# **Quarterly Industry Update**

As of December 31, 2016 Industry: Medical Devices



## Industry Summary

Cogent Valuation identified Medical Devices publicly traded companies, IPOs, and recent M&A transactions within the Medical Devices 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 December 31, 2015, the median 52-week share price return of the Medical Devices industry was 17.9%. Between December 31, 2014 and December 31, 2016, the median EV/EBITDA multiple increased from 13.0 to 16.2. Furthermore, the median price-to-earnings multiple increased from 34.8 to 35.8 over the same period.

Comparable Public Company Key Statis	tics										
Median 52-Week Return	7.9%	Median EV/Revenue Multiple				3.8x Median Price/Earnings Multiple					35.8x
Median Year-to-Date Return	14.2%	Median EV/EBITDA Multiple			16.2x	M	26.4x				
Comparable Public Company Market Pr	ice Returns (As o	of December (	31, 2016)								
	YTD	3 Month	1 Year	2 Year	3 Year	5 Year	2015	2014	2013	2012	2011
ABIOMED, Inc.	24.8%	-12.4%	24.8%	72.1%	61.5%	43.6%	137.2%	42.3%	<b>99.0</b> %	-27.2%	<b>92.2</b> %
AngioDynamics Inc.	39.0%	-3.8%	39.0%	-5.8%	-0.6%	2.6%	-36.1%	10.8%	56.1%	-25.8%	-3.6%
Atossa Genetics, Inc.	340.6%	-32.9%	-70.6%	-74.4%	-65.7%	N/A	-77.6%	-38.4%	-40.5%	N/A	N/A
AtriCure, Inc.	-12.8%	23.7%	-12.8%	-1.0%	1.6%	12.0%	12.4%	6.9%	170.7%	-37.8%	8.1%
Becton, Dickinson and Company	7.4%	-7.9%	7.4%	<b>9</b> .1%	14.4%	17.2%	10.7%	<b>25.9</b> %	41.3%	4.6%	-11.6%
BIOLASE, Inc.	66.4%	-20.0%	66.4%	-27.0%	-20.8%	-10.6%	-68.0%	-6.6%	56.1%	-26.6%	52.8%
Boston Scientific Corporation	17.3%	-9.1%	17.3%	27.8%	21.6%	32.3%	39.2%	10.2%	109.8%	7.3%	- <b>29</b> .5%
Cardiovascular Systems Inc.	60.1%	2.0%	60.1%	-10.3%	-11.0%	19.7%	-49.7%	-12.3%	173.2%	27.4%	-15.5%
CAS Medical Systems Inc.	-9.0%	-6.9%	-9.0%	-1.2%	-1.8%	-1.6%	7.3%	-2.9%	-20.9%	23.0%	-45.4%
CryoLife Inc.	77.6%	9.0%	77.6%	30.0%	20.0%	31.9%	-4.9%	2.2%	78.0%	29.8%	-11.4%
Cutera, Inc.	35.7%	45.6%	35.7%	27.5%	19.4%	18.4%	19.8%	4.9%	13.1%	20.8%	-10.1%
Cytosorbents Corporation	-2.2%	-14.8%	-2.2%	-26.0%	20.4%	6.4%	-44.0%	218.4%	-3.8%	-18.8%	14.4%
