

Industry BlueBook

Diagnostics & Tools

January 2024

The industry's authoritative information resource for
valuations, M&A transactions, and Financings

DASHBOARD^{1,2,3,4,5}

EV MULTIPLES

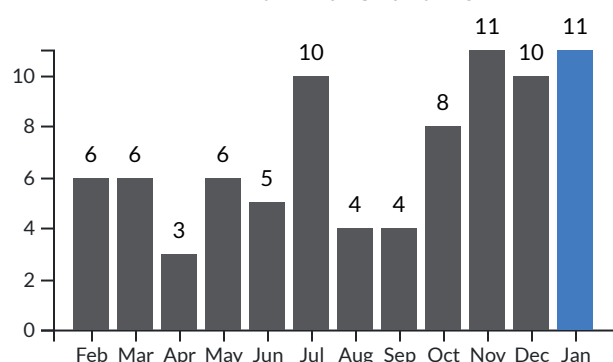
	REVENUE				EBITDA			
	LTM	%Δ	FTM	%Δ	LTM	%Δ	FTM	%Δ
In Vitro Diagnostics	3.0x	-22%	2.9x	-16%	13.3x	-12%	13.6x	0%
Diagnostic Services	2.2x	-8%	2.3x	2%	11.1x	2%	11.3x	-2%
Life Science Tools	5.2x	-2%	5.4x	2%	21.2x	-7%	19.6x	-5%
In Vivo Diagnostics	2.7x	-11%	2.6x	-13%	21.3x	-1%	14.1x	-9%
Digital Detection and Diagnosis	NM	NM	NM	NM	NM	NM	NM	NM

M&A DEALS & FINANCINGS

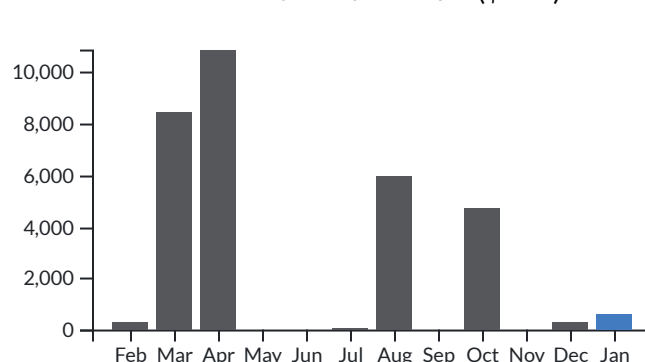
	DEAL COUNT				VOLUME (\$MM)			
	M&A	%Δ	FINANCINGS	%Δ	M&A	%Δ	FINANCINGS	%Δ
In Vitro Diagnostics	1	-50%	3	0%	350	707%	17	119%
Diagnostic Services	3	0%	6	20%	148	231%	96	136%
Life Science Tools	5	150%	8	100%	145	870%	18	45%
In Vivo Diagnostics	2	-60%	6	100%	139	-43%	56	237%
Digital Detection and Diagnosis	1	-50%	1	-50%	0	NM	2	-38%

1. Enterprise value (EV) equals equity market value (market capitalization) plus debt, plus preferred stock, minus cash and cash equivalents
2. Deals counted once in total if included in multiple segments
3. LTM = last twelve months; FTM = forward twelve months
4. %Δ – percent change month over month
5. NM – Not Meaningful

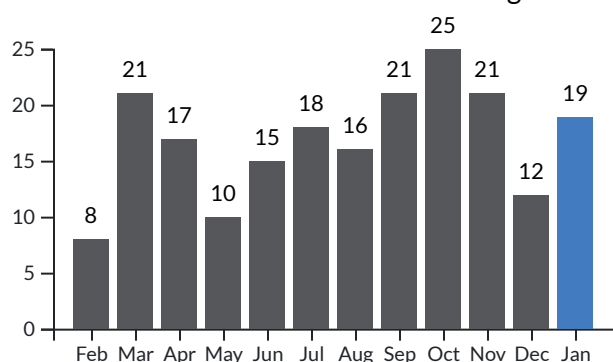
12 Month Deal Count M&A



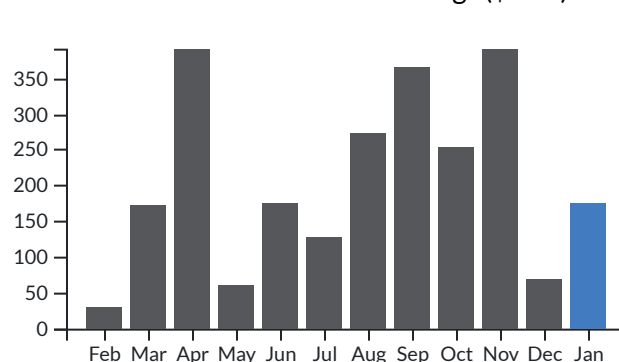
12 Month Volume M&A (\$MM)



