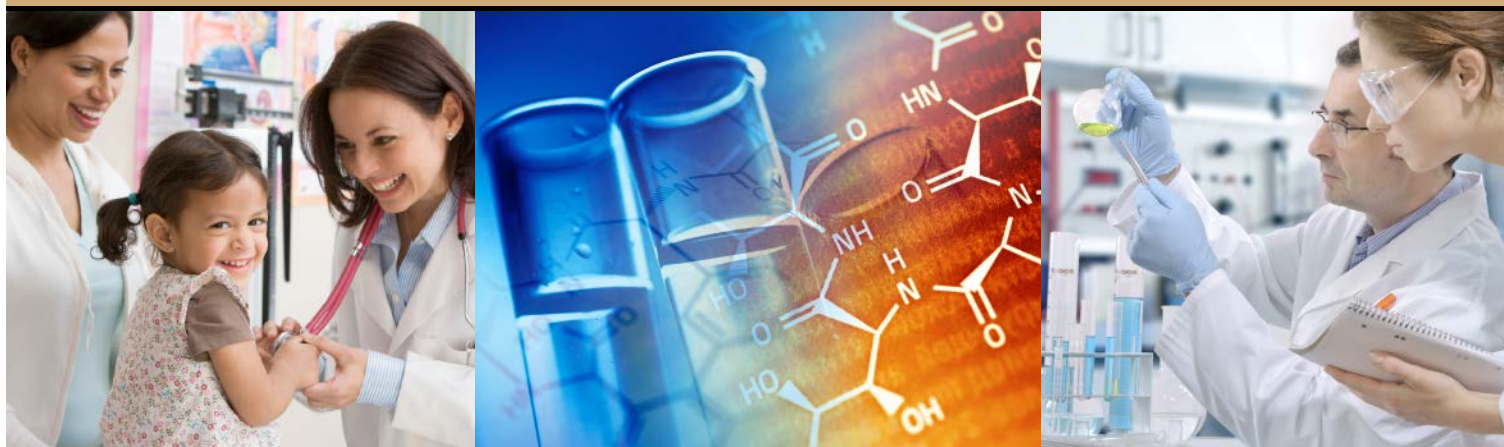


# FOCUS Healthcare and Life Sciences Report



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Summer 2017

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## FOCUS Healthcare and Life Sciences Group

# FOCUS Healthcare and Life Sciences Report

By Jonathan Wilfong, Regional Managing Partner, Southeast, and Healthcare and Life Sciences Team Leader, FOCUS Investment Banking LLC

As Team Leader of the FOCUS Healthcare and Life Sciences Practice Group, I'm pleased to introduce the Summer 2017 issue of the FOCUS Healthcare and Life Sciences Report.

On pages three and four, be sure to read Part I of a fascinating new two-part article, "Precision Medicine—The Leading Edge of Medical Therapeutics." According to the authors (an impressive group of FOCUS interns and researchers), precision medicine is a transformative approach to disease treatment and prevention, customizing healthcare based on an individual's genetic makeup, life-style and environment. It guides medical decision-making by looking at patients' genes—their unique DNA and RNA—along with their health history, socioeconomic status, environment and lifestyle choices.

Ushered in by the Human Genome Project (formally launched in 1990 and declared complete in 2003), precision medicine holds the promise of identifying economically viable methods to accurately decipher large numbers of genetic sequences. The infrastructure required to store and analyze this data, however, is staggering—and the path forward will not be easy.

Collecting and sharing healthcare data faces considerable logistical barriers, with streamlined access for researchers and health care providers constrained by competition for scarce research dollars and institutional credit. Part II of this important new article will appear in the Autumn 2017 FOCUS Healthcare and Life Sciences Report.

At FOCUS, we continue to witness consolidation activity and private equity interest in historically highly-fragmented ancillary services such as care for the disabled and those with substance dependence. While the mega-deal dollars may be down, we expect the middle market to remain very strong going into the last half of 2017.

We hope you enjoy this issue of our report.

Please feel free to contact me at [jonathan.wilfong@focusbankers.com](mailto:jonathan.wilfong@focusbankers.com) with your comments and suggestions.

## FOCUS Healthcare and Life Sciences Team

The FOCUS Healthcare and Life Sciences Practice Group is comprised of experienced executives from a broad spectrum of healthcare services, healthcare IT, medical device, pharmaceutical and life sciences companies.

Our team can leverage years of hands-on and transactional experience in the healthcare industry in order to manage your transaction from initial consulting to deal initiation to a successful close with experienced professional guidance every step of the process.

The FOCUS Healthcare and Life Sciences Team is uniquely qualified to help you meet your objectives because we:

- Offer strategic advisory services that enhance shareholder value.
- Supply a proven transaction methodology for delivering results.
- Devote significant C-level resources with operating expertise in the sector to executing transactions.
- Deliver the most exact, comprehensive research to help close a deal, deploying a team of research professionals dedicated to producing precise analysis.
- Leverage years of experience in the middle market to maximize opportunities for a successful transaction.
- Supply a national presence with global reach—regional offices ensure that all clients receive personalized service throughout every phase of a transaction.

# Precision Medicine—The Leading Edge of Medical Therapeutics

## Part I of II

By Avneet Heer, M.S.; Evans Love, M.S.; Sami Rahman, M.S.; Rohan Ranadive, M.S.; and Xiyue Guo, FOCUS Investment Banking Interns

**MEET ALLISON:** Eight years old. A fan of basketball, hip hop, and jewelry—and a pediatric brain tumor patient at Dana-Farber/Boston Children's (2017). When surgery and chemotherapy failed, genomic testing of Allison's tumor identified a genetic mutation called "BRAF." This particular mutation was being targeted in a clinical trial already underway for melanoma. On the outside chance that the melanoma therapies might guide treatment for Allison's brain tumor, she joined the trial. Within two months, her tumor was no longer visible on an MRI.

