



Medical Device Q4, 2017



In This Issue:

Industry News
Transactions
State of the Industry
About Mirus
Mirus Healthcare Spotlight

Industry News

BD Completes Bard Acquisition, Creating New Global Health Care Leader

Becton Dickinson Full Article

In late December 2017, Becton, Dickinson & Company (NYSE:BDX) announced that it had completed its acquisition of C.R. Bard, Inc. (NYSE: BCR) creating a new health care industry leader with approximately \$16 billion in annualized revenue. "Today is a historic day for BD as we welcome Bard and its 16,000 associates to BD," said Vincent A. Forlenza, chairman and CEO.

Audax Recapitalizes Belmont Instrument Corporation

Mirus Capital Advisors Full Article

Belmont Instrument Corporation, a leading provider of fluid warming infusion systems sold into acute care, military, and EMS settings, has been recapitalized by Boston-based Audax Group. "Audax was a perfect fit for Belmont," commented Patrick West, a partner at Mirus, which advised Belmont. "The Mirus team was very professional and effective throughout," commented Andrew Jay, one of Belmont's directors. "We ran a competitive process when selecting our advisor, and the Mirus team stood out from the beginning. They brought a unique combination of committed competitiveness, deep domain expertise and a real personal touch that was essential in meeting the goals of the shareholders."

FDA Panel Votes Against Recommending Intrinsic Therapeutics' Barricaid Spinal Prosthesis

Mass Device Full Article

An FDA advisory panel voted 5 to 8 against recommending approval for Intrinsic Therapeutics's Barricaid prosthesis designed for partial annulus replacement in patients with herniated discs. The negative recommendation came based on concerns over the safety of the device, including breakage rate and certain endplate lesions of unknown origin.

Medical Device M&A Environment



Aggregate Transaction Value (\$M)

50,000

40,000

30,000 20,000

10,000

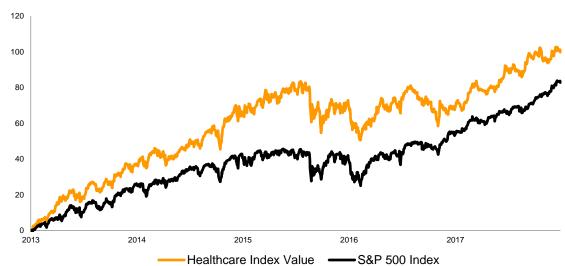
Aggregate Transaction

Q4 2017 Medical Device Transactions

						Enterprise	EV / LTM	
	Date Closed	Target	Buyers/Investors	Sector	Se	Value (\$M)	Revenue	EBITDA
	12/29/2017	C. R. Bard, Inc.	Becton, Dickinson and Company (NYSE:BDX)	Medical Devices		24,894	6.6x	21.4x
٩	12/27/2017	MGC Diagnostics Corporation	Altus Capital Partners	Cardiorespiratory		44	1.1x	24.4x
	12/6/2017	Vexim SA (ENXTPA:ALVXM)	Stryker Corporation (NYSE:SYK)	Spinal		219	9.3x	-
ì	12/5/2017	Crospon Limited	Medtronic plc (NYSE:MDT)	Gastroenterology		-	-	-
Ì	12/1/2017	Harpoon Medical, Inc.	Edwards Lifesciences Corporation (NYSE:EW)	Cardiorespiratory		250	-	-
-	11/30/2017	Medical Australia Limited	ICU Medical, Inc. (NasdaqGS:ICUI)	Medical Devices and Equipment		8	0.8x	19.2x
	11/21/2017	Medisize BV	Flexicare (Group) Limited	Cardiorespiratory		-	-	-
	10/31/2017	Epocal Inc.	Siemens Healthineers, Inc.	Hematology		-	-	-
ı	10/25/2017	invendo medical GmbH	Ambu A/S (CPSE:AMBU B)	Gastroenterology		266	-	-
	10/24/2017	Rhein Medical, Inc.	Katena Products, Inc.	Opthalmalogy		-	-	-
Ē	10/18/2017	Clinical Innovations, LLC	EQT Partners AB	Obstetrics		-	-	-
	10/2/2017	Interson Protac SAS	Prodways SAS (ENXTPA:PWG)	Audiology		-	-	-
	10/2/2017	NeoTract, Inc.	Teleflex Urology Limited	Urology		1,100	21.6x	-

Healthcare

Healthcare valuations largely mirrored the S&P 500's positive performance over the past year. While not achieving the heady highs of 2014 and 2105, M&A activity continues to be strong with valuations trending up. US healthcare companies enter 2018 with a focus on innovative and cost effective ways to deliver patient-centered, technology-enabled healthcare.