12 Month Deal Count Financings



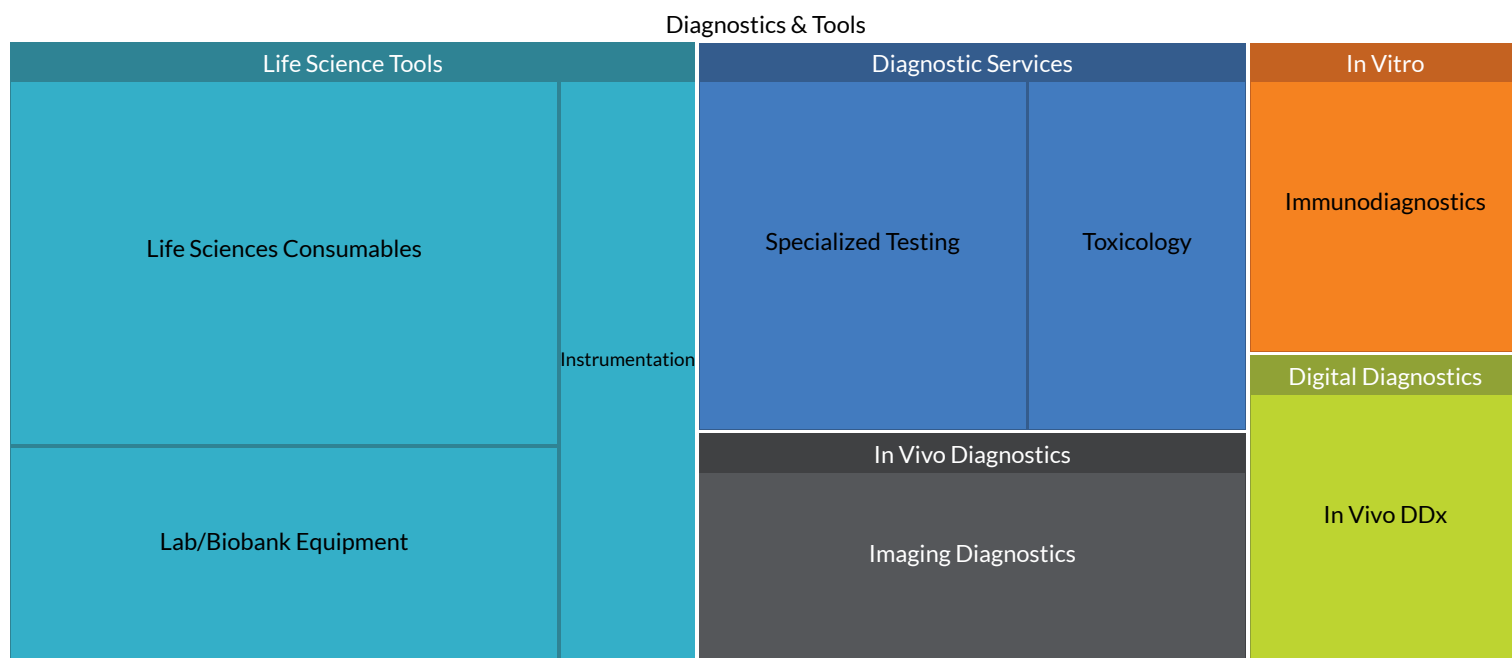
12 Month Volume Financings (\$MM)