**MEET LARRY:** A PhD scientist at the University of California San Diego—and a colon cancer patient. Before his resection surgery, Larry generated a personalized 3-D model of his cancerous colon using data-driven visualization software to help his surgeon identify and prepare for potential risks she would encounter. Thanks to Larry's models, his surgery minimized unexpected adverse outcomes and speeded his recovery (Lafee, 2017).

**MEET ERIC:** A kidney cancer survivor thanks to a precision-medicine guided treatment plan and now director of NIH's *All of Us Research Program*. Eric's mission: to build a national, large-scale biobank with help from one million volunteers who contribute their future health data—genomic sequences, biospecimens, electronic health records, diet and lifestyle surveys, and information from real-time wearables. Participants come from all walks of life: they span age, race, and ethnic backgrounds; represent diverse educational and income levels; work in varied occupations; and reside in rural and urban communities around the nation...a reflection of the melting pot of American society (Dishman, 2016).

For Allison, Larry, and Eric, "precision medicine" is more than a new buzzword. It represents a transformative approach to disease treatment and prevention. Precision medicine customizes healthcare based on an individual's genetic makeup, lifestyle, and environment. It guides medical decision-making by looking at patients' genes—their unique DNA and RNA—along with their health history, socioeconomic status, environment, and lifestyle choices. Our current "one size fits all" care models, where doctors must rely on expected responses of "average" patients

to drugs and therapeutic protocols, are being replaced by tools that are more efficient and effective (NIH, 2017).

What is driving precision medicine? The ability for scientists to quickly and affordably identify our unique genetic fingerprint. What does this mean exactly? To thrive and reproduce, the cells in our bodies contain chromosomes made up of two twisted strands of DNA. The complete set (or genome) of human DNA is composed of more than 3 billion alphabetically-coded pairs of chemicals arranged in a precise order on these DNA strands.

In 2003, the international Human Genome Project successfully identified the order—or "sequence"—of DNA codes found in the human genome, an achievement that gives researchers a "manual" to the human body (DOE, 2015). It is now possible to determine an individual's unique genetic code in a single day at a cost of less than \$1,000 a shot (Illumina, 2014). By combining advances in genetic sequencing with rapidly evolving health IT, precision medicine is opening new pathways for evidence-based biomedical research to leverage big data—marking the next step in the evolution of medicine.

### Molecular Diagnostics

At the heart of precision medicine is the NextGen field of molecular diagnostics, where researchers use big data's analytic tools to interpret human genetic codes and identify specific code sequences that may be associated with particular diseases. Working with "high-throughput" technologies developed by companies like Illumina (2014), scientists can sequence hundreds of thousands of DNA strands at one time. An individual's entire genome can be read with unprecedented speed and accuracy, opening the door to powerful new predictive and personalized therapy regimens.

Cutting-edge suites of predictive genomic-based diagnostic tests are being developed by companies in the molecular diagnostics sector. Genomic Health's Oncotype Dx®, for example, is designed to predict whether women diagnosed with breast cancer are likely to benefit from chemotherapy after surgical removal of their tumors; CardioDx's coronary

artery disease test Corus® indicates whether patients' chest pain signals serious heart disease; and Nodality's Single Cell Network Profiling Test® looks at biological samples to detect whether single cells are functioning properly, critical to the testing of new drugs. When paired with advances in genomic sequencing, molecular diagnostic scientists are gaining the ability to diagnose even rare disorders where conventional techniques have failed.

## Big Data

Ushered in by the Human Genome Project, precision medicine holds the promise of identifying economically viable methods to accurately decipher large numbers of genetic sequences. The infrastructure required to store and analyze this data, however, is staggering. As of 2015, the average hospital had about two-thirds of a petabyte (700 terabytes) of patient data, 80 percent of which was unstructured image data like CT scans and X-rays; by 2020, digital healthcare data is expected to reach 25,000 petabytes (IBM, 2015).

Using cloud-based platforms to power advanced analytics, normalized precision medicine metrics can potentially be cross-referenced and collectively compared with demographic information, medical histories, and drug response profiles to determine the effective therapies for individual patients.

## Future Challenges

The path forward, however, will not be easy. Collecting and sharing healthcare data faces considerable logistical barriers, with streamlined access for researchers and health care providers constrained by competition for scarce research dollars and institutional credit. Progress in predictive medicine for both individual patients and disease knowledge networks must also resolve the gnarly problems of mapping disparate and uneven information to evolving data interchange standards.

Ensuring patient anonymity and respecting ethical boundaries also remain key concerns. Data-driven patient profiles clearly help lower costs and improve outcomes as individuals move from one healthcare setting to another. The advent of inexpensive web- and smartphone-based tools for collecting digital health information combined with the growing adoption of electronic medical record applications offer creative opportunities for synthesizing the data from our genes.

These benefits can be threatened, however, by the exploding interest in data mining for both non-profit and profit

purposes and by research increasingly dependent on dynamic, interactive cloud-based knowledge networks. In today's hacker environment, distributed access to electronic health data faces challenges maintaining personal privacy and protecting against damaging system breaches.

Despite these vulnerabilities, this disruptive new technology holds great promise for fundamentally changing healthcare paradigms. Informed by our personal genetic, behavioral, and environmental data, each of us—like Allison, Larry, and Eric—will be empowered by precision medicine to find treatments and preventative strategies tailored to best meet our unique needs.

