

# Quarterly Industry Update

As of March 31, 2017

Industry: Blood Diagnostics

## Industry Summary

Cogent Valuation identified Blood Diagnostics publicly traded companies, IPOs, and recent M&A transactions within the Blood Diagnostics industry, which provides a basis for market and transaction pricing that can be used by your firm in estimating market sentiment and its impact on your firm's value. Over the last year since March 31, 2016, the median 52-week share price return of the Blood Diagnostics industry was 27.4%. Between March 31, 2015 and March 31, 2017, the median EV/EBITDA multiple decreased from 16.9 to 15.2. Furthermore, the median price-to-earnings multiple decreased from 23.9 to 20.9 over the same period.

## Comparable Public Company Key Statistics

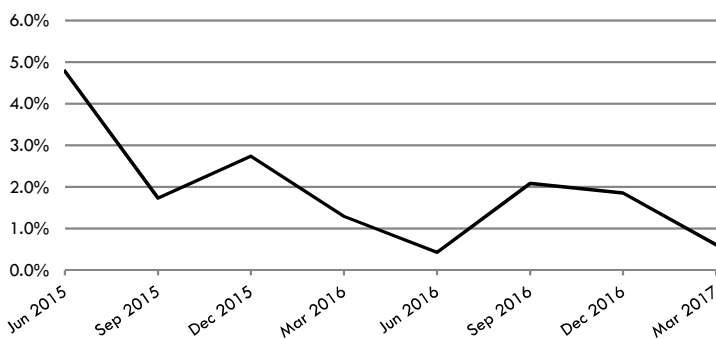
Median 52-Week Return	27.4%	Median EV/Revenue Multiple	4.2x	Median Price/Earnings Multiple	20.9x
Median 3-Year CAGR Return	2.3%	Median EV/EBITDA Multiple	15.2x	Median EV/Gross CF Multiple	20.6x

## Comparable Public Company Market Price Returns (As of March 31, 2017)

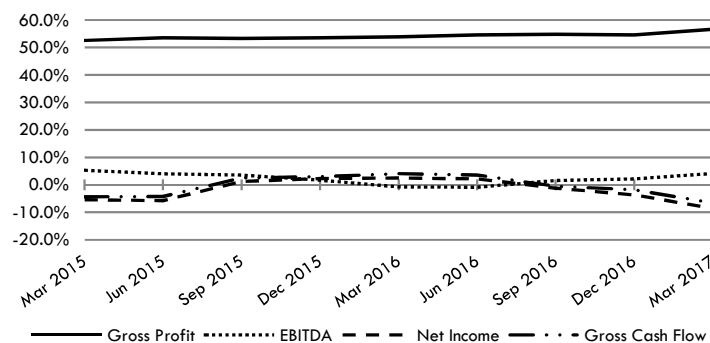
	YTD	3 Month	1 Year	2 Year	3 Year	5 Year	2016	2015	2014	2013	2012
Abaxis, Inc.	-8.1%	-8.1%	6.9%	-13.0%	7.6%	10.7%	-5.2%	-2.0%	42.0%	7.8%	34.1%
BG Medicine, Inc.	99.3%	99.3%	-77.8%	-84.3%	-78.2%	-69.0%	-89.0%	-80.2%	-55.7%	-55.0%	-51.1%
DexCom, Inc.	41.9%	41.9%	24.8%	16.6%	27.0%	52.0%	-27.1%	48.8%	55.5%	160.6%	46.0%
Escalon Medical Corp.	-4.8%	-4.8%	-87.5%	-72.8%	-59.7%	-37.0%	-90.1%	-34.2%	-18.3%	107.3%	-5.0%
Insulet Corporation	14.4%	14.4%	29.9%	13.7%	-3.1%	17.6%	-0.3%	-17.9%	24.2%	74.8%	12.7%
Masimo Corporation	38.4%	38.4%	122.9%	68.2%	50.6%	31.9%	62.4%	57.6%	-9.9%	39.1%	12.4%
MGC Diagnostics Corporation	6.0%	6.0%	36.3%	7.6%	-9.8%	7.8%	19.5%	3.1%	-49.4%	114.6%	13.0%
Quest Diagnostics Incorporated	6.8%	6.8%	37.4%	13.0%	19.2%	9.9%	29.2%	6.1%	25.3%	-8.1%	0.4%
<b>Median of Industry Public Companies</b>	<b>10.6%</b>	<b>10.6%</b>	<b>27.4%</b>	<b>10.3%</b>	<b>2.3%</b>	<b>10.3%</b>	<b>-2.8%</b>	<b>0.6%</b>	<b>7.1%</b>	<b>57.0%</b>	<b>12.6%</b>

(Multiple year periods are calculated as the average annual return.)