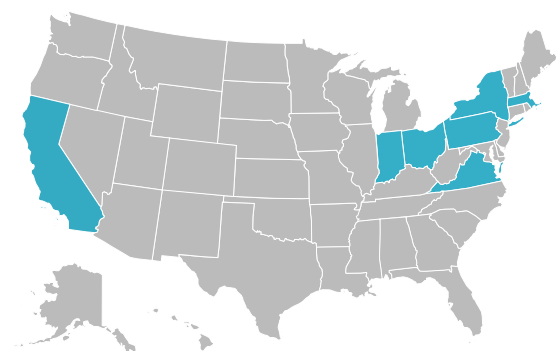
CROSSTREE

M&A ACTIVITY

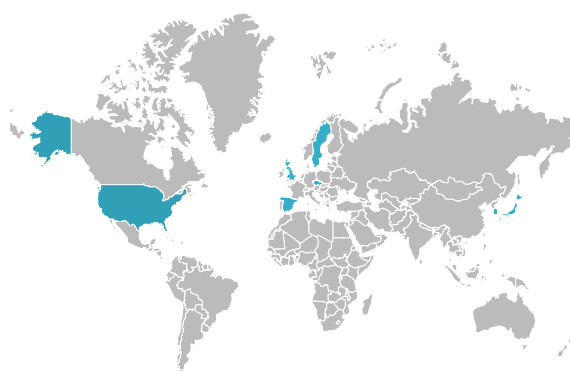
DEALS BY SEGMENT



U.S. DEALS BY STATE



WORLDWIDE DEALS BY COUNTRY



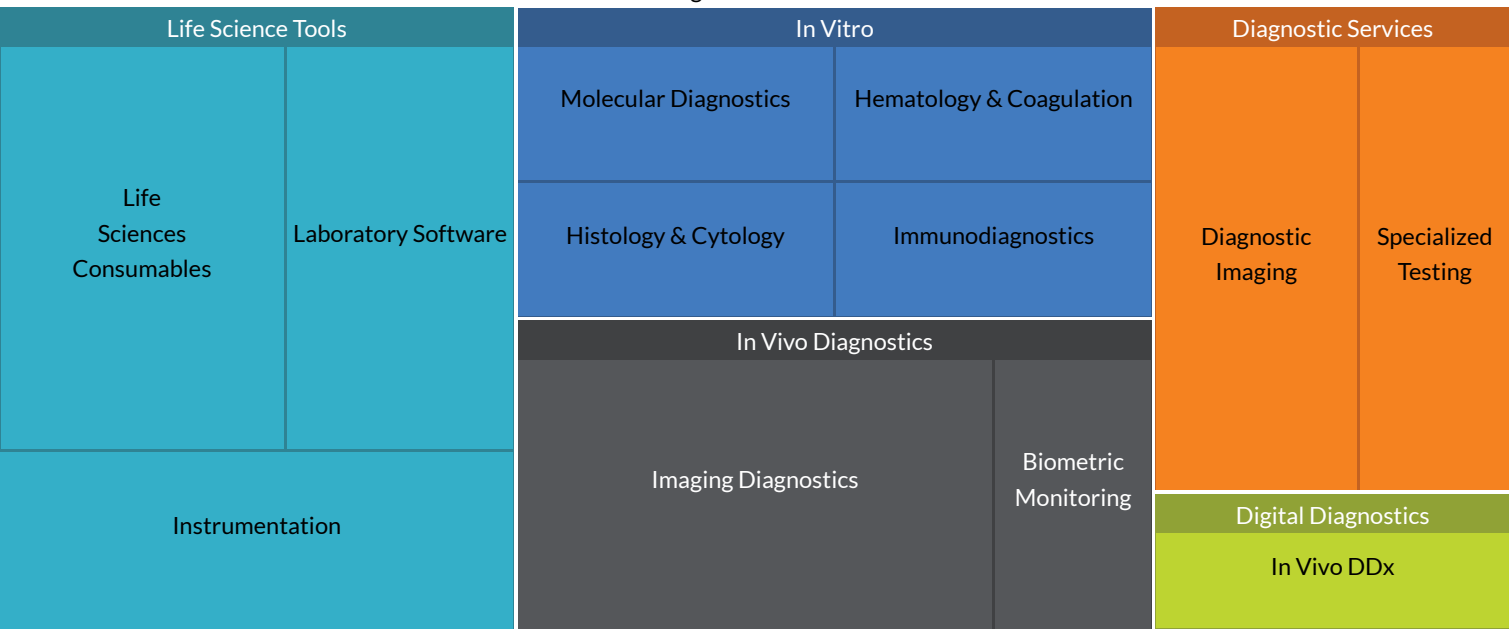
SELECTED TRANSACTIONS

Announced Date Segment		Sub-Segment	Target Company	Geography	Selected Buyers	Size (\$mm)
1/28/2024	Life Science Tools	Consumables	Sofie Biosciences, Inc.	United States	Trilantic Capital Management L.P.	139.4
1/26/2024	In Vivo Diagnostics	Imaging Diagnostics				
1/26/2024	Digital Diagnostics	In Vivo DDx	DOCSUN BioMed Ltd.	United States	BioRegenx, Inc.	-
1/22/2024	Diagnostic Services	Specialized Testing	Invitae Corporation (Prenatal Testing)	United States	Natera, Inc.	52.5
1/17/2024	Life Science Tools	Lab/Biobank Equipment	Labtech International Ltd.	United Kingdom	Calibre Scientific, Inc.	-

