end of the quarter, compared with \$240.5 million on December 31, 2018

Additional Highlights:

- Remaining 2019 adjusted subscription backlog² as of March 31, 2019 was \$432 million, an increase of \$62 million, or 17%, compared with a year ago
- Launched Acorn Al™, a company designed to provide actionable insights by breaking data silos and improving data agility across the entire life science continuum
- Appointed the company's first-ever Chief Information Officer, Dr. Rama Kondru, an industry visionary and former CIO of Janssen Americas. Additionally, Dr. Rachel Sherman, former principal deputy commissioner of FDA, joined Acorn AI as chief scientific and medical advisor
- In collaboration with the FDA Center for Drug Evaluation and Research (CDER), Medidata will apply a
 Synthetic Control Arm™ approach to adult historical clinical trial data and extrapolate results to children.
 The aim is to minimize exposure of children to clinical trials and increase the speed and efficiency of
 pediatric drug development

- Secured a competitive win with a top 10 medical device company that will use Rave EDC, CTMS and eTMF to standardize operations and increase efficiency across business units
- Revenue retention rate³ was nearly 100% for the quarter

"We had a good start to the year with 16% total revenue growth," said Rouven Bergmann, chief financial officer, Medidata. "With a rock-solid core business, combined with the launch of Acorn AI, we are well positioned for future growth while we focus on expanding our operating margins."

Conference call details:

Time: Today, April 30, 8 a.m. ET

Conference ID: 9260289

Live dial-in: 1-877-791-0148, domestic

1-647-689-5652, international

Webcast: investors.medidata.com

Replay: 1-800-585-8367, domestic
1-416-621-4642, international

About Medidata

Medidata is leading the digital transformation of life sciences, with the world's most-used platform for clinical development, commercial, and real-world data. Powered by artificial intelligence and delivered by industry experts, Medidata helps pharmaceutical, biotech, medical device companies, and academic researchers accelerate value, minimize risk and optimize outcomes. Medidata and its companies, Acorn Al and SHYFT, serve more than 1,200 customers and partners worldwide and empower more than 150,000 certified users every day to create hope for millions of patients. Discover the future of life sciences: www.medidata.com

Cautionary Statement

Certain statements made in this press release are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 that involve significant risks and uncertainties about Medidata Solutions, Inc. ("Medidata"), including, but not limited to, statements about Medidata's forecast of financial performance, products and services, business model, strategy and growth opportunities, and competitive position. Such statements are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in these statements. Among other things, the risks and uncertainties include those associated with possible fluctuations in our financial and operating results; integration activities, performance and financial impact of acquired companies; our ability to retain and expand our customer base or increase new business from those customers; and our ability to continue to release, and gain customer acceptance of, new and improved versions of our products. For additional disclosure regarding these and other risks faced by Medidata, see disclosures contained in Medidata's public filings with the Securities and Exchange Commission, including the "Risk Factors" section of Medidata's Annual Report on Form 10-K for the year ended December 31, 2018. You should consider these factors in evaluating the forward-looking statements included in this press release and not place undue reliance on such statements. The forward-looking statements are made as of the date hereof, and Medidata undertakes no obligation to update such statements as a result of new information, new developments or otherwise, except as required by law.

(1) Non-GAAP Financial Information

Medidata provides non-GAAP operating income, net income, and net income per share data as a supplement to its operating results. These measures are not in accordance with, or an alternative to, generally accepted accounting principles (GAAP), and may be different from non-GAAP measures used by other companies. Management uses these non-GAAP measures to evaluate its financial results, develop budgets, manage expenditures, and as an important factor in determining variable compensation. In addition, management believes, based on discussions with investors, that these non-GAAP measures enhance investors' ability to assess Medidata's historical and projected future financial performance. While management believes these non-GAAP financial measures provide useful supplemental information to investors, there are inherent limitations associated with the use of non-GAAP financial measures. Investors are encouraged to review the attached reconciliations of these non-GAAP financial measures to the nearest comparable GAAP measures.

(2) Adjusted subscription backlog equals subscription backlog plus outstanding intra-year renewals valued at a	n
amount equal to the contracts to be renewed.	

(3) Revenue	retention i	rate is calculated	l as the perc	entage of prio	r year reveni	ue attributable to	customers	retained
in the curren	t year.							