## Median Quarterly Revenue Growth of All Blood Diagnostics Companies



## Median Gross Profit, EBITDA, Net Income and Gross Cash Flow Margins



## Median Public Company Multiples of the Blood Diagnostics Industry

Date:	3/31/2015	6/30/2015	9/30/2015	12/31/2015	3/31/2016	6/30/2016	9/30/2016	12/31/2016	3/31/2017
EV/Revenues Multiple	3.0x	3.4x	2.3x	2.2x	2.8x	3.3x	3.3x	4.6x	4.2x
EV/EBITDA Multiple	16.9x	16.1x	14.0x	14.1x	13.8x	13.9x	14.8x	15.4x	15.2x
Price/Earnings Multiple	23.9x	29.0x	21.8x	20.2x	19.7x	21.9x	26.1x	28.3x	20.9x
EV/Gross Cash Flows Multiple	21.1x	25.4x	20.4x	19.3x	18.7x	20.1x	20.7x	21.9x	20.6x

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# Quarterly Industry Update

As of March 31, 2017

Industry: Blood Diagnostics

## Industry Initial Public Offerings (dollars in millions, except share prices)

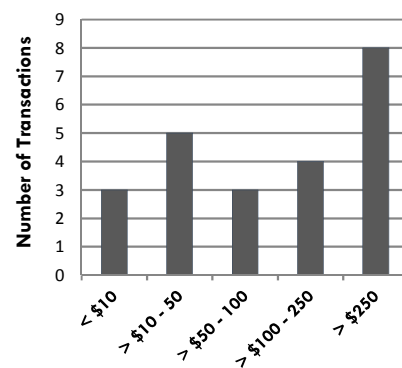
Offer Date	Company Name	Offer Price	Shares Offered	Amount Raised	Total Assets	Debt	LTM Revenues	LTM EBITDA	LTM Net Income	LTM Cash Flows
3/13/2017	Hemcheck Sweden AB (publ)	\$0.67	4.7	\$3.2	\$843.0	\$171.5	\$917.6	\$150.6	\$76.6	\$175.7
2/17/2017	PCL Inc.	\$6.94	1.5	\$10.4	\$809.6	\$141.6	\$893.3	\$150.4	\$79.0	\$172.6
6/29/2016	ExpreS2ion Biotech Holding AB	\$0.70	3.1	\$2.1	N/A	N/A	N/A	N/A	N/A	N/A
7/9/2015	Cellnovo Limited	\$11.73	3.0	\$34.8	\$10.5	\$11.5	\$0.2	(\$7.7)	(\$8.1)	(\$7.2)
8/6/2014	T2 Biosystems, Inc.	\$11.00	5.2	\$57.2	\$25.8	\$4.6	\$0.3	(\$21.4)	(\$23.0)	(\$20.8)
4/24/2014	Quotient Limited	\$8.00	5.0	\$40.0	\$26.4	\$15.0	\$18.5	(\$5.4)	(\$6.6)	(\$5.0)
8/2/2012	Globus Medical, Inc.	\$12.00	8.3	\$100.0	\$354.8	\$0.0	\$347.9	\$121.4	\$63.9	\$138.8
10/18/2011	ZELTIQ Aesthetics, Inc.	\$13.00	7.0	\$91.0	\$19.3	\$1.0	\$50.5	(\$5.1)	(\$6.4)	(\$4.4)
2/3/2011	BG Medicine, Inc.	\$7.00	5.0	\$35.0	\$6.0	\$4.5	\$1.0	(\$15.4)	(\$18.1)	(\$14.9)
2/2/2011	Tornier N.V.	\$19.00	8.8	\$166.3	\$499.2	\$133.8	\$223.4	\$13.2	(\$62.1)	\$28.6
8/13/2010	Electromed, Inc.	\$4.00	1.7	\$6.8	\$13.4	\$3.8	\$14.2	\$2.3	\$1.0	\$2.6
<b>Median of All IPOs</b>		<b>nm</b>	<b>nm</b>	<b>\$35.0</b>	<b>\$26.1</b>	<b>\$8.1</b>	<b>\$34.5</b>	<b>\$3.0</b>	<b>(\$2.7)</b>	<b>\$3.3</b>