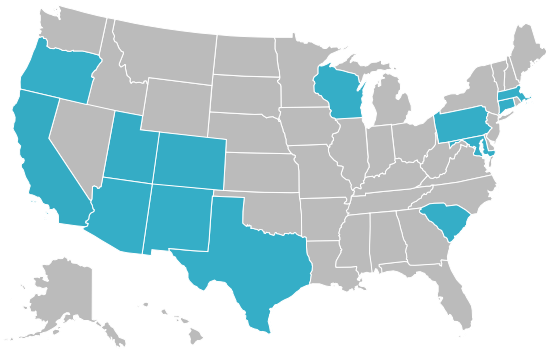
Announced Date	Segment	Sub-Segment	Target Company	Geography	Selected Buyers	Size (\$mm)
1/9/2024	Life Science Tools	Consumables	Mabtech AB	Sweden	Eqt Fund Management S.à R.L.	-
1/8/2024	Diagnostic Services	Specialized Testing	C2I Genomics Inc.	United States	Veracyte, Inc. (NasdaqGM:VCYT)	95.0
1/8/2024	In Vivo Diagnostics	Imaging Diagnostics	MIM Software	United States	GE HealthCare Technologies Inc. (NasdaqGS:GEHC)	-
1/3/2024	Life Science Tools	Consumables	AbCheck s.r.o.	Czechia	Ampersand Biomedicines Inc.	6.0
1/2/2024	Life Science Tools	Consumables Instrumentation Lab/Biobank Equipment	LINEALAB, S.L.	Spain	Calibre Scientific, Inc.	-
1/2/2024	Diagnostic Services	Toxicology	First Hospital Laboratories, Inc.	United States	Sterling Check Corp. (NasdaqGS:STER)	-
1/2/2024	In Vitro	Immunodiagnosics	LumiraDx Point-of-Care Testing Tech	-	Roche Diagnostics Corporation	350.0

FINANCINGS

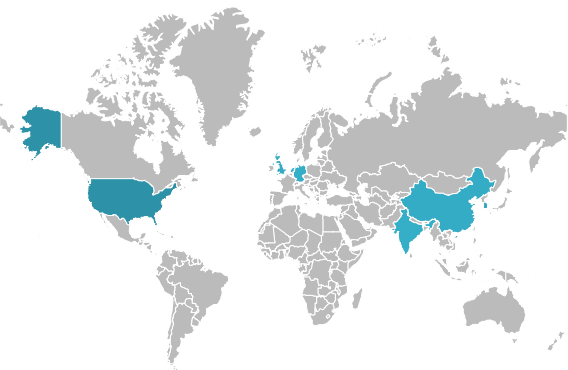
DEALS BY SEGMENT



U.S. DEALS BY STATE



WORLDWIDE DEALS BY COUNTRY



SELECTED TRANSACTIONS					
Closed Date Segment	Sub-Segment	Target Company	Geography	Selected Investors	Size (\$mm)
1/29/2024	Life Science Tools Consumables	Carcinotech Ltd	United Kingdom	Maven Capital Partners UK LLP, Old College Capital, Old College Capital, Gabriel Investments Limited, Old College Capital, EOS Technology Investment Syndicate, SIS Ventures Limited, Alba Equity	5.3
1/24/2024	Diagnostic Services Specialized Testing	Circular Genomics Inc.	United States	Mountain Group Capital, LLC, Cottonwood Capital Partners, LLC, Tramway Venture Partners, UNM Rainforest Innovations	8.3