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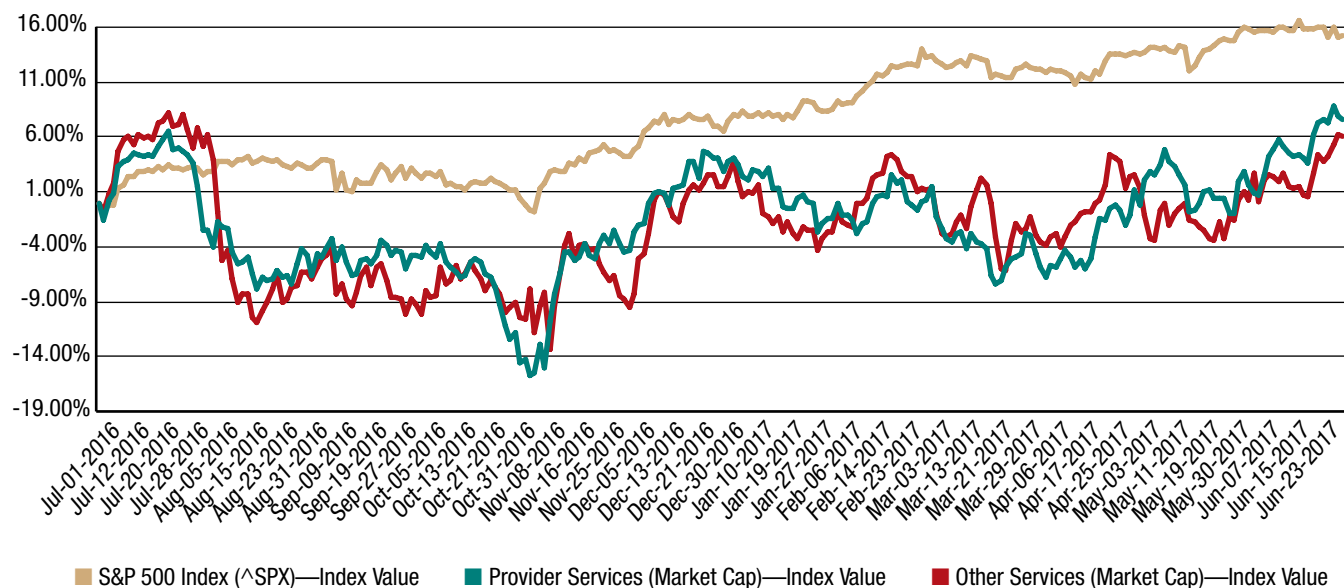
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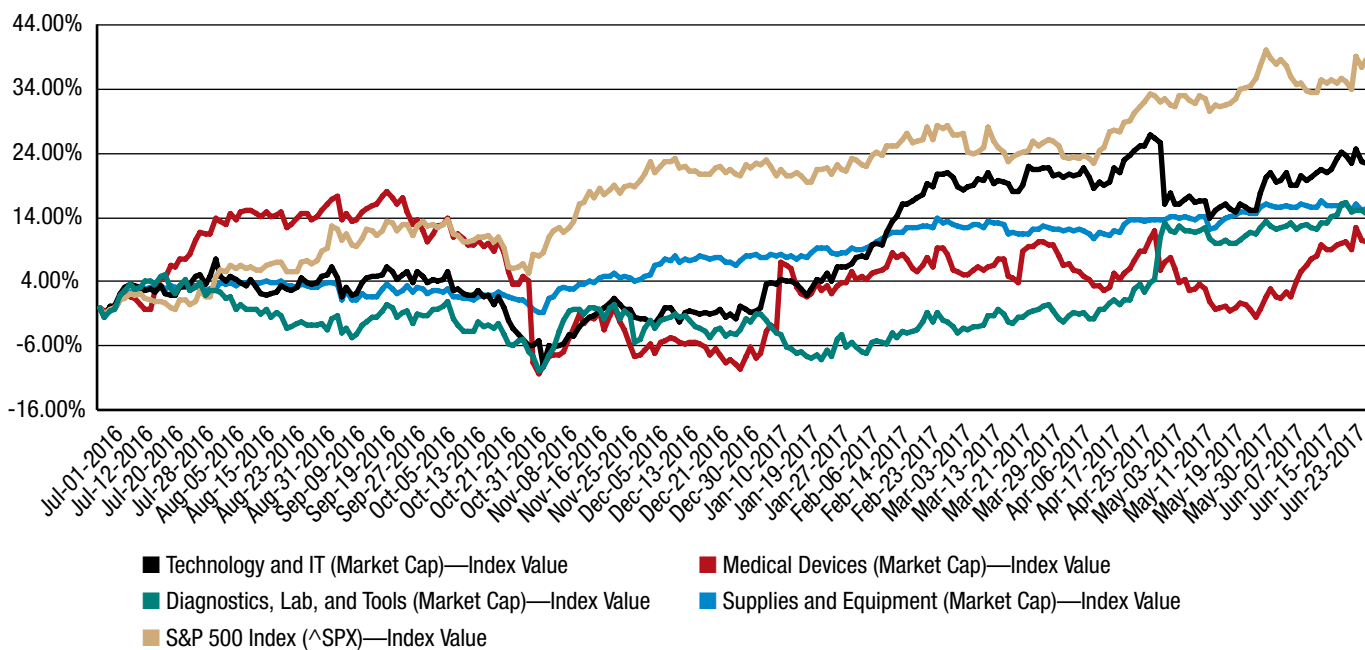
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## Performance: S&P 500 vs. Public Medical Service Companies (7/1/2016-6/30/2017)