nm: not meaningful

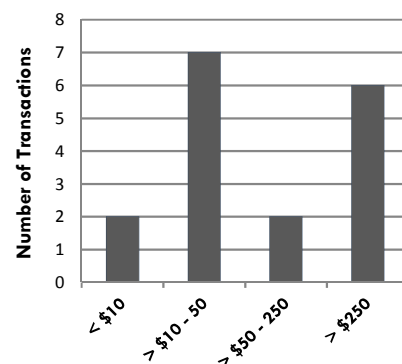
## Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions)

Transaction Date	Target	Acquirer	Transaction Size	% Bought	LTM Revenues	EV/Revenues
11/4/2016	Cepheid	Danaher Corporation	\$4,402.2	100%	\$564.2	7.2x
6/29/2016	Nanosphere, Inc.	Luminex Corporation	\$114.7	100%	\$23.0	4.4x
4/5/2016	Allenex AB (publ)	CareDx, Inc	\$38.4	78%	\$16.4	2.6x
3/31/2016	Affymetrix Inc.	Thermo Fisher Scientific	\$1,466.6	100%	\$359.8	3.7x
3/24/2016	Magellan Diagnostics, Inc.	Meridian Bioscience, Inc.	\$66.0	100%	\$16.0	4.1x
9/29/2015	Health Diagnostic Laboratory	True Health Diagnostics	\$37.1	100%	N/A	N/A
6/11/2015	Biosensors International	Hony Capital (Beijing)	\$50.0	100%	N/A	N/A
11/20/2014	LipoScience, Inc.	Laboratory Corp. of America	\$101.0	100%	\$45.5	1.3x
10/31/2014	Cell Marque Corporation	Sigma-Aldrich Corporation	\$170.0	100%	N/A	N/A
9/10/2013	Flowsense Medical	Baxter International	\$4.5	100%	\$0.1	N/A
9/6/2013	Gambro AB	Baxter International	\$4,013.8	100%	\$1,670.7	2.4x
2/6/2013	Epocal	Inverness Medical	\$241.5	100%	N/A	N/A
10/3/2012	Drew Scientific	ERBA Diagnostics	\$6.5	100%	\$13.0	0.5x
8/1/2012	Gen-Probe	Hologic	\$4,204.1	100%	\$586.6	6.6x
5/31/2012	SunTech Medical Group	Halma	\$57.0	100%	\$23.0	2.3x
5/22/2012	Navilyst Medical	AngioDynamics	\$374.5	100%	\$148.6	2.5x
4/2/2012	Accutome	Halma	\$25.0	100%	\$20.2	1.2x
1/3/2012	Verum Diagnostica	Roche Holding	\$13.3	100%	N/A	N/A
11/23/2011	Shanghai Yuanqi	SHMY Healthdigit Biochips	\$54.0	70%	\$0.1	N/A
11/8/2011	Axis-Shield	Alere	\$396.1	100%	\$164.7	2.3x
9/2/2011	Life Enhancement Technology	VasoHealthcare	\$3.3	100%	N/A	N/A
8/23/2011	Phadia	Thermo Fisher Scientific	\$3,512.8	100%	\$523.4	6.7x
6/29/2011	Beckman Coulter	Danaher	\$7,392.9	100%	\$3,663.4	1.9x
<b>Median of the 23 M&amp;A Transaction Targets</b>			<b>\$101.0</b>	<b>100%</b>	<b>\$45.5</b>	<b>2.5x</b>

### Size of M&A Transactions



### LTM Revenues Reported



### Definitions of Financial Terms Used in this Quarterly Industry Update:

Enterprise Value (EV): Market Value of Equity + Market Value of Debt - Cash

Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA): Profitability metric sometimes also referred to as operating profit or operating earnings.

Gross Cash Flows: Net Income + Depreciation and Amortization Expense

Latest Twelve Months (LTM): Financial information is as of the latest twelve months through the date of this Quarterly Industry Update.