Closed Date	Segment	Sub-Segment	Target Company	Geography	Selected Investors	Size (\$mm)
1/23/2024	Diagnostic Services	Diagnostic Imaging	Elephas Biosciences Corporation	United States	Arch Venture Partners, L.P., State of Wisconsin Investment Board, Venture Investors, LLC, Sands Capital Management, LLC, Tao Capital Partners, Northpond Ventures, LLC, dRx Capital AG, WARF Ventures	55.0
1/23/2024	In Vitro	Hematology & Coagulation	Glycotest, Inc.	United States	Shanghai Fosun Pharmaceutical (Group) Co., Ltd. (SHSE:600196), NetScientific plc (AIM:NSCI), EMV Capital Ltd	1.0
1/22/2024	Diagnostic Services	Diagnostic Imaging	Beijing Digital Precision Medicine Technology Co., Ltd.	China	Shenzhen Huaqi Shengshi Investment Management Co., Ltd., Rising Capital, Shanghai Daohe Healthcare Private Equity Fund Management Co., Ltd.	27.8
1/18/2024	In Vivo Diagnostics	Imaging Diagnostics	ViaLase, Inc.	United States	Undisclosed	2.3
1/17/2024	Life Science Tools	Lab Software Instrumentation	Vox Imaging Technology Ltd	United Kingdom	Discovery Park Ventures LLC	0.1
1/16/2024	In Vivo Diagnostics	Imaging Diagnostics	QDI Systems BV	Netherlands	NV NOM Investerings- En Ontwikkelingsmaatschappij voor Noord-Nederland, RUG Houdstermaatschappij B.V., Carduso Capital B.V., MAKI Ventures Oy	5.5
1/16/2024	Life Science Tools In Vivo Diagnostics	Lab Software Imaging Diagnostics	VIENCE	Korea (Republic of)	Undisclosed	-
1/16/2024	In Vitro Life Science Tools	Molecular Immunodiagnostics Instrumentation	PCL, Inc. (KOSDAQ:A241820)	Korea (Republic of)	Global Emerging Markets	7.5
1/16/2024	In Vivo Diagnostics	Biometric Monitoring	Onera Technologies B.V.	Netherlands	Innovation Industries Management B.V., EQT Life Sciences, Innovation Industries Management B.V., 15th Rock Ventures LLP, Invest-NL, Imec.xpand	32.7
1/16/2024	Diagnostic Services	Specialized Testing	Vgenomics India Private Limited	India	Mumbai Angels Network Private Limited, O2 Angel Network	-
1/11/2024	In Vitro	Histology & Cytology	Techcyte	United States	Undisclosed	8.4
1/10/2024	Life Science Tools	Consumables	Vitro Biopharma, Inc.	United States	Undisclosed	1.0
1/8/2024	In Vivo Diagnostics	Imaging Diagnostics	TCL Healthcare Equipment (Shanghai) Co., Ltd.	China	Cathay Capital Private Equity SAS	14.0
1/5/2024	Life Science Tools	Lab Software	Wobble Genomics Limited	United Kingdom	Undisclosed	0.3
1/4/2024	Diagnostic Services In Vivo Diagnostics Digital Diagnostics	Diagnostic Imaging Imaging Diagnostics In Vivo DDx	Ceretype Neuromedicine, Inc.	United States	Cedar Street Group, LLC, Leafy Tunnel Ltd., One Mind Accelerator	2.0
1/3/2024	Life Science Tools	Consumables	Carcinotech Ltd	United Kingdom	Undisclosed	0.5
1/3/2024	Diagnostic Services Life Science Tools	Consumables Instrumentation	NemaMetrix Inc.	United States	Oregon Nanoscience and Microtechnologies Institute, Bridge City Ventures, Rogue Venture Partners, LLC	3.0

PUBLIC MARKETS¹

IN VITRO DIAGNOSTICS

Molecular Diagnostics

Company Name	Geography	Enterprise Value (\$mm)	xRevenue		xEBITDA	
			LTM EV	FTM EV	LTM EV	FTM EV
Amoy Diagnostics Co., Ltd.	China	820	6.2x	5.0x	25.3x	17.4x
Biocartis Group NV	Belgium	167	2.5x	2.6x	NM	NM
Dx & Vx Co., Ltd.	Korea (Republic of)	138	4.1x	NM	NM	NM
Genomictree Inc.	Korea (Republic of)	245	74.1x	NM	NM	NM
Guangdong HybriBio Biotech Co.,Ltd.	China	522	1.7x	3.1x	5.0x	NM
Qiagen N.V.	Netherlands	10,181	5.2x	5.1x	18.8x	14.2x
Sansure Biotech Inc.	China	774	1.8x	NM	10.3x	NM
Seegene, Inc.	Korea (Republic of)	595	2.0x	2.1x	14.4x	10.4x
Tellgen Corporation	China	236	2.8x	NM	12.1x	NM
Zhejiang Orient Gene Biotech Co., Ltd. (SHSE:688298)	China	68	0.3x	NM	NM	NM
Mean		1,375	10.1x	3.6x	14.3x	14.0x
Median		384	2.7x	3.1x	13.3x	14.2x

Microbiology

Company Name	Geography	Enterprise Value (\$mm)	xRevenue		xEBITDA	
			LTM EV	FTM EV	LTM EV	FTM EV
bioMérieux S.A. (ENXTPA:BIM)	France	12,905	3.2x	3.1x	14.9x	13.6x
OraSure Technologies, Inc. (NasdaqGS:OSUR)	United States	332	0.7x	1.4x	4.5x	15.6x
QuidelOrtho Corporation	United States	7,038	2.3x	2.4x	8.8x	8.9x
Sansure Biotech Inc.	China	774	1.8x	NM	10.3x	NM
Mean		5,262	2.0x	2.3x	9.6x	12.7x
Median		3,906	2.0x	2.4x	9.5x	13.6x

Histology & Cytology

Company Name	Geography	Enterprise Value (\$mm)	xRevenue		xEBITDA	
			LTM EV	FTM EV	LTM EV	FTM EV
Guangzhou LBP Medicine Science & Technology Co., Ltd.	China	224	3.3x	NM	30.9x	NM
Mean		224	3.3x	NM	30.9x	NM
Median		224	3.3x	NM	30.9x	NM