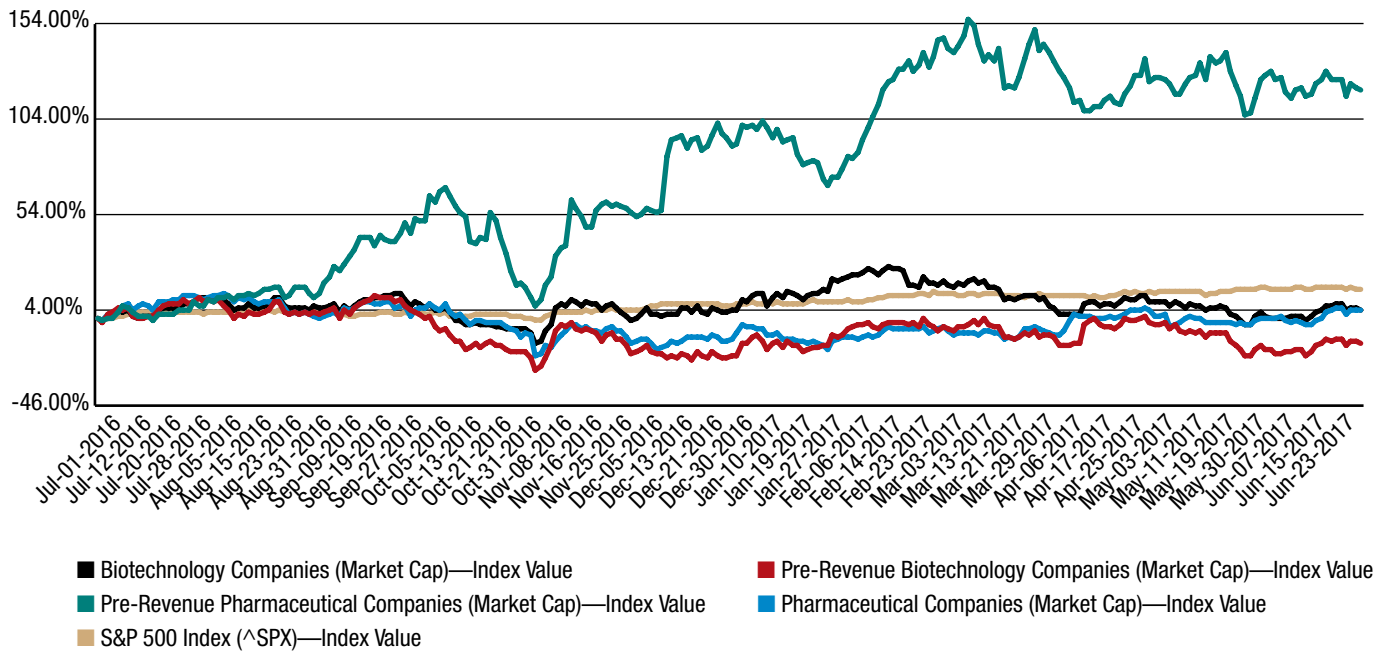


## Performance: S&P 500 vs. Public Medical Product Companies (7/1/2016-6/30/2017)





## Performance: S&P 500 vs. Public Pharmaceutical and Biotechnology Companies (7/1/2016-6/30/2017)



## Revenue Earning Pharmaceutical Companies

Company Name	Total Enterprise Value Latest (\$ millions)	LTM Total Revenue (\$ millions)	LTM EBITDA (\$ millions)	TEV/Total Revenues LTM—Latest	TEV/EBITDA LTM—Latest	LTM Period Date, Income Statement
Akorn, Inc. (NasdaqGS:AKRX)	4,687.1	1,101.9	445.8	4.3X	10.5X	Mar-31-2017
Alimera Sciences, Inc. (NasdaqGM:ALIM)	166.0	35.2	(21.8)	4.7X	N/A	Mar-31-2017
BioDelivery Sciences International, Inc. (NasdaqCM:BDSI)	154.5	40.8	(35.5)	3.8X	N/A	Mar-31-2017
DepoMed Inc. (NasdaqGS:DEPO)	1,198.5	441.6	125.1	2.7X	9.6X	Mar-31-2017
Emergent BioSolutions, Inc. (NYSE:EBS)	1,367.5	502.7	150.2	2.7X	9.1X	Mar-31-2017
Horizon Pharma plc (NasdaqGS:HZNP)	3,217.3	997.3	245.0	3.2X	13.1X	Mar-31-2017
Impax Laboratories Inc. (NasdaqGS:IPXL)	1,812.2	783.3	148.9	2.3X	12.2X	Mar-31-2017
Lannett Company, Inc. (NYSE:LCI)	1,542.0	667.1	261.2	2.3X	5.9X	Mar-31-2017
Pacira Pharmaceuticals, Inc. (NasdaqGS:PCRX)	1,795.5	280.2	(31.1)	6.4X	N/A	Mar-31-2017
Pernix Therapeutics Holdings, Inc. (NasdaqGM:PTX)	309.4	138.1	1.8	2.2X	N/A	Mar-31-2017
Supernus Pharmaceuticals, Inc. (NasdaqGM:SUPN)	2,083.3	228.4	67.3	9.1X	31.0X	Mar-31-2017
VIVUS Inc. (NasdaqGS:VVUS)	112.9	135.9	68.5	0.8X	1.6X	Mar-31-2017
Summary Statistics						
High	\$4,687.1	\$1,101.9	\$445.8	9.1X	31.0X	
Low	\$112.9	\$35.2	(\$35.5)	0.8X	1.6X	
Mean	\$1,537.2	\$446.0	\$118.8	3.7X	11.6X	
Median	\$1,454.8	\$360.9	\$96.8	3.0X	10.0X	