Daxor Corp.	8.5%	4.7%	8.5%	8.7%	6.5%	-2.0%	8.9%	2.2%	-10.1%	-16.5%	-1. <b>6</b> %
Delcath Systems, Inc.	84.0%	-62.8%	-88.5%	-78.2%	-75.8%	-74.0%	-58.7%	-70.3%	-79.3%	-59.7%	-68.9%
DexCom, Inc.	-27.1%	-31.9%	-27.1%	4.1%	19.0%	45.0%	48.8%	55.5%	160.6%	46.0%	-31.8%
Endologix Inc.	-42.2%	-55.3%	-42.2%	-38.8%	-31.0%	-13.0%	-35.3%	-12.3%	22.5%	24.0%	60.6%
EnteroMedics Inc.	2.5%	-78.8%	-98.5%	-96.3%	-90.2%	-74.3%	-90.8%	-30.4%	-27.1%	64.7%	-44.8%
Escalon Medical Corp.	-90.1%	-84.3%	<b>-90</b> .1%	-74.5%	-62.4%	-36.3%	-34.2%	-18.3%	107.3%	-5.0%	-33.3%
Globus Medical, Inc.	-10.8%	9.9%	-10.8%	2.2%	7.1%	N/A	17.0%	17.8%	92.4%	N/A	N/A
InspireMD, Inc.	-88.6%	21.5%	-88.6%	-88.7%	-84.0%	-74.2%	-88.7%	-68.4%	-36.9%	-55.3%	N/A
LeMaitre Vascular, Inc.	46.9%	27.7%	46.9%	82.0%	46.8%	33.8%	125.5%	-4.5%	39.5%	-3.0%	-12.6%
Merit Medical Systems, Inc.	42.5%	<b>9</b> .1%	42.5%	23.7%	19.0%	14.6%	7.3%	10.1%	13.2%	3.9%	5.7%
MGC Diagnostics Corporation	19.5%	12.7%	19.5%	11.0%	-14.6%	8.6%	3.1%	-49.4%	114.6%	13.0%	0.4%
NeuroMetrix Inc.	-62.7%	-52.7%	-62.7%	-69.2%	-60.2%	-52.3%	-74.6%	-33.2%	12.5%	-65.4%	-69.4%
NuVasive, Inc.	24.5%	1.1%	24.5%	19.5%	27.7%	39.9%	14.7%	45.9%	109.1%	22.8%	-50.9%
Nxstage Medical, Inc.	19.6%	4.9%	19.6%	20.9%	37.9%	8.1%	22.2%	79.3%	-11.1%	-36.7%	-28.5%
Strata Skin Sciences, Inc.	-60.4%	-17.0%	-60.4%	-39.4%	-59.0%	-58.8%	-7.5%	-81.3%	-64.2%	-51.5%	10.1%
Stryker Corporation	28.9%	2.9%	28.9%	12.7%	16.8%	19.2%	-1.5%	25.5%	37.1%	10.3%	-7.4%
Sunshine Heart, Inc.	-74.1%	-37.5%	-74.1%	-71.3%	-67.0%	N/A	-68.2%	-56.3%	59.4%	N/A	N/A
Tandem Diabetes Care, Inc.	-81.8%	-71. <b>9</b> %	-81.8%	-58.9%	-56.3%	N/A	-7.0%	-50.7%	N/A	N/A	N/A
The Cooper Companies, Inc.	30.4%	-2.4%	30.4%	3.9%	12.2%	19.9%	-17.2%	30.9%	33.9%	31.1%	25.2%
TransEnterix, Inc.	-47.6%	-23.1%	-47.6%	-33.2%	-46.0%	N/A	-14.8%	-64.7%	N/A	N/A	N/A
Utah Medical Products, Inc.	24.3%	21.7%	24.3%	10.1%	8.4%	21.9%	-2.5%	5.1%	58.6%	33.5%	0.4%
Varian Medical Systems, Inc.	11.1%	-9.8%	11.1%	1. <b>9</b> %	4.9%	6.0%	-6.6%	11.4%	10.6%	4.6%	-3.1%
Median of Industry Public Companies	14.2%	-7.4%	7.9%	0.4%	3.3%	8.6%	-5.7%	2.2%	38.3%	4.6%	-8.8%