Hematology & Coagulation

Company Name	Geography	Enterprise Value (\$mm)	xRevenue		xEBITDA	
			LTM EV	FTM EV	LTM EV	FTM EV
Beijing Succeeder Technology Inc.	China	159	4.1x	2.8x	8.2x	NM
Sysmex Corporation	Japan	11,162	3.8x	3.5x	15.4x	13.4x
Mean		5,661	3.9x	3.2x	11.8x	13.4x
Median		5,661	3.9x	3.2x	11.8x	13.4x

DIAGNOSTIC SERVICES

Diagnostic Imaging

Company Name	Geography	Enterprise Value (\$mm)	xRevenue		xEBITDA	
			LTM EV	FTM EV	LTM EV	FTM EV
Akumin Inc. (OTCPK:AKUM.Q)	United States	1,689	2.3x	NM	9.6x	NM
Centro de Imagem Diagnósticos S.A.	Brazil	419	1.8x	NM	17.8x	NM
Integral Diagnostics Limited (ASX:IDX)	Australia	522	1.8x	1.7x	9.5x	8.5x
RadNet, Inc. (NasdaqGM:RDNT)	United States	3,883	2.5x	2.3x	11.4x	16.2x
Mean		1,628	2.1x	2.0x	12.1x	12.3x
Median		1,106	2.0x	2.0x	10.5x	12.3x

Specialized Testing

Company Name	Geography	Enterprise Value (\$mm)	xRevenue		xEBITDA	
			LTM EV	FTM EV	LTM EV	FTM EV
Adaptive Biotechnologies Corporation	United States	391	2.2x	1.9x	NM	NM
Aspira Women's Health Inc. (NasdaqCM:AWH)	United States	60	6.6x	4.7x	NM	NM
BGI Genomics Co., Ltd.	China	1,438	1.8x	NM	15.4x	NM
Biora Therapeutics, Inc.	United States	96	NM	73.3x	NM	NM
CareDx, Inc (NasdaqGM:CDNA)	United States	229	0.8x	0.9x	NM	NM
Castle Biosciences, Inc. (NasdaqGM:CSTL)	United States	406	2.1x	1.9x	NM	NM
Dx & Vx Co., Ltd.	Korea (Republic of)	138	4.1x	NM	NM	NM
Exact Sciences Corporation	United States	13,668	5.7x	5.0x	NM	51.4x
Genetron Holdings Limited (NasdaqGM:GTH)	China	94	1.0x	NM	NM	NM
Guardant Health, Inc.	United States	2,865	5.4x	4.5x	NM	NM
Invitae Corporation (Prenatal Testing)	United States	1,366	2.8x	2.7x	NM	NM
MDxHealth SA	Belgium	120	1.9x	1.6x	NM	NM
Myriad Genetics, Inc. (NasdaqGS:MYGN)	United States	2,012	2.7x	2.5x	NM	NM
Natera, Inc.	United States	7,429	7.5x	6.1x	NM	NM
NeoGenomics, Inc.	United States	2,096	3.7x	3.4x	NM	NM
Sema4 Holdings Corp.	United States	59	0.3x	0.3x	NM	NM
Veracyte, Inc. (NasdaqGM:VCYT)	United States	1,639	4.8x	4.3x	NM	NM
Mean		2,006	3.3x	8.1x	15.4x	51.4x
Median		406	2.8x	3.0x	15.4x	51.4x

General Chemistry

Company Name	Geography	Enterprise Value (\$mm)	xRevenue		xEBITDA	
			LTM EV	FTM EV	LTM EV	FTM EV
Diagnósticos da América S.A. (BOVESPA:DASA3)	Brazil	3,713	1.3x	1.2x	8.9x	6.4x
Dr. Lal PathLabs Limited (NSEI:LALPATHLAB)	India	2,450	9.6x	8.5x	37.3x	31.5x
Guangzhou Kingmed Diagnostics Group Co., Ltd.	China	3,254	2.4x	2.3x	19.1x	12.3x
H.U. Group Holdings, Inc.	Japan	1,257	0.8x	0.8x	7.9x	6.3x
Integrated Diagnostics Holdings plc	Jersey	233	1.9x	1.6x	7.1x	5.5x
Laboratory Corporation of America Holdings	United States	24,590	1.6x	2.0x	10.3x	11.3x
Medicover AB (publ) (OM:MCOV B)	Sweden	3,534	1.9x	1.7x	13.6x	11.3x
Metropolis Healthcare Limited (NSEI:METROPOLIS)	India	1,022	7.4x	6.7x	30.9x	26.1x
Quest Diagnostics Incorporated (NYSE:DGX)	United States	19,323	2.1x	2.1x	9.3x	9.9x
Sonic Healthcare Limited	Australia	11,731	2.2x	2.0x	10.8x	10.4x
Thyrocare Technologies Limited	India	382	5.8x	5.1x	25.4x	19.3x