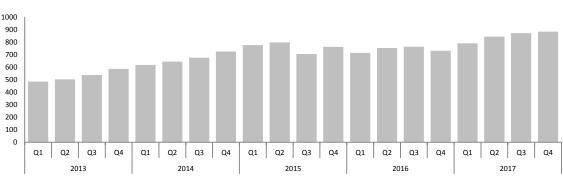
As of 12/31/2017		LTM Financials			Valuation Metrics			LTM Margins		
Company Name	Ticker	Enterprise Value	Revenue	Gross Profit	EBITDA	EV / Revenue	EV / Gross Profit	EV / EBITDA	Gross Margin	EBITDA Margin
Abbott Laboratories	NYSE:ABT	\$112,401	\$27,390	\$15,972	\$5,959	4.1x	7.0x	18.9x	58.3%	21.8%
AbbVie Inc.	NYSE:ABBV	\$182,927	\$28,216	\$21,530	\$12,144	6.5x	8.5x	15.1x	76.3%	43.0%
Aetna Inc.	NYSE:AET	\$63,304	\$60,535	\$15,907	\$5,685	1.0x	4.0x	11.1x	26.3%	9.4%
Agilent Technologies, Inc.	NYSE:A	\$20,970	\$4,472	\$2,409	\$1,095	4.7x	8.7x	19.2x	53.9%	24.5%
AmerisourceBergen Corporation	NYSE:ABC	\$21,383	\$155,441	\$4,620	\$2,460	0.1x	4.6x	8.7x	3.0%	1.6%
Amgen Inc.	NasdaqGS:AMGN	\$120,661	\$22,849	\$18,926	\$12,441	5.3x	6.4x	9.7x	82.8%	54.4%
Anthem, Inc.	NYSE:ANTM	\$68,814	\$90,039	\$17,803	\$5,876	0.8x	3.9x	11.7x	19.8%	6.5%
Baxter International Inc.	NYSE:BAX	\$35,192	\$10,561	\$4,573	\$2,250	3.3x	7.7x	15.6x	43.3%	21.3%
Becton, Dickinson and Company	NYSE:BDX	\$61,694	\$12,251	\$6,040	\$3,385	5.0x	10.2x	18.2x	49.3%	27.6%
Biogen Inc.	NasdaqGS:BIIB	\$70,362	\$12,274	\$10,644	\$6,740	5.7x	6.6x	10.4x	86.7%	54.9%
Boston Scientific Corporation	NYSE:BSX	\$39,514	\$9,048	\$6,454	\$2,515	4.4x	6.1x	15.7x	71.3%	27.8%
Bristol-Myers Squibb Company	NYSE:BMY	\$101,749	\$20,776	\$14,859	\$5,689	4.9x	6.8x	17.9x	71.5%	27.4%
Cardinal Health, Inc.	NYSE:CAH	\$28,127	\$132,614	\$6,885	\$3,159	0.2x	4.1x	8.9x	5.2%	2.4%
Celgene Corporation	NasdagGS:CELG	\$84,658	\$13,003	\$11,709	\$5,951	6.5x	7.2x	14.2x	90.0%	45.8%
Centene Corporation	NYSE:CNC	\$17,935	\$45,810	\$7,959	\$1,770	0.4x	2.3x	10.1x	17.4%	3.9%
Cerner Corporation	NasdagGS:CERN	\$22,084	\$5,041	\$4,288	\$1,368	4.4x	5.2x	16.1x	85.1%	27.1%
Cigna Corporation	NYSE:CI	\$51,816	\$41,616	\$13,754	\$4,935	1.2x	3.8x	10.5x	33.0%	11.9%
Community Health Systems, Inc.	NYSE:CYH	\$14,487	\$16,764	\$6,187	\$1,655	0.9x	2.3x	8.8x	36.9%	9.9%
Danaher Corporation	NYSE:DHR	\$74,832	\$18,330	\$10,193	\$4,260	4.1x	7.3x	17.6x	55.6%	23.2%
DaVita Inc.	NYSE:DVA	\$22,573	\$10,884	\$3,244	\$2,399	2.1x	7.0x	9.4x	29.8%	22.0%
Eli Lilly and Company	NYSE:LLY	\$95,101	\$22,871	\$16,844	\$6,514	4.2x	5.6x	14.6x	73.6%	28.5%
Envision Healthcare Corporation	NYSE:EVHC	\$11,023	\$7,207	\$1,992	\$1,051	1.5x	5.5x	10.5x	27.6%	14.6%
Express Scripts Holding Company	NasdagGS:ESRX	\$53,792	\$99,549	\$8,610	\$7,133	0.5x	6.2x	7.5x	8.6%	7.2%
Genesis Healthcare, Inc.	NYSE:GEN	\$4,529	\$5,350	\$2,212	\$420	0.8x	2.0x	10.8x	41.3%	7.8%