# Quarterly Industry Update

As of March 31, 2017

Diagnostics Industry Aggregates



## Comparable Public Company Key Statistics

Median 52-Week Return	30.1%	Median EV/Revenue Multiple	3.4x	Median Price/Earnings Multiple	43.1x
Median Year-to-Date Return	5.8%	Median EV/EBITDA Multiple	16.4x	Median EV/Gross CF Multiple	19.7x

## Comparable Public Company Market Price Returns (As of March 31, 2017)

	YTD	3 Month	1 Year	2 Year	3 Year	5 Year	2016	2015	2014	2013	2012
Abaxis, Inc.	-8.1%	-8.1%	6.9%	-13.0%	7.6%	10.7%	-5.2%	-2.0%	42.0%	7.8%	34.1%
Accelerate Diagnostics, Inc.	16.6%	16.6%	68.4%	3.7%	3.5%	87.3%	-3.4%	12.0%	57.3%	202.7%	233.1%
AngioDynamics, Inc.	2.8%	2.8%	41.2%	-1.2%	3.3%	7.2%	39.0%	-36.1%	10.8%	56.1%	-25.8%
BG Medicine, Inc.	99.3%	99.3%	-77.8%	-84.3%	-78.2%	-69.0%	-89.0%	-80.2%	-55.7%	-55.0%	-51.1%
Biopix, Inc.	4.2%	4.2%	48.1%	3.9%	-42.5%	-35.2%	57.6%	-82.8%	-17.3%	-16.4%	-56.0%
Bio-Techne Corporation	-1.1%	-1.1%	7.5%	0.7%	6.0%	7.7%	14.3%	-2.6%	-2.4%	38.5%	0.1%
Chembio Diagnostics, Inc.	-22.1%	-22.1%	-11.5%	14.5%	15.4%	6.0%	27.6%	36.3%	16.0%	-28.8%	40.8%
CombiMatrix Corporation	105.7%	105.7%	51.0%	-56.3%	-50.7%	-53.4%	-75.8%	-43.4%	-43.9%	-56.4%	-73.6%
DexCom, Inc.	41.9%	41.9%	24.8%	16.6%	27.0%	52.0%	-27.1%	48.8%	55.5%	160.6%	46.0%
Digirad Corporation	6.0%	6.0%	6.9%	8.0%	15.6%	20.3%	-13.6%	32.8%	17.8%	80.5%	4.6%
Enzo Biochem, Inc.	20.6%	20.6%	84.0%	68.4%	26.2%	25.5%	54.2%	1.4%	52.1%	8.1%	20.5%
ERBA Diagnostics, Inc.	45.8%	45.8%	-65.7%	-68.4%	-48.6%	-11.9%	-82.7%	-56.2%	16.1%	206.7%	102.3%
Escalon Medical Corp.	-4.8%	-4.8%	-87.5%	-72.8%	-59.7%	-37.0%	-90.1%	-34.2%	-18.3%	107.3%	-5.0%
Exact Sciences Corporation	76.8%	76.8%	250.4%	3.6%	18.6%	16.2%	44.7%	-66.4%	133.5%	11.0%	30.4%
Forward Industries, Inc.	-5.0%	-5.0%	-7.9%	22.6%	-15.4%	-12.9%	-15.5%	42.3%	-32.9%	4.7%	-11.4%