MEDIDATA SOLUTIONS, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)

(Amounts in thousands, except per share data)

Three Months Ended March 31	Three	Months	Ended	March	31.
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		2019	2018
Revenues			
Subscription	\$	146,875	\$ 126,819
Professional services		26,629	22,379
Total revenues		173,504	149,198
Cost of revenues (1)(2)			
Subscription		26,728	20,341
Professional services		19,275	15,961
Total cost of revenues		46,003	36,302
Gross profit		127,501	112,896
Operating costs and expenses			
Research and development (1)		46,489	37,522
Sales and marketing (1)(2)		43,396	36,861
General and administrative (1)		32,634	25,187
Total operating costs and expenses		122,519	99,570
Operating income		4,982	13,326
Interest and other income (expense)			
Interest expense		(1,110)	(5,575)
Interest income		945	2,088
Other expense, net		(28)	(96)
Total interest and other expense, net		(193)	(3,583)
Income before income taxes		4,789	9,743
Provision for income taxes		(6,356)	(582)
Net income	\$	11,145	\$ 10,325
Earnings per share			
Basic	\$	0.19	\$ 0.18
Diluted	\$	0.18	\$ 0.17
Weighted average common shares outstanding			
Basic		59,693	57,055
Diluted		61,755	60,098
(1) Stock-based compensation expense included in cost of revenues ar	nd operating costs and	expenses is as	follows:
Cost of revenues	\$	2,383	\$ 1,268
Research and development		4,249	2,854
Sales and marketing		5,426	2,644
General and administrative		7,606	6,389
Total stock-based compensation	\$	19,664	\$ 13,155
(2) Amortization of intangible assets included in costs of revenues and of	operating costs and ex	penses is as foll	ows:
Cost of revenues	\$	1,364	\$ 1,094
Sales and marketing		506	120
Total amortization of intangible assets	\$	1,870	\$ 1,214

MEDIDATA SOLUTIONS, INC.

Reconciliation of GAAP Operating Income and GAAP Net Income to Non-GAAP Operating Income and Non-GAAP Net Income (Unaudited)

(Amounts in thousands, except per share data)

Three Months Ended March 31,

	2019		2018
Operating income:			
GAAP operating income	\$ 4,982	\$	13,326
GAAP operating margins	2.9%		8.9%
Stock-based compensation	19,664		13,155
Depreciation and amortization	10,529		7,813
Contingent consideration adjustments (1)	161		(72)
Cash compensation from acquisition-related agreements (2)	 590		
Non-GAAP operating income	\$ 35,926	\$	34,222
Non-GAAP operating margins	20.7%		22.9%
Net income:			
GAAP net income	\$ 11,145	\$	10,325
Stock-based compensation	19,664		13,155
Amortization	1,870		1,214
Contingent consideration adjustments (1)	161		(72)
Cash compensation from acquisition-related agreements (2)	590		_
Non-cash interest expense (3)	109		3,908
Tax impact on add-back items (4)	 (5,599)		(4,551)
Non-GAAP net income	\$ 27,940	\$	23,979
GAAP basic earnings per share	\$ 0.19	\$	0.18
GAAP diluted earnings per share	\$ 0.18	\$	0.17
Non-GAAP basic earnings per share	\$ 0.47	\$	0.42
Non-GAAP diluted earnings per share	\$ 0.45	\$	0.40
		-	

⁽¹⁾ Change in fair value of acquisition-related contingent consideration liability.

(4) Tax impact calculated using a 25% rate.

The table above presents a reconciliation of GAAP to non-GAAP operating income, net income, and net income per share applicable to common stockholders for the three months ended March 31, 2019 and 2018. Non-GAAP operating income excludes the impact of stock-based compensation, depreciation, amortization of intangible assets associated with acquisitions, adjustments to the fair value of contingent consideration, and cash compensation from acquisition-related agreements. Non-GAAP net income excludes the tax-affected impact of stock-based compensation, amortization of intangible assets associated with acquisitions, adjustments to the fair value of contingent consideration, cash compensation from acquisition-related agreements, and non-cash interest expense.

⁽²⁾ Expense associated with acquisition-related cash compensation agreements entered into with certain employees of SHYFT Analytics, Inc. ("SHYFT").