Gilead Sciences, Inc.	NasdagGS:GILD	\$94,182	\$26,107	\$21,749	\$15,433	3.6x	4.3x	6.1x	83.3%	59.1%
HCA Healthcare, Inc.	NYSE:HCA	\$64,999	\$43,614	\$16,239	\$8,188	1.5x	4.0x	7.9x	37.2%	18.8%
Henry Schein, Inc.	NasdagGS:HSIC	\$13,191	\$12,462	\$3,399	\$1,052	1.1x	3.9x	12.5x	27.3%	8.4%
Humana Inc.	NYSE:HUM	\$29,861	\$53,767	\$10,271	\$3,672	0.6x	2.9x	8.1x	19.1%	6.8%
IQVIA Holdings Inc.	NYSE:IQV	\$29,224	\$8,060	\$3,438	\$1,699	3.6x	8.5x	17.2x	42.7%	21.1%
Johnson & Johnson	NYSE:JNJ	\$394,454	\$76,450	\$51,184	\$24,241	5.2x	7.7x	16.3x	67.0%	31.7%
Kindred Healthcare, Inc.	NYSE:KND	\$4,207	\$6,996	\$2,927	\$454	0.6x	1.4x	9.3x	41.8%	6.5%
Laboratory Corporation of America Holdings	NYSE:LH	\$23,074	\$10,206	\$3,464	\$2,048	2.3x	6.7x	11.3x	33.9%	20.1%
LifePoint Health, Inc.	NasdagGS:LPNT	\$4,867	\$6,406	\$2,075	\$749	0.8x	2.3x	6.5x	32.4%	11.7%
Magellan Health, Inc.	NasdagGS:MGLN	\$2,608	\$5,408	\$295	\$247	0.5x	8.8x	10.6x	5.5%	4.6%
McKesson Corporation	NYSE:MCK	\$40,044	\$205,442	\$10,906	\$3,766	0.2x	3.7x	10.6x	5.3%	1.8%
Merck & Co., Inc.	NYSE:MRK	\$169,381	\$40,122	\$27,619	\$12,745	4.2x	6.1x	13.3x	68.8%	31.8%
Molina Healthcare, Inc.	NYSE:MOH	\$2,741	\$19,445	\$2,372	\$327	0.1x	1.2x	8.4x	12.2%	1.7%
Owens & Minor, Inc.	NYSE:OMI	\$1,975	\$9,318	\$1,172	\$209	0.2x	1.7x	9.4x	12.6%	2.2%
Patterson Companies, Inc.	NasdagGS:PDCO	\$4,344	\$5,532	\$1,280	\$391	0.8x	3.4x	11.1x	23.1%	7.1%
Pfizer Inc.	NYSE:PFE	\$243,342	\$52,546	\$41,708	\$21,007	4.6x	5.8x	11.6x	79.4%	40.0%
Quest Diagnostics Incorporated	NYSE:DGX	\$17,026	\$7,709	\$3,040	\$1,552	2.2x	5.6x	11.0x	39.4%	20.1%
Regeneron Pharmaceuticals, Inc.	NasdagGS:REGN	\$39,400	\$5,872	\$3,400	\$2,225	6.7x	11.6x	17.7x	57.9%	37.9%
Stryker Corporation	NYSE:SYK	\$62,443	\$12,444	\$8,252	\$3,404	5.0x	7.6x	18.3x	66.3%	27.4%
Tenet Healthcare Corporation	NYSE:THC	\$18,469	\$19,061	\$6,669	\$1,995	1.0x	2.8x	9.3x	35.0%	10.5%
Thermo Fisher Scientific Inc.	NYSE:TMO	\$97,490	\$20,918	\$10,047	\$5,249	4.7x	9.7x	18.6x	48.0%	25.1%
UnitedHealth Group Incorporated	NYSE:UNH	\$230,816	\$201,159	\$47,011	\$16,904	1.1x	4.9x	13.7x	23.4%	8.4%
Universal Health Services, Inc.	NYSE:UHS	\$14,805	\$10,243	\$4,276	\$1,697	1.4x	3.5x	8.7x	41.7%	16.6%
WellCare Health Plans, Inc.	NYSE:WCG	\$5,256	\$17,007	\$2,262	\$637	0.3x	2.3x	8.3x	13.3%	3.7%
Zimmer Biomet Holdings, Inc.	NYSE:ZBH	\$34,377	\$7,824	\$5,691	\$2,809	4.4x	6.0x	12.2x	72.7%	35.9%
Zoetis Inc.	NYSE:ZTS	\$38,855	\$5,307	\$3,539	\$1,976	7.3x	11.0x	19.7x	66.7%	37.2%
ZUELIS IIIC.	INTOE:ZIO	230,022	30,3U/	23,339	21,970	7.3X	11.UX	19.78	00.776	37.270