GenMark Diagnostics, Inc.	4.7%	4.7%	143.3%	-0.6%	8.9%	25.9%	57.7%	-43.0%	2.4%	47.7%	118.4%
Insulet Corporation	14.4%	14.4%	29.9%	13.7%	-3.1%	17.6%	-0.3%	-17.9%	24.2%	74.8%	12.7%
Luminex Corporation	-9.2%	-9.2%	-5.3%	7.2%	0.5%	-4.7%	-5.4%	14.0%	-3.3%	15.5%	-20.9%
Masimo Corporation	38.4%	38.4%	122.9%	68.2%	50.6%	31.9%	62.4%	57.6%	-9.9%	39.1%	12.4%
Meridian Bioscience, Inc.	-22.0%	-22.0%	-33.0%	-15.0%	-14.1%	-6.6%	-13.7%	24.7%	-38.0%	31.0%	7.5%
Merit Medical Systems, Inc.	9.1%	9.1%	56.3%	22.5%	26.4%	18.4%	42.5%	7.3%	10.1%	13.2%	3.9%
Merrimack Pharmaceuticals, Inc.	-24.5%	-24.5%	-63.2%	-49.1%	-15.1%	-13.0%	-48.4%	-30.1%	112.0%	-12.5%	N/A
MGC Diagnostics Corporation	6.0%	6.0%	36.3%	7.6%	-9.8%	7.8%	19.5%	3.1%	-49.4%	114.6%	13.0%
Myriad Genetics, Inc.	15.2%	15.2%	-48.7%	-26.4%	-17.5%	-4.1%	-61.4%	26.7%	62.3%	-23.0%	30.1%
Navidea Biopharmaceuticals, Inc	-9.5%	-9.5%	-38.9%	-39.8%	-32.2%	-29.4%	-52.1%	-29.6%	-8.7%	-26.9%	8.0%
Neogen Corporation	-0.7%	-0.7%	30.2%	18.4%	13.4%	20.3%	16.8%	14.0%	8.5%	51.3%	47.9%
OraSure Technologies, Inc.	47.3%	47.3%	78.8%	40.6%	17.5%	2.4%	36.3%	-36.5%	61.2%	-12.4%	-21.2%
Quest Diagnostics Incorporated	6.8%	6.8%	37.4%	13.0%	19.2%	9.9%	29.2%	6.1%	25.3%	-8.1%	0.4%
Quidel Corporation	5.7%	5.7%	31.2%	-8.4%	-6.0%	4.3%	1.0%	-26.7%	-6.4%	65.5%	23.4%
Surmodics, Inc.	-5.3%	-5.3%	30.6%	-3.9%	2.1%	9.4%	25.3%	-8.3%	-9.4%	9.1%	52.5%
T2 Biosystems, Inc.	0.0%	0.0%	-46.7%	-41.8%	N/A	N/A	-51.9%	-43.1%	N/A	N/A	N/A
TrovaGene, Inc.	-45.2%	-45.2%	-75.3%	-58.9%	-41.5%	-23.5%	-61.1%	25.6%	-25.1%	-17.2%	110.0%
Veracyte, Inc.	18.6%	18.6%	70.0%	12.3%	-18.8%	N/A	7.5%	-25.5%	-33.4%	N/A	N/A
Vermillion, Inc.	120.0%	120.0%	42.2%	8.7%	-10.9%	0.7%	-47.2%	-9.5%	-15.7%	78.8%	12.8%
<b>Median of Industry Public Companies</b>	<b>5.8%</b>	<b>5.8%</b>	<b>30.1%</b>	<b>3.6%</b>	<b>0.5%</b>	<b>6.6%</b>	<b>-1.9%</b>	<b>-5.4%</b>	<b>2.4%</b>	<b>14.4%</b>	<b>12.7%</b>