## Pre-Revenue Earning Pharmaceutical Companies

Company Name	Total Enterprise Value Latest (\$ millions)	LTM Total Revenue (\$ millions)	LTM EBITDA (\$ millions)	TEV/Total Revenues LTM—Latest	TEV/EBITDA LTM—Latest	LTM Period Date, Income Statement
AcelRx Pharmaceuticals, Inc. (NasdaqGM:ACRX)	46.9	17.4	(33.5)	2.7X	N/A	Mar-31-2017
Achaogen, Inc. (NasdaqGM:AKAO)	781.0	43.4	(55.0)	18.0X	N/A	Mar-31-2017
Corbus Pharmaceuticals Holdings, Inc. (NasdaqGM:CRBP)	267.6	2.8	(24.4)	95.6X	N/A	Mar-31-2017
Imprimis Pharmaceuticals, Inc. (NasdaqCM:IMMY)	70.8	21.7	(14.3)	3.3X	N/A	Mar-31-2017
Zogenix, Inc. (NasdaqGM:ZGNX)	302.0	22.3	(68.1)	13.5X	N/A	Mar-31-2017
Summary Statistics						
High	\$781.0	\$43.4	(\$14.3)	95.6X	-	
Low	\$46.9	\$2.8	(\$68.1)	2.7X	-	
Mean	\$293.7	\$21.5	(\$39.1)	26.6X	-	
Median	\$267.6	\$21.7	(\$33.5)	13.5X	-	

Source: Capital IQ—stock prices as of 6/30/2017

TEV/EBITDA LTM multiples with n/a values indicate negative LTM EBITDA values and were not used for the Summary Statistics.

## Revenue Earning Biotechnology Companies

Company Name	Total Enterprise Value Latest (\$ millions)	LTM Total Revenue (\$ millions)	LTM EBITDA (\$ millions)	TEV/Total Revenues LTM—Latest	TEV/EBITDA LTM—Latest	LTM Period Date, Income Statement
Array BioPharma Inc. (NasdaqGM:ARRY)	1,354.3	41.5	(96.3)	32.6X	N/A	Mar-31-2017
Cytori Therapeutics, Inc. (NasdaqCM:CYTX)	45.6	10.1	(18.7)	4.5X	N/A	Mar-31-2017
NewLink Genetics Corporation (NasdaqGM:NLNK)	820.2	116.4	(74.2)	7.0X	N/A	Mar-31-2017
Momenta Pharmaceuticals, Inc. (NasdaqGS:MNTA)	97.0	32.8	(73.1)	3.0X	N/A	Mar-31-2017
United Therapeutics Corporation (NasdaqGS:UTHR)	4,689.5	1,600.3	993.4	2.9X	4.7X	Mar-31-2017
Summary Statistics						
High	\$4,689.5	\$1,600.3	\$993.4	32.6X	4.7X	
Low	\$45.6	\$10.1	(\$96.3)	2.9X	4.7X	
Mean	\$1,401.3	\$360.2	\$146.2	10.0X	4.7X	
Median	\$820.2	\$41.5	(\$73.1)	4.5X	4.7X	

## Pre-Revenue Earning Biotechnology Companies

Company Name	Total Enterprise Value Latest (\$ millions)	LTM Total Revenue (\$ millions)	LTM EBITDA (\$ millions)	TEV/Total Revenues LTM—Latest	TEV/EBITDA LTM—Latest	LTM Period Date, Income Statement
ACADIA Pharmaceuticals Inc. (NasdaqGS:ACAD)	2,934.4	32.6	(309.0)	90.0X	N/A	Mar-31-2017
Achillion Pharmaceuticals, Inc. (NasdaqGS:ACHN)	249.0	15.0	(66.2)	16.6X	N/A	Mar-31-2017
ArQule Inc. (NasdaqGM:ARQL)	65.0	3.5	(25.1)	18.6X	N/A	Mar-31-2017
Opexa Therapeutics, Inc. (NasdaqCM:OPXA)	2.2	2.2	(5.5)	1.0X	N/A	Mar-31-2017
Rigel Pharmaceuticals, Inc. (NasdaqGS:RIGL)	236.1	18.9	(61.9)	12.5X	N/A	Mar-31-2017
TrovaGene, Inc. (NasdaqCM:TROV)	26.8	0.4	(35.5)	67.0X	N/A	Mar-31-2017
Windtree Therapeutics, Inc. (NasdaqCM:WINT)	20.3	2.2	(31.8)	9.2X	N/A	Mar-31-2017
Summary Statistics						
High	\$2,934.4	\$32.6	(\$5.5)	90.0X	-	
Low	\$2.2	\$0.0	(\$309.0)	1.0X	-	
Mean	\$504.8	\$10.7	(\$76.4)	30.7X	-	
Median	\$65.0	\$3.5	(\$35.5)	16.6X	-	

Source: Capital IQ—stock prices as of 6/30/2017

TEV/EBITDA LTM multiples with n/a values indicate negative LTM EBITDA values and were not used for the Summary Statistics.



## Medical Devices

Company Name	Total Enterprise Value Latest (\$ millions)	LTM Total Revenue (\$ millions)	LTM EBITDA (\$ millions)	TEV/Total Revenues LTM—Latest	TEV/EBITDA LTM—Latest	LTM Period Date, Income Statement
DexCom, Inc. (NasdaqGS:DXCM)	6,218.5	599.4	(69.8)	10.4X	N/A	Mar-31-2017
Endologix Inc. (NasdaqGS:ELGX)	548.9	193.2	(61.3)	2.8X	N/A	Mar-31-2017
ICU Medical, Inc. (NasdaqGS:ICUI)	3,288.6	526.1	102.1	6.3X	32.2X	Mar-31-2017
LivaNova PLC (NasdaqGS:LIVN)	3,010.3	1,212.1	193.8	2.5X	15.5X	Mar-31-2017
Nxstage Medical, Inc. (NasdaqGS:NXTM)	1,606.4	374.0	14.7	4.3X	N/A	Mar-31-2017
STAAR Surgical Company (NasdaqGM:STAA)	436.0	83.5	(1.6)	5.2X	N/A	Mar-31-2017
The Spectranetics Corporation (NasdaqGS:SPNC)	1,948.8	277.6	(16.3)	7.0X	N/A	Mar-31-2017
Summary Statistics						
High	\$6,218.5	\$1,212.1	\$193.8	10.4X	32.2X	
Low	\$436.0	\$83.5	(\$69.8)	2.5X	15.5X	
Mean	\$2,436.8	\$466.6	\$23.1	5.5X	23.9X	
Median	\$1,948.8	\$374.0	(\$1.6)	5.2X	23.9X	