Healthcare

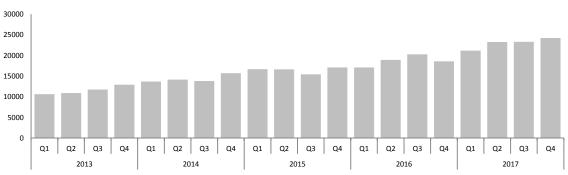
State of the Industry

Dow Jones US Healthcare Index



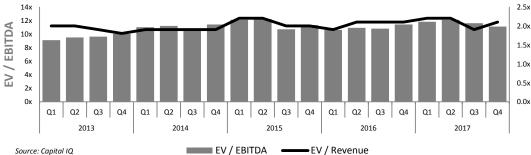
Source: Capital IQ

Dow Jones US Select Medical Equipment Index



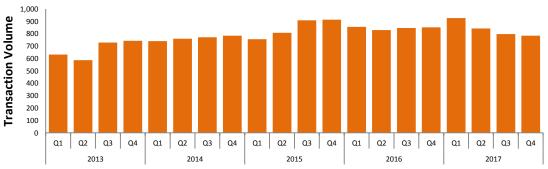
Source: Capital IQ

Industry Valuations



Source: Capital IQ

Healthcare Transaction Volume



Source: Capital IQ

"The Mirus team successfully guided us through every aspect of the transaction, from identifying prospective buyers through closing. They conducted a thorough process and we are delighted by the outcome."

- Bill Hanson, Founder and President of LTI

Please contact one of our partners today to answer any questions you may have to discuss the future of your business



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About Mirus

The Mirus team works with the owners of closely-held companies in multiple segments of the \$2.8 trillion US healthcare industry to achieve their desired outcome. While global in focus and experience, we benefit from being in one of the most dynamic healthcare ecosystems that includes some of the most active healthcare focused venture capital and private equity firms, leading research universities, large medical device companies and innovative med-tech and healthcare services firms. The Mirus healthcare team has experience executing a spectrum of engagements with some of the the most innovative healthcare companies in the world. We have particular expertise in: medical devices, healthcare equipment, healthcare IT, diagnostics, contract research, healthcare staffing, and related companies.

Partner Spotlight

Patrick West is an accomplished executive, entrepreneur, advisor and director with extensive executive management and M&A experience in the healthcare technology sectors. Having been both a senior level med-tech executive and a successful entrepreneur, Patrick brings the valuable perspective of having sat on both sides of the negotiating table, This allows him unique insight and an informed ability to navigate the deal process. In addition to his focus on helping clients maximize enterprise and ultimately exit value as a partner at Mirus, Patrick continues to hold a range of non-executive board positions and provides angel investment and strategic direction to a portfolio of companies.

Mirus Healthcare Spotlight



Liberating Technologies is a leading supplier of upper-limb prosthetic devices for adults and children, ranging from simple passive hands and body-powered devices to the sophisticated myoelectrically-controlled prosthetic systems. The company designs and manufactures prosthetic devices such as the Boston Digital™ Arm System, LTI Locking Shoulder Joint and the VariGrip™ prosthetic controller. College Park Industries designs and manufactures a full line of anatomically correct, custom built lower limb prosthetic solutions.



Integra Companies provides comprehensive single use connectivity solutions including tubing, hoses and gaskets for high-purity environments. Integra Companies supplies a broad selection of top tier products to customers in the biopharmaceutical, food processing, and microelectronic industries in the Northeast U.S. WR enables science in laboratory and production facilities in the pharmaceutical, biotechnology, industrial, education, government and healthcare industries. With more than 160 years of experience, VWR offers a well-established network that reaches thousands of specialized laboratories and facilities spanning the globe.



VuCOMP, Inc. leads the way in setting a new standard for computer-aided detection. The company is dedicated exclusively to developing advanced cancer detecting technologies. VuCOMP's engineering team has worked together since 1986, pioneering some of the world's most advanced computer vision systems. VuCOMP and iCAD will work collaboratively to ensure a seamless transition of service and support for existing M-Vu Breast Density customers to iCAD.