(Multiple year periods are calculated as the average annual return.)

# Quarterly Industry Update

As of March 31, 2017

Diagnostics Industry Aggregates



## Median Public Company Multiples of the Diagnostics Industry Aggregates

Date:	3/31/2015	6/30/2015	9/30/2015	12/31/2015	3/31/2016	6/30/2016	9/30/2016	12/31/2016	3/31/2017
EV/Revenues Multiple	3.1x	3.4x	2.5x	3.1x	2.6x	3.0x	3.7x	3.8x	3.4x
EV/EBITDA Multiple	14.2x	14.0x	13.9x	14.8x	13.9x	13.4x	16.8x	16.0x	16.4x
Price/Earnings Multiple	35.0x	36.6x	31.8x	31.2x	36.1x	34.9x	39.3x	41.4x	43.1x
EV/Gross Cash Flows Multiple	34.3x	27.1x	24.1x	24.8x	21.5x	20.8x	23.6x	23.9x	19.7x

## Industry Initial Public Offerings - Diagnostics Industry Aggregates (dollars in millions, except share prices)

Offer Date	Company Name	Offer Price	Shares Offered	Amount Raised	Total Assets	Debt	LTM Revenues	LTM EBITDA	LTM Net Income	LTM Cash Flows
3/13/2017	Hemcheck Sweden AB (publ)	\$0.67	4.7	\$3.2	\$0.6	\$0.3	\$0.0	(\$0.2)	(\$0.2)	(\$0.2)
2/17/2017	PCL Inc.	\$6.94	1.5	\$10.4	\$8.6	\$0.9	\$0.2	(\$1.9)	(\$1.9)	(\$1.9)
11/10/2015	Advanced Accelerator Applications S.A.	\$16.00	4.7	\$75.0	\$233.9	\$27.1	\$88.7	\$1.2	(\$17.3)	\$9.6
5/5/2015	HTG Molecular Diagnostics, Inc.	\$14.00	3.6	\$50.0	\$8.7	\$10.5	\$3.3	(\$12.4)	(\$14.0)	(\$11.9)
5/4/2015	OpGen, Inc.	\$6.00	2.9	\$17.1	\$2.7	\$3.2	\$4.1	(\$5.0)	(\$5.7)	(\$4.5)
2/18/2015	Check-Cap Ltd.	\$6.00	2.0	\$12.0	\$3.3	\$0.0	\$0.0	(\$4.0)	(\$4.2)	(\$3.9)
8/6/2014	T2 Biosystems, Inc.	\$11.00	5.2	\$57.2	\$25.8	\$4.6	\$0.3	(\$21.4)	(\$23.0)	(\$20.8)
7/16/2014	Roka Bioscience, Inc.	\$12.00	5.0	\$60.0	\$56.3	\$9.7	\$2.7	(\$27.0)	(\$30.2)	(\$24.6)
6/17/2014	Signal Genetics, Inc.	\$10.00	0.9	\$8.5	\$3.5	\$27.2	\$4.3	(\$0.4)	(\$2.3)	(\$0.2)
4/24/2014	Quotient Limited	\$8.00	5.0	\$40.0	\$26.4	\$15.0	\$18.5	(\$5.4)	(\$6.6)	(\$5.0)
2/4/2014	Biocept, Inc.	\$10.00	1.9	\$19.0	\$1.1	\$5.9	\$0.1	(\$7.9)	(\$9.7)	(\$7.6)
10/30/2013	Veracyte, Inc.	\$13.00	5.0	\$65.0	\$27.2	\$4.8	\$17.1	(\$20.6)	(\$23.2)	(\$19.9)
4/4/2013	Cancer Genetics, Inc.	\$10.00	0.6	\$6.0	\$9.0	\$15.2	\$4.3	(\$7.3)	(\$6.7)	(\$6.9)
8/2/2012	Globus Medical, Inc.	\$12.00	8.3	\$100.0	\$354.8	\$0.0	\$347.9	\$121.4	\$63.9	\$138.8
3/28/2012	Merrimack Pharmaceuticals, Inc.	\$7.00	14.3	\$100.1	\$85.3	\$0.0	\$34.2	(\$75.5)	(\$79.2)	(\$70.5)
10/18/2011	ZELTIQ Aesthetics, Inc.	\$13.00	7.0	\$91.0	\$19.3	\$1.0	\$50.5	(\$5.1)	(\$6.4)	(\$4.4)
2/3/2011	BG Medicine, Inc.	\$7.00	5.0	\$35.0	\$6.0	\$4.5	\$1.0	(\$15.4)	(\$18.1)	(\$14.9)
2/2/2011	Tornier N.V.	\$19.00	8.8	\$166.3	\$499.2	\$133.8	\$223.4	\$13.2	(\$62.1)	\$28.6
8/13/2010	Electromed, Inc.	\$4.00	1.7	\$6.8	\$13.4	\$3.8	\$14.2	\$2.3	\$1.0	\$2.6
5/28/2010	GenMark Diagnostics, Inc.	\$6.00	4.6	\$27.6	\$16.1	\$0.0	\$1.2	(\$17.3)	(\$20.4)	(\$16.0)
4/22/2010	Lianluo Smart Limited	\$8.00	1.5	\$12.0	\$17.8	\$1.5	\$12.4	\$3.6	\$2.7	\$3.9
4/21/2010	DynaVox Inc.	\$15.00	9.4	\$140.6	\$128.4	\$79.2	\$105.2	\$28.1	\$13.5	\$30.7
11/1/2007	Nanosphere, Inc.	\$14.00	6.1	\$98.0	\$40.4	\$10.8	\$1.5	(\$24.9)	(\$25.7)	(\$23.5)
8/7/2007	Masimo Corporation	\$17.00	11.9	\$202.6	\$152.1	\$31.7	\$234.0	\$80.6	\$46.2	\$84.3
5/14/2007	Insulet Corporation	\$15.00	7.7	\$115.5	\$57.1	\$31.2	\$3.7	(\$32.2)	(\$36.0)	(\$29.8)
<b>Median of All IPOs</b>		<b>nm</b>	<b>nm</b>	<b>\$50.0</b>	<b>\$19.3</b>	<b>\$4.8</b>	<b>\$4.3</b>	<b>(\$5.1)</b>	<b>(\$6.7)</b>	<b>(\$4.5)</b>

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