⁽³⁾ Non-cash interest expense for the three months ended March 31, 2019 and 2018 includes amortization of issuance costs of our credit agreement entered into in 2017. Non-cash interest expense for the three months ended March 31, 2018 also includes amortization of debt discount and issuance costs on our 1.00% convertible senior notes issued in 2013 and settled in August 2018. We exclude this incremental non-cash interest expense for purposes of calculating non-GAAP net income. We believe that excluding these expenses from our non-GAAP measures is useful to investors because such incremental non-cash interest expense does not generate a cash outflow, nor do the debt issuance costs represent a cash outflow except in the period of issuance; therefore both are not indicative of our continuing operations.

MEDIDATA SOLUTIONS, INC.

CONSOLIDATED BALANCE SHEETS (Unaudited)

(Amounts in thousands, except per share data)

ASSETS Current assets: Cash and cash equivalents Marketable securities Accounts receivable, net of allowance for doubtful accounts of \$1,959 and \$1,999, respectively (1) Capitalized contract costs Prepaid expenses and other current assets Total current assets Restricted cash Operating lease assets (2) Furniture, fixtures and equipment, net Goodwill Intangible assets, net Deferred tax assets Other assets Total assets LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Accounts payable Accrued payroll and other compensation Accrued expenses and other Operating lease liabilities (2)	177, 23, 36, 443, 7, 86, 111, 215, 28, 46, 57, \$ 996,	060 853 186 817 968 212 383 035 958 276 503 367 702	\$	105,440 135,105 170,744 22,247 28,949 462,485 7,205 — 98,983 216,017 29,546 45,982 52,994 913,212
Cash and cash equivalents Marketable securities Accounts receivable, net of allowance for doubtful accounts of \$1,959 and \$1,999, respectively (1) Capitalized contract costs Prepaid expenses and other current assets Total current assets Restricted cash Operating lease assets (2) Furniture, fixtures and equipment, net Goodwill Intangible assets, net Deferred tax assets Other assets Total assets LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Accounts payable Accrued payroll and other compensation Accrued expenses and other	97, 177, 23, 36, 443, 7, 86, 111, 215, 28, 46, 57, \$ 996,	060 853 186 817 968 212 383 035 958 276 503 367 702	\$	135,105 170,744 22,247 28,949 462,485 7,205 — 98,983 216,017 29,546 45,982 52,994
Marketable securities Accounts receivable, net of allowance for doubtful accounts of \$1,959 and \$1,999, respectively (1) Capitalized contract costs Prepaid expenses and other current assets Total current assets Restricted cash Operating lease assets (2) Furniture, fixtures and equipment, net Goodwill Intangible assets, net Deferred tax assets Other assets Total assets LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Accounts payable Accrued payroll and other compensation Accrued expenses and other	97, 177, 23, 36, 443, 7, 86, 111, 215, 28, 46, 57, \$ 996,	060 853 186 817 968 212 383 035 958 276 503 367 702	\$	135,105 170,744 22,247 28,949 462,485 7,205 — 98,983 216,017 29,546 45,982 52,994
Accounts receivable, net of allowance for doubtful accounts of \$1,959 and \$1,999, respectively (1) Capitalized contract costs Prepaid expenses and other current assets Total current assets Restricted cash Operating lease assets (2) Furniture, fixtures and equipment, net Goodwill Intangible assets, net Deferred tax assets Other assets Total assets LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Accounts payable Accrued payroll and other compensation Accrued expenses and other	177, 23, 36, 443, 7, 86, 111, 215, 28, 46, 57, \$ 996,	853 186 817 968 212 383 035 958 276 503 367 702		170,744 22,247 28,949 462,485 7,205 — 98,983 216,017 29,546 45,982 52,994
Capitalized contract costs Prepaid expenses and other current assets Total current assets Restricted cash Operating lease assets (2) Furniture, fixtures and equipment, net Goodwill Intangible assets, net Deferred tax assets Other assets Total assets LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Accounts payable Accrued payroll and other compensation Accrued expenses and other	23, 36, 443, 7, 86, 111, 215, 28, 46, 57, \$ 996,	186 817 968 212 383 035 958 276 503 367 702		22,247 28,949 462,485 7,205 ————————————————————————————————————
Prepaid expenses and other current assets Total current assets Restricted cash Operating lease assets (2) Furniture, fixtures and equipment, net Goodwill Intangible assets, net Deferred tax assets Other assets Total assets LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Accounts payable Accrued payroll and other compensation Accrued expenses and other	36, 443, 7, 86, 111, 215, 28, 46, 57, \$ 996,	817 968 212 383 035 958 276 503 367 702		28,949 462,485 7,205 — 98,983 216,017 29,546 45,982 52,994