Mean	6,499	3.4x	3.1x	16.4x	13.7x
Median	3,254	2.1x	2.0x	10.8x	11.3x

LIFE SCIENCE TOOLS

Laboratory Software

Company Name	Geography	Enterprise Value	xRevenue		xEBITDA	
		(\$mm)	LTM EV	FTM EV	LTM EV	FTM EV
Precigen, Inc. (NasdaqGS:PGEN)	United States	277	41.0x	50.6x	NM	NM
Schrödinger, Inc.	United States	1,538	7.7x	6.5x	NM	NM
Simulations Plus, Inc. (NasdaqGS:SLP)	United States	644	10.4x	9.3x	40.2x	28.1x
SyntekaBio, Inc.	Korea (Republic of)	123	NM	NM	NM	NM
Mean		646	19.7x	22.1x	40.2x	28.1x
Median		461	10.4x	9.3x	40.2x	28.1x

Life Sciences Consumables

Company Name	Geography	Enterprise Value	xRevenue		xEBITDA	
		(\$mm)	LTM EV	FTM EV	LTM EV	FTM EV
Abnova (Taiwan) Corporation	Taiwan (Province of China)	51	4.0x	NM	20.7x	NM
Adaptive Biotechnologies Corporation	United States	391	2.2x	1.9x	NM	NM
Avantor, Inc.	United States	20,911	3.0x	3.0x	15.0x	16.8x
Bio-Techne Corporation	United States	11,522	10.1x	9.6x	32.0x	26.1x
Bioneer	Korea (Republic of)	455	2.4x	NM	43.0x	NM
Borosil Limited (BSE:543212)	India	508	3.8x	NM	31.4x	NM
Collectis S.A.	France	227	9.0x	8.1x	NM	NM
Genscript Biotech Corporation	China	2,990	4.2x	2.8x	NM	NM
Guangzhou Jet Bio-Filtration Co., Ltd.	China	214	3.3x	3.0x	20.4x	19.1x
Guerbet SA (ENXTPA:GBT)	France	685	0.8x	0.8x	6.7x	5.9x
NKMAX CO., Ltd.	Korea (Republic of)	166	20.2x	NM	NM	NM
PanGen Biotech Inc.	Korea (Republic of)	53	14.4x	NM	NM	NM
Porton Pharma Solutions	China	1,290	1.9x	2.3x	7.6x	9.1x
Qiagen N.V.	Netherlands	10,181	5.2x	5.1x	18.8x	14.2x
Repligen Corporation	United States	10,364	15.5x	16.2x	59.8x	76.4x
Twist Bioscience Corporation	United States	1,630	6.7x	5.6x	NM	NM
Vitrolife AB (publ)	Sweden	2,389	7.1x	6.7x	22.8x	19.6x
Viva Biotech Holdings	China	428	1.3x	NM	6.3x	NM
Mean		3,581	6.4x	5.4x	23.7x	23.4x
Median		597	4.1x	4.0x	20.5x	17.9x

Instrumentation

Company Name	Geography	Enterprise Value	xRevenue		xEBITDA	
		(\$mm)	LTM EV	FTM EV	LTM EV	FTM EV
10x Genomics, Inc.	United States	4,667	7.9x	6.7x	NM	NM
AnHui Wanyi Science and Technology Co., Ltd.	China	203	2.0x	1.4x	NM	9.6x
Biotage AB (publ) (OM:BIOT)	Sweden	1,139	7.4x	5.7x	32.8x	24.8x
Bruker Corporation (NasdaqGS:BRKR)	United States	10,786	3.8x	3.5x	17.7x	17.7x
Harvard Bioscience, Inc.	United States	228	2.0x	2.0x	18.3x	12.5x

Illuminate	United States	24,049	5.4x	5.4x	57.8x	60.5x
Mettler-Toledo International Inc.	United States	27,998	7.2x	7.6x	21.8x	23.4x
NanoString Technologies, Inc.	United States	170	1.1x	0.9x	NM	NM
Pacific Biosciences of California, Inc.	United States	1,910	11.3x	8.0x	NM	NM
Quanterix Corporation (NasdaqGM:QTRX)	United States	550	4.7x	4.2x	NM	NM
Standard BioTools Inc.	United States	940	8.9x	8.1x	NM	NM
Waters	United States	21,041	7.0x	7.1x	20.5x	20.3x
Mean		7,807	5.7x	5.1x	28.2x	24.1x
Median		1,525	6.2x	5.6x	21.1x	20.3x