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

# **Quarterly Industry Update**

As of December 31, 2016 Industry: Medical Devices



### Median Public Company Multiples of the Industry: Medical Devices

Date:	12/31/2014	3/31/2015	6/30/2015	9/30/2015	12/31/2015	3/31/2016	6/30/2016	9/30/2016	12/31/2016
EV/Revenues Multiple	3.0x	3.5x	3.6x	3.1x	3.4x	3.0x	3.1x	3.7x	3.8x
EV/EBITDA Multiple	13.0x	14.5x	14.0x	14.3x	13.3x	14.9x	15.2x	17. <b>2</b> x	16.2x
Price/Earnings Multiple	34.8x	34.9x	36.0x	35.0x	33.4x	34.0x	35.2x	40.7x	35.8x
EV/Gross Cash Flows Multiple	23.0x	27.8x	30.1x	26.8x	40.0x	27.0x	27.2x	28.0x	26.4x

## Industry Initial Public Offerings - Industry: Medical Devices (dollars in millions, except share prices)

<u>Offer Date</u>	<u>Company Name</u>	Offer Price	Shares Offered	<u>Amount Raised</u>	<u>Total Assets</u>	<u>Debt</u>	LTM Revenues	LTM EBITDA	LTM Net Income	LTM Cash Flows
12/8/2016	Acarix A/S	\$1.93	8.0	\$15.3	N/A	N/A	N/A	N/A	N/A	N/A
11/3/2016	Neurotech International Limited	\$0.15	35.0	\$5.4	\$2.2	\$0.7	\$0.2	(\$2.7)	(\$3.3)	(\$2.6)
10/5/2016	Obalon Therapeutics, Inc.	\$15.00	5.0	\$75.0	\$20.1	\$9.9	\$3.9	(\$15.4)	(\$16.1)	(\$15.2)
7/12/2016	Vincent Medical Holdings Limited	\$0.13	89.3	\$16.4	\$41.3	\$0.6	\$57.8	\$10.5	\$7.5	\$12.2
4/28/2016	PAVmed Inc.	\$5.00	1.1	\$5.3	\$1.2	\$0.0	\$0.0	\$0.0	(\$1.8)	\$0.0
2/28/2016	Invent Medic Sweden AB	\$0.35	3.0	\$1.1	\$0.5	\$0.1	\$0.1	\$0.0	(\$0.1)	\$0.0
11/10/2015	Advanced Accelerator Applications S.A.	\$16.00	4.7	\$75.0	\$233.9	\$27.1	\$88.7	\$1.0	(\$17.3)	\$9.4
6/4/2015	EndoChoice Holdings, Inc.	\$15.00	6.4	\$95.3	\$102.7	\$39.5	\$64.3	(\$39.7)	(\$58.0)	(\$34.1)
1/30/2015	Avinger, Inc.	\$13.00	5.0	\$65.0	\$23.1	\$32.7	\$11.5	(\$23.9)	(\$32.4)	(\$22.4)
12/19/2014	Medovex Corporation	\$5.75	1.4	\$8.0	\$2.6	\$0.0	\$0.0	(\$0.7)	(\$0.7)	(\$0.7)
11/5/2014	Nevro Corp.	\$18.00	7.0	\$126.0	\$62.9	\$0.0	\$26.6	(\$26.5)	(\$26.2)	(\$26.5)
5/7/2014	K2M Group Holdings, Inc.	\$15.00	8.8	\$132.4	\$296.9	\$43.2	\$155.6	(\$8.1)	(\$37.9)	(\$1.6)
4/15/2014	TriVascular Technologies, Inc.	\$12.00	6.5	\$78.0	\$64.7	\$44.3	\$19.5	(\$42.9)	(\$50.3)	(\$41.9)
11/13/2013	Tandem Diabetes Care, Inc.	\$15.00	8.0	\$120.0	\$48.6	\$29.3	\$21.0	(\$37.1)	(\$48.1)	(\$34.2)
10/8/2013	LDR Holding Corporation	\$15.00	5.0	\$75.0	\$78.7	\$53.8	\$98.0	\$2.5	(\$10.3)	\$5.6
8/2/2012	Globus Medical, Inc.	\$12.00	8.3	\$100.0	\$354.8	\$0.0	\$347.9	\$121.4	\$63.9	\$138.8
6/27/2012	Tesaro, Inc.	\$13.50	6.0	\$81.0	\$93.0	\$0.0	\$0.0	(\$23.2)	(\$23.2)	(\$23.2)
4/30/2012	Supernus Pharmaceuticals, Inc.	\$5.00	3.4	\$50.0	\$53.7	\$29.5	\$0.8	(\$36.9)	\$53.8	(\$36.2)
11/17/2011	Sphere Medical Holding PLC	\$1.46	15.1	\$22.1	\$1.5	\$3.8	\$0.0	(\$6.6)	(\$7.0)	(\$6.3)
4/18/2011	InspireMD, Inc.	\$1.50	7.0	\$10.4	\$4.4	\$1.5	\$4.9	(\$3.1)	(\$3.4)	(\$3.0)
2/10/2011	Kips Bay Medical, Inc.	\$8.00	2.1	\$16.5	\$7.2	\$0.0	\$0.1	(\$8.7)	(\$10.2)	(\$8.6)
2/2/2011	Tornier N.V.	\$19.00	8.8	\$166.3	\$499.2	\$133.8	\$223.4	\$13.2	(\$62.1)	\$28.6
11/23/2010	Anacor Pharmaceuticals, Inc.	\$5.00	12.0	\$60.0	\$20.4	\$9.1	\$31.1	(\$4.3)	(\$6.5)	(\$3.6)
11/22/2010	Zogenix, Inc.	\$4.00	7.1	\$56.0	\$55.0	\$35.9	\$14.6	(\$55.4)	(\$77.6)	(\$54.1)
Median of All IPOs		nm	nm	<b>\$62.5</b>	<b>\$48.6</b>	<b>\$9.1</b>	\$14.6	(\$6.6)	(\$10.3)	(\$3.6)