## Supplies and Equipment

Company Name	Total Enterprise Value Latest (\$ millions)	LTM Total Revenue (\$ millions)	LTM EBITDA (\$ millions)	TEV/Total Revenues LTM—Latest	TEV/EBITDA LTM—Latest	LTM Period Date, Income Statement
ATRION Corp. (NasdaqGS:ATRI)	1,135.1	145.8	48.8	7.8X	23.3X	Mar-31-2017
Bovie Medical Corporation (AMEX:BVX)	6,454.0	2,097.0	271.8	3.1X	23.7X	Mar-31-2017
Bio-Rad Laboratories, Inc. (NYSE:BIO)	67.7	37.2	(2.8)	1.8X	N/A	Mar-31-2017
Cantel Medical Corp. (NYSE:CMN)	3,365.2	741.6	141.9	4.5X	23.7X	Apr-30-2017
Invacare Corporation (NYSE:IVC)	505.4	1,021.6	(8.2)	0.5X	N/A	Mar-31-2017
Retractable Technologies, Inc. (AMEX:RVP)	28.0	30.8	(2.4)	0.9X	N/A	Mar-31-2017
Sharps Compliance Corp. (NasdaqCM:SMED)	64.7	36.7	0.5	1.8X	N/A	Mar-31-2017
Summary Statistics						
High	\$6,454.0	\$2,097.0	\$271.8	7.8X	23.7X	
Low	\$28.0	\$30.8	(\$8.2)	0.5X	23.3X	
Mean	\$1,660.0	\$587.2	\$64.2	2.9X	23.6X	
Median	\$505.4	\$145.8	\$0.5	1.8X	23.7X	

Source: Capital IQ—stock prices as of 6/30/2017

TEV/EBITDA LTM multiples with n/a values indicate negative LTM EBITDA values and were not used for the Summary Statistics.

## Diagnostics, Laboratories, and Tools

Company Name	Total Enterprise Value Latest (\$ millions)	LTM Total Revenue (\$ millions)	LTM EBITDA (\$ millions)	TEV/Total Revenues LTM—Latest	TEV/EBITDA LTM—Latest	LTM Period Date, Income Statement
Abaxis, Inc. (NasdaqGS:ABAX)	1,058.6	227.2	51.8	4.7X	20.4X	Mar-31-2017
Chembio Diagnostics, Inc. (NasdaqCM:CEMI)	68.8	17.6	(7.4)	3.9X	N/A	Mar-31-2017
CONMED Corporation (NasdaqGS:CNMD)	1,883.5	768.9	124.9	2.4X	15.1X	Mar-31-2017
Enzo Biochem Inc. (NYSE:ENZ)	450.8	106.2	(4.6)	4.2X	N/A	Apr-30-2017
Fluidigm Corporation (NasdaqGS:FLDM)	263.6	101.0	(64.7)	2.6X	N/A	Mar-31-2017
Genomic Health Inc. (NasdaqGS:GHDX)	1,023.4	331.0	(0.2)	3.1X	N/A	Mar-31-2017
Luminex Corporation (NasdaqGS:LMNX)	841.3	285.4	50.5	2.9X	16.7X	Mar-31-2017
Repligen Corporation (NasdaqGS:RGEN)	1,482.9	110.0	27.4	13.5X	54.1X	Mar-31-2017
VWR Corporation (NasdaqGS:VWR)	6,390.2	4,555.0	480.4	1.4X	13.3X	Mar-31-2017
Summary Statistics						
High	\$6,390.2	\$4,555.0	\$480.4	13.5X	54.1X	
Low	\$68.8	\$17.6	(\$64.7)	1.4X	13.3X	
Mean	\$1,495.9	\$722.5	\$73.1	4.3X	23.9X	
Median	\$1,023.4	\$227.2	\$27.4	3.1X	16.7X	

## Technology and IT

Company Name	Total Enterprise Value Latest (\$ millions)	LTM Total Revenue (\$ millions)	LTM EBITDA (\$ millions)	TEV/Total Revenues LTM—Latest	TEV/EBITDA LTM—Latest	LTM Period Date, Income Statement
Accuray Incorporated (NasdaqGS:ARAY)	480.2	366.3	(5.1)	1.3X	N/A	Mar-31-2017
Allscripts Healthcare Solutions, Inc. (NasdaqGS:MDRX)	3,978.9	1,617.8	153.4	2.5X	25.9X	Mar-31-2017
Analogic Corporation (NasdaqGS:ALOG)	747.4	512.9	65.2	1.5X	11.5X	Apr-30-2017
Computer Programs & Systems Inc. (NasdaqGS:CPSI)	588.4	261.7	28.2	2.2X	20.9X	Mar-31-2017
Fonar Corp. (NasdaqCM:FONR)	175.2	91.7	20.9	1.9X	8.4X	Mar-31-2017
iCAD, Inc. (NasdaqCM:ICAD)	59.1	27.1	(8.3)	2.2X	N/A	Mar-31-2017
Masimo Corporation (NasdaqGS:MASI)	4,319.5	709.8	171.0	6.1X	25.3X	Apr-01-2017
Omniceil, Inc. (NasdaqGS:OMCL)	1,769.9	672.2	43.9	2.6X	40.3X	Mar-31-2017
Summary Statistics						
High	\$4,319.5	\$1,617.8	\$171.0	6.1X	40.3X	
Low	\$59.1	\$27.1	(\$8.3)	1.3X	8.4X	
Mean	\$1,514.8	\$532.4	\$58.7	2.5X	22.0X	
Median	\$667.9	\$439.6	\$36.1	2.2X	23.1X	

Source: Capital IQ—stock prices as of 6/30/2017

TEV/EBITDA LTM multiples with n/a values indicate negative LTM EBITDA values and were not used for the Summary Statistics.