Lab/Biobank Equipment

Company Name	Geography	Enterprise Value (\$mm)	xRevenue		xEBITDA	
			LTM EV	FTM EV	LTM EV	FTM EV
BICO Group AB (publ)	Sweden	537	2.3x	2.4x	NM	25.5x
Sartorius Aktiengesellschaft	Germany	28,981	7.4x	7.3x	25.7x	24.4x
Stratec SE	Germany	639	2.3x	2.1x	17.0x	10.9x
Tecan Group Ltd. (SWX:TECN)	Switzerland	4,931	3.9x	3.9x	23.0x	19.6x
Mean		8,772	4.0x	3.9x	21.9x	20.1x
Median		2,785	3.1x	3.1x	23.0x	22.0x

IN VIVO DIAGNOSTICS

Biometric Monitoring

Company Name	Geography	Enterprise Value (\$mm)	xRevenue		xEBITDA	
			LTM EV	FTM EV	LTM EV	FTM EV
Contec Medical Systems Co.,Ltd	China	844	6.9x	NM	26.5x	NM
Guangdong Transtek Medical Electronics Co., Ltd	China	194	1.7x	1.5x	NM	21.6x
iRhythm Technologies, Inc.	United States	3,645	7.7x	6.6x	NM	NM
TaiDoc Technology Corporation	Taiwan (Province of China)	378	2.1x	2.6x	7.8x	7.8x
Zhejiang Starry Pharmaceutical Co.,Ltd.	China	836	2.5x	2.4x	17.9x	12.4x
Mean		1,179	4.2x	3.3x	17.4x	14.0x
Median		836	2.5x	2.5x	17.9x	12.4x

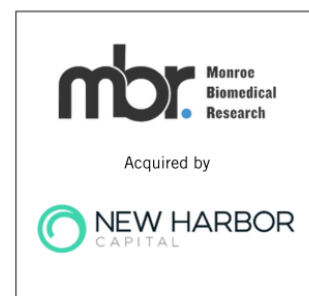
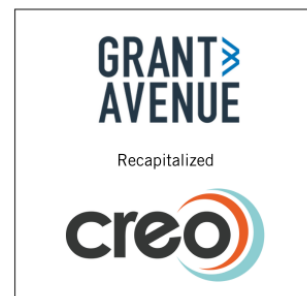
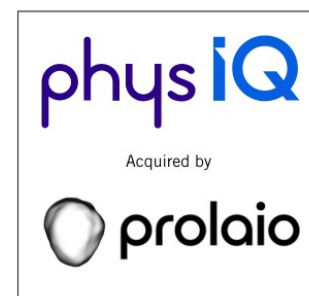
Imaging Diagnostics

Company Name	Geography	Enterprise Value (\$mm)	xRevenue		xEBITDA	
			LTM EV	FTM EV	LTM EV	FTM EV
4DMedical Limited	Australia	108	NM	28.0x	NM	NM
Detection Technology Oyj	Finland	204	1.8x	1.7x	21.4x	12.2x
iRay Technology Company Limited	China	2,962	11.5x	9.0x	30.1x	20.9x
Kromek Group plc	United Kingdom	60	2.7x	2.3x	NM	52.5x
Nano-X Imaging Ltd.	Israel	225	23.4x	11.7x	NM	NM
Ray Co., Ltd.	Korea (Republic of)	260	2.4x	1.8x	16.3x	9.6x
Siemens Healthineers AG	Germany	79,123	3.4x	3.2x	21.3x	15.8x
SonoScape Medical Corp.	China	1,940	7.0x	5.5x	29.2x	19.7x
Varex Imaging Corporation (NasdaqGS:VREX)	United States	1,112	1.2x	1.3x	9.7x	8.9x
Mean		9,555	6.7x	7.2x	21.3x	19.9x
Median		260	3.0x	3.2x	21.3x	15.8x

1. NM - Not Meaningful

RECENT CROSSTREE TRANSACTIONS

Crosstree Capital Partners provides mergers and acquisitions and financing advisory services exclusively to leading Health Sciences companies. Since inception, the firm has been a consistent leader within our focus areas, closing more than 100 successful transactions with companies ranging from private equity-backed consolidators to Fortune 500 publicly-traded companies. In the process, we have represented clients on five continents, and roughly 35% of our transactions have been cross-border.



Contact Us

Jeff Ellis, CFA
Head of Diagnostics & Tools
813-774-4753
jeff.ellis@crosstreecapital.com
www.crosstreecapital.com

Location

Tampa (Headquarters)
5411 Skycenter Dr. Suite 625
Tampa, FL
33607

CROSSTREE