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 December 31, 2016 Industry: Medical Devices



#### Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions) Size of the 28 M&A Transactions (dollars in millions) Transaction Date <u>Target</u> Acquirer Transaction Size <u>% Bought</u> 10 2/17/2017 Vascular Solutions, Inc. **Teleflex Incorporated** \$1,031.0 100% 1/4/2017 St. Jude Medical, Inc. Abbott Laboratories \$30,174.8 100% 12/8/2016 Shanghai Genext Medical Lifeline Scientific, Inc. \$81.4 100% 9 11/21/2016 EndoChoice Holdings, Inc. **Boston Scientific** \$250.7 100% 9/16/2016 Patricia Industries AB \$640.0 Laborie Medical Technologies, 97% 8 9/1/2016 Xeridiem Medical Devices, Inc. PPC Industries, Inc. \$10.5 100% 8/22/2016 Heartware International Inc. Medtronic, Inc. \$1,254.6 100% 7/14/2016 \$380.0 Sequent Medical, Inc. MicroVention, Inc. 100% 7 6/29/2016 **CogENT Therapeutics, LLC** Entellus Medical, Inc. \$11.0 100% 5/2/2016 \$174.0 **CORPAK MedSystems**, Inc. Halyard Health, Inc. 100% **Number of Transactions** 6 4/29/2016 Alcoa Remmele Medical Lisi Medical SAS \$102.0 100% 4/8/2016 **Biosensors International CITIC Private Equity Funds** \$1,104.4 80% 4/4/2016 \$895.0 **Creganna-Tactx Medical** TE Connectivity Ltd. 100% 5 3/24/2016 \$66.0 100% Magellan Diagnostics, Inc. Meridian Bioscience, Inc. 2/3/2016 TriVascular Technologies, Inc. Endologix, Inc. \$173.1 100% 4 1/29/2016 Inova Labs, Inc. ResMed Inc. \$110.0 100% 1/25/2016 \$82.7 **Cardiac Science Corporation** CFS 915 LLC 100% 1/8/2016 \$14.0 NorMedix, Inc. SurModics, Inc. (nka:Surmodics, 100% 3 9/28/2015 Lazarus Effect, Inc. \$100.0 Medtronic plc 100% 9/22/2015 DreamCIS, Inc. Hangzhou Tigermed Consulting \$28.6 98% 9/8/2015 Rizzoli Ortopedia S.p.A. ab medica s.p.a. \$5.6 100% 2 8/31/2015 Tendyne Holdings Inc. Abbott Laboratories \$360.0 90% 7/30/2015 Altura Medical, Inc. Lombard Medical, Inc. \$49.0 100% 1 6/18/2015 CardioInsight Technologies Inc. Medtronic plc \$123.0 100% 2/17/2015 Philips Holding USA Inc. \$1,363.5 100% **Volcano** Corporation 75100-250 7 \$ 50 100 8/8/2014 \$180.0 Avalon Laboratories, LLC Nordson Medical 100% 0 7510.50 25210 7/1/2014 ABIOMED Europe GmbH \$34.3 100% ECP Entwick. 5/30/2014 CardioMEMS, Inc. St. Jude Medical Inc. \$375.0 81% \$148.1 Median of the 28 M&A Transaction Targets 100%

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