## Provider Services

Company Name	Total Enterprise Value Latest (\$ millions)	LTM Total Revenue (\$ millions)	LTM EBITDA (\$ millions)	TEV/Total Revenues LTM—Latest	TEV/EBITDA LTM—Latest	LTM Period Date, Income Statement
Addus HomeCare Corporation (NasdaqGS:ADUS)	433.1	409.7	32.0	1.1X	13.5X	Mar-31-2017
Civitas Solutions, Inc. (NYSE:CIVI)	1,270.7	1,438.0	147.7	0.9X	8.6X	Mar-31-2017
Kindred Healthcare Inc. (NYSE:KND)	4,359.0	7,149.9	520.0	0.6X	8.4X	Mar-31-2017
Magellan Health, Inc. (NasdaqGS:MGLN)	2,083.2	5,025.5	245.9	0.4X	8.5X	Mar-31-2017
Providence Service Corp. (NasdaqGS:PRSC)	996.9	897.2	111.4	1.1X	8.9X	Mar-31-2017
RadNet, Inc. (NasdaqGM:RDNT)	1,333.6	1,713.4	119.8	0.8X	11.1X	Mar-31-2017
The Ensign Group, Inc. (NasdaqGS:ENSG)	677.1	1,596.3	71.8	0.4X	9.4X	Mar-31-2017
US Physical Therapy Inc. (NYSE:USPH)	880.2	363.4	59.4	2.4X	14.8X	Mar-31-2017
Summary Statistics						
High	\$4,359.0	\$7,149.9	\$520.0	2.4X	14.8X	
Low	\$433.1	\$363.4	\$32.0	0.4X	8.4X	
Mean	\$1,504.2	\$2,324.2	\$163.5	1.0X	10.4X	
Median	\$1,133.8	\$1,517.2	\$115.6	0.8X	9.2X	

## Other Services

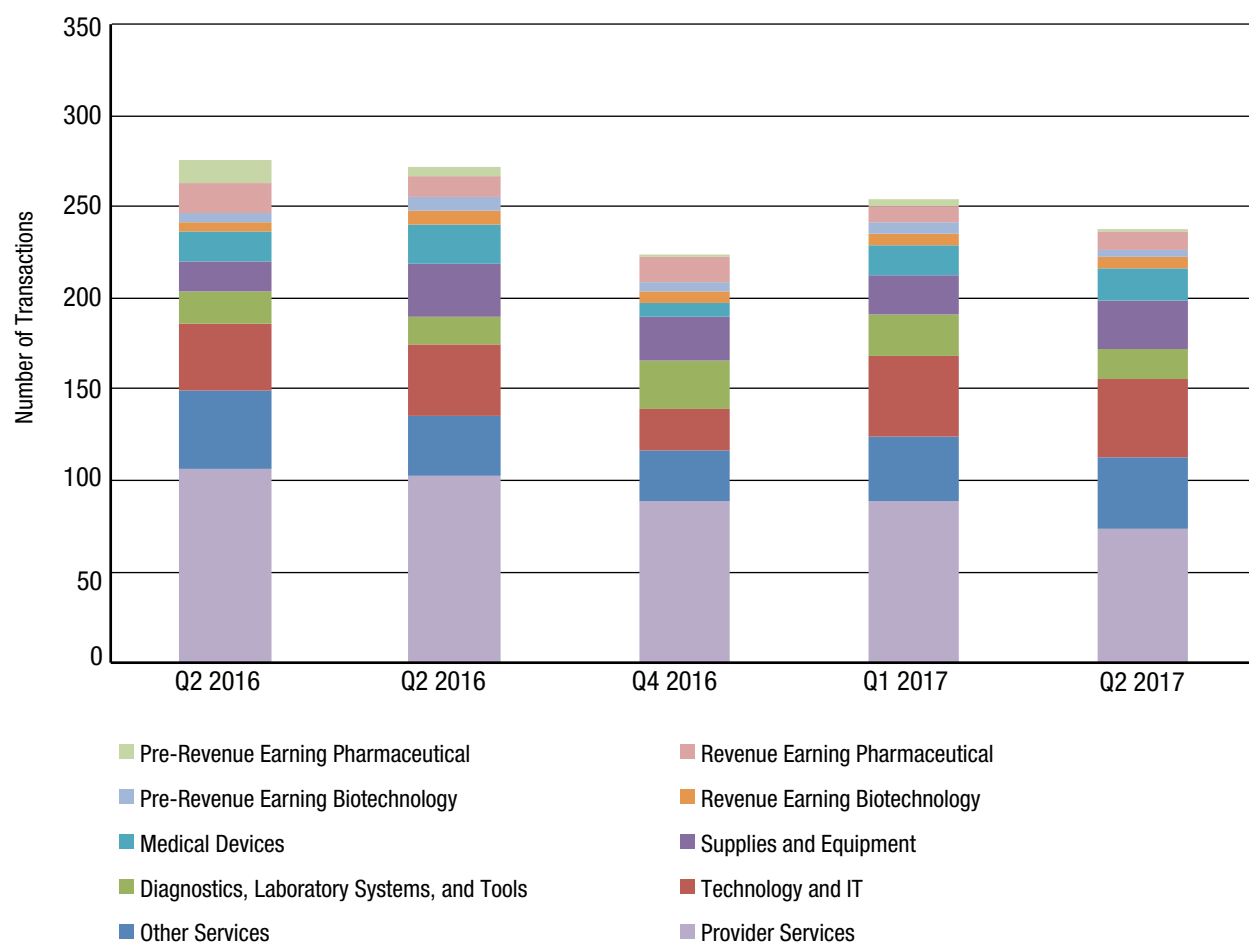
Company Name	Total Enterprise Value Latest (\$ millions)	LTM Total Revenue (\$ millions)	LTM EBITDA (\$ millions)	TEV/Total Revenues LTM—Latest	TEV/EBITDA LTM—Latest	LTM Period Date, Income Statement
Albany Molecular Research Inc. (NasdaqGS:AMRI)	1,529.3	628.7	71.8	2.4X	21.3X	Mar-31-2017
AMN Healthcare Services Inc. (NYSE:AHS)	2,195.1	1,929.4	226.9	1.1X	9.7X	Mar-31-2017
Bioanalytical Systems Inc. (NasdaqCM:BASI)	19.3	22.7	0.9	0.9X	21.4X	Mar-31-2017
Cross Country Healthcare, Inc. (NasdaqGS:CCRN)	493.7	844.5	39.2	0.6X	12.6X	Mar-31-2017
National Research Corp. (NasdaqGS:NRCI.B)	700.0	111.8	37.5	6.3X	18.7X	Mar-31-2017
PDL BioPharma, Inc. (NasdaqGS:PDLI)	227.7	103.3	45.5	2.2X	5.0X	Mar-31-2017
Summary Statistics						
High	\$2,195.1	\$1,929.4	\$226.9	6.3X	21.4X	
Low	\$19.3	\$22.7	\$0.9	0.6X	5.0X	
Mean	\$860.9	\$606.7	\$70.3	2.2X	14.8X	
Median	\$596.9	\$370.3	\$42.4	1.7X	15.6X	