Total current assets Restricted cash Operating lease assets (2) Furniture, fixtures and equipment, net Goodwill Intangible assets, net Deferred tax assets Other assets Total assets LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Accounts payable Accrued payroll and other compensation Accrued expenses and other	443, 7, 86, 111, 215, 28, 46, 57, \$ 996,	968 212 383 035 958 276 503 367 702		462,485 7,205 — 98,983 216,017 29,546 45,982 52,994
Restricted cash Operating lease assets (2) Furniture, fixtures and equipment, net Goodwill Intangible assets, net Deferred tax assets Other assets Total assets LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Accounts payable Accrued payroll and other compensation Accrued expenses and other	7, 86, 111, 215, 28, 46, 57, \$ 996,	212 383 035 958 276 503 367 702		7,205 — 98,983 216,017 29,546 45,982 52,994
Operating lease assets (2) Furniture, fixtures and equipment, net Goodwill Intangible assets, net Deferred tax assets Other assets Total assets LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Accounts payable Accrued payroll and other compensation Accrued expenses and other	\$ 86, 111, 215, 28, 46, 57, \$ 996,	383 035 958 276 503 367 702		98,983 216,017 29,546 45,982 52,994
Furniture, fixtures and equipment, net Goodwill Intangible assets, net Deferred tax assets Other assets Total assets LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Accounts payable Accrued payroll and other compensation Accrued expenses and other	111, 215, 28, 46, 57, \$ 996,	035 958 276 503 367 702		216,017 29,546 45,982 52,994
Goodwill Intangible assets, net Deferred tax assets Other assets Total assets LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Accounts payable Accrued payroll and other compensation Accrued expenses and other	215, 28, 46, 57, \$ 996,	958 276 503 367 702		216,017 29,546 45,982 52,994
Intangible assets, net Deferred tax assets Other assets Total assets LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Accounts payable Accrued payroll and other compensation Accrued expenses and other	28, 46, 57, \$ 996, \$ 8, 31,	276 503 367 702		29,546 45,982 52,994
Deferred tax assets Other assets Total assets LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Accounts payable Accrued payroll and other compensation Accrued expenses and other	\$ 996, \$ 31,	503 367 702 137		45,982 52,994
Other assets Total assets LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Accounts payable Accrued payroll and other compensation Accrued expenses and other	\$ 996, \$ 31,	367 702 137		52,994
Total assets LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Accounts payable Accrued payroll and other compensation Accrued expenses and other	\$ 996, \$ 8, 31,	702 137		
LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Accounts payable Accrued payroll and other compensation Accrued expenses and other	\$ 8, 31,	137		913,212
Current liabilities: Accounts payable Accrued payroll and other compensation Accrued expenses and other	\$ 8, 31,	137		
Accounts payable Accrued payroll and other compensation Accrued expenses and other	31,		\$	
Accrued payroll and other compensation Accrued expenses and other	31,		\$	
Accrued expenses and other		823		7,482
Accrued expenses and other	46			51,270
Onerating lease liabilities (2)	40,	785		37,487
	14,;	286		_
Deferred revenue	71,	591		74,463
Total current liabilities	172,	622		170,702
Noncurrent liabilities:				11.0,1.0
Term loan, net	86,	606		88,366
Deferred revenue, noncurrent		424		3,843
Deferred tax liabilities		98		99
Operating lease liabilities, noncurrent (2)	96.	585		_
Other long-term liabilities		641		18,754
Total noncurrent liabilities	187,			111,062
Total liabilities	359,			281,764
Commitments and contingencies		0.0		201,10
Stockholders' equity:				
Preferred stock, par value \$0.01 per share; 5,000 shares authorized, none issued and outstanding		_		_
Common stock, par value \$0.01 per share; 200,000 shares authorized; 67,434 and 66,103 shares issued; 62,246 and 61,348 shares outstanding, respectively		674		661
Additional paid-in capital	596,	725		574,667
Treasury stock, 5,188 and 4,755 shares, respectively	(181,	553))	(152,849
Accumulated other comprehensive loss	· · · · · · · · · · · · · · · · · · ·	103)		(4,869
Retained earnings	224,			213,838
Total stockholders' equity	636,			631,448
Total liabilities and stockholders' equity	\$ 996,		\$	913,212