Q3: Quarterly Industry Update

AS OF September 30, 2019



Cardiovascular Equipment

INDUSTRY SUMMARY

COGENT VALUATION identified **Cardiovascular Equipment** publicly traded companies, IPOs, and recent M&A transactions within the Cardiovascular Equipment 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 September 30, 2018, the median 52-week share price return of the Cardiovascular Equipment industry was 39.0%. Between September 30, 2017 and September 30, 2019, the median EV/EBITDA multiple increased from 17.2 to 23.0. Furthermore, the median price-to-earnings multiple increased from 32.9 to 46.6 over the same period. The median revenue growth and EBITDA margins for the industry for the quarter were 3.0% and 26.9%, respectively.

Public Company Key Statistics Median 52-Week Return

39%

Median EV/EBITDA Multiple

23x

Median 3-Year CAGR Return

34.8%

Median Price/Earnings Multiple

46.6x

Median EV/Revenue Multiple

6x

Median EV/Gross CF Multiple

55.2x

Comparable Public Company Market Price Returns as of September 30, 2019

	2019	3 Month	1 Year	2 Year	3 Year	2018	2017	2016
ABIOMED, Inc.	140.0%	140.0%	66.3%	75.2%	78.6%	66.3%	137.2%	42.3%
BioTelemetry, Inc.	115.6%	115.6%	33.8%	63.0%	67.1%	358%	16.5%	26.3%
Boston Scientific Corporation	55.3%	55.3%	14.6%	20.5%	29.5%	46.6%	39.2%	10.2%
Cardiovascular Systems, Inc.	65.2%	65.2%	-2.0%	45.4%	1.1%	-2.1%	-49.7%	-12.3%
CryoLife, Inc.	83.8%	83.8%	20.3%	25.8%	30.6%	0.0%	-4.9%	2.2%
Edwards Lifesciences Corporation	54.5%	54.5%	13.4%	3.4%	40.2%	10.3%	24.0%	93.7%
Medtronic plc	21.8%	21.8%	32.4%	7.4%	11.7%	13.4%	6.5%	25.8%
St. James's Place plc	-9.9%	-9.9%	66.3%	27.4%	5.6%	32.4%	17.1%	5.3%
Teleflex Incorporated	6.9%	6.9%	105.2%	27.4%	18.8%	54.4%	-56.4%	38.3%
Median of Industry Public Companies	55.3%	55.3%	34.4%	75.2%	29.5%	20.3%	14.5%	24.4%

Multiple year periods are calculated as the average annual return.

Highest Return Lowest Return Median Return

Industry Revenue Growth and Profit Margins for the Past Two Years



Public Company Median Multiples by Quarter

	9/30/19	6/30/19	3/31/19	12/31/18	9/30/18	6/30/18	3/31/18	12/31/17
EV/Revenues Multiple	6.0x	5.4x	4.5x	4.5x	5.2x	4.9x	4.5x	4.1x
EV/EBITDA Multiple	23.0x	20.0x	19.9x	20.3x	22.3x	22.3x	19.0x	15.7x
Price/Earnings Multiple	46.6x	46.4x	45.6x	44.1x	44.3x	44.7x	36.0x	34.8x
EV/Gross Cash Flows Multiple	55.2x	64.1x	45.8x	54.7x	40.7x	39.2x	31.9x	30.6x

Highest Multiple Lowest Multiple

Median Multiple

Industry Initial Public Offerings—Cardiovascular (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
8/30/19	Hancock Jaffe Laboratories, Inc.	\$5.00	15.1	\$22.1	\$1.5	\$3.8	\$0.0	(\$6.3)	(\$7.0)	(\$6.3)
1/17/19	Sphere Medical Holding PLC	\$1.46	7.0	\$10.4	\$4.4	\$1.5	\$4.5	(\$7.0)	(\$3.4)	(\$3.0)
4/18/18	Kips Bay Medical, Inc.	\$1.50	2.1	\$16.5	\$7.2	\$0.0	\$0.2	(\$3.3)	(\$10.2)	(\$8.6)
2/10/18	BioTelemetry, Inc.	\$8.00	4.5	\$81.0	\$103.0	\$2.8	\$64.9	(\$8.6)	(\$0.4)	\$8.9
3/18/17	Volcano Corporation	\$18.00	6.8	\$54.4	\$62.0	\$31.1	\$95.3	\$4.8	(\$17.8)	\$0.5
6/14/06	Lombard Medical Technologies Limited	\$8.00	14.4	\$47.0	\$11.8	\$7.4	\$0.1	(\$4.2)	(\$13.0)	(\$8.2)
12/12/05	AtriCure, Inc.	\$2.82	4.0	\$48.0	\$12.4	\$0.0	\$25.5	(\$9.5)	(\$9.7)	(\$3.7)
8/5/05	Stereotaxis, Inc.	\$12.00	5.5	\$44.0	\$41.1	\$6.0	\$9.9	(\$5.8)	(\$30.5)	(\$29.2)
	Median of all IPOs	nm	nm	\$45.5	\$12.1	\$3.3	\$7.2	(\$6.1)	(\$9.9)	(\$5.0)

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

Transactio Date	ⁿ Target	Acquirer	Transaction Size	% Bought	LTM Revenues	EV/ Revenues
9/29/19	C. R. Bard, Inc.	Becton, Dickinson	\$25,785.2	100%	\$3,779.3	6.6x
8/1/19	JOTEC GmbH	CryoLife, Inc.	\$253.6	100%	\$51.0	5.0x
8/9/18	The Spectranetics Corporation	Philips Holding USA Inc.	\$2,117.3	100%	\$277.6	7.5x
2/17/18	Vascular Solutions, Inc.	Teleflex Incorporated	\$1,007.2	100%	\$160.0	6.1x
1/29/18	St. Jude Medical, Inc.	Abbott Laboratories	\$30,336.5	100%	\$5,644.0	5.3x
1/3/17	Selexys Pharmaceuticals	Novartis AG	\$665.0	100%	N/A	N/A
1/3/17	Creganna-Tactx Medical	Tyco Electronics UK Holdings Ltd.	\$895.0	100%	\$249.0	3.6x
11/18/16	Thoratec Corp.	St. Jude Medical, Inc.; SJM International, Inc.	\$3,683.3	100%	\$483.8	7.0x
4/4/16	Lazarus Effect, Inc.	Medtronic plc	\$100.0	100%	N/A	N/A
10/8/15	C. R. Bard, Inc.	Lombard Medical, Inc.	\$49.0	81%	N/A	N/A
9/28/15	Cardiolnsight Technologies	Medtronic plc	\$123.0	100%	N/A	N/A
7/30/15	CardioMEMS, Inc.	St. Jude Medical Inc.	\$375.0	100%	N/A	N/A
6/18/15	Oscor Inc., Lead Business	Sorin SpA	\$20.0	100%	N/A	N/A
5/30/14	CircuLite, Inc.	Heartware International	\$401.8	100%	\$1.3	N/A
2/20/14	Cardiocom	Medtronic	\$200.0	100%	\$50.0	4.0x
12/1/13	eResearchTechnology	Genstar Capital	\$423.5	100%	\$193.7	1.9x
8/11/13	SunTech Medical Group	Halma	\$57.0	81%	\$23.0	2.3x
7/3/12	ZOLL Medical	Asahi Kasei	\$2,216.2	100%	\$544.3	3.9x
	Median of the 18 M&A Transaction T	argets	\$452.0	100%	\$160.0	5.0x

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Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions) as of September 30, 2019





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): 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.

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