Source: Capital IQ—stock prices as of 6/30/2017

TEV/EBITDA LTM multiples with n/a values indicate negative LTM EBITDA values and were not used for the Summary Statistics.

# M&A Activity in Healthcare and Life Sciences

## Healthcare M&A Transactions by Quarter (Q2 2016 to Q2 2017)



Source: Capital IQ

# Notable Healthcare Industry Transactions

## *Selected Healthcare Transactions Q2 2017*

The following healthcare industry transactions have caught the attention of FOCUS Investment Banking:

### **Sucampo Pharmaceuticals, Inc. Acquires Vtesse, Inc.**

Sucampo Pharmaceuticals, Inc. has acquired Vtesse, Inc. for \$200 million. Vtesse is working on the development of VTS-270 for the treatment of Niemann-Pick disease type C (NPC), as well as on conducting pre-clinical discovery and development of other novel drugs for NPC and other lysosomal storage diseases. The company was founded in 2005 and is based in Gaithersburg, Maryland. (April 3, 2017)

### **HCA Holdings, Inc. Acquires Memorial University Medical Center, Inc.**

HCA Holdings, Inc. has acquired Memorial University Medical Center, Inc. for \$430 million. Memorial University Medical Center, a tertiary care hospital, provides healthcare services to patients in southeast Georgia and southern South Carolina. The company was founded in 1955 and is based in Savannah, Georgia. (April 19, 2017)

### **Baxter International Inc. Acquires Wound Care Technologies, Inc.**

Baxter International Inc. has acquired Wound Care Technologies, Inc. for an undisclosed amount. Wound Care Technologies develops and markets external tissue expansion devices for the wound care market. Its DermaClose RC surgical device is a continuous external tissue expander for use in reducing and assisting with the closure of thickness wounds of the skin. The company was founded in 2007 and is based in Chanhassen, Minnesota. (April 26, 2017)

### **EPI Health, LLC Acquires Cipher Pharmaceuticals US LLC**

EPI Health, LLC has acquired Cipher Pharmaceuticals US LLC for \$14 million. Cipher Pharmaceuticals, a pharmaceutical and surgical device company, develops and markets products for the treatment of dermatological conditions. It focuses on specialty pharmaceuticals and novel surgical devices. The company was founded in 2010 and is based in Charleston, South Carolina. (May 1, 2017)

### **Savaria Corporation Acquires Span-America Medical Systems, Inc.**

Savaria Corporation has acquired Span-America Medical Systems, Inc. for \$81 million. Span-America offers various medical products consisting of non-powered and powered therapeutic support surfaces, medical bed frames, patient positioners, polyurethane foam mattress overlays, and seating products. The company was founded in 1970 and is based in Greenville, South Carolina. (May 1, 2017)

### **Express Scripts Holding Company Acquires Matrix Healthcare Services, Inc.**

Express Scripts Holding Company has acquired Matrix Healthcare Services, Inc. for an undisclosed amount. Matrix offers pharmacy management benefit programs, including bill review, mail order pharmacy, and compound pharmacy programs; clinical and pain-related data; ARM program, a customizable program to modify existing alert, review, and manage alerts; and a Web portal to fulfill, track, and manage pharmacy orders on behalf of benefits providers. The company was founded in 2001 and is based in Tampa, Florida. (May 17, 2017)

### **Eloxx Pharmaceuticals, Ltd. Acquires Sevion Therapeutics, Inc.**

Eloxx Pharmaceuticals, Ltd. has acquired Sevion Therapeutics, Inc. for an undisclosed amount. Sevion, a development-stage biotech company, builds and develops a portfolio of therapeutics for the treatment of cancer and immunological diseases in the United States. The company's product candidates are derived from multiple proprietary technology platforms, including cell-based arrayed antibody discovery, ultralong antibody scaffolds, and Chimeraosome nanocages. The company was founded in 1964 and is based in San Diego, California. (June 2, 2017)

### **Teladoc, Inc. Acquires Best Doctors, Inc.**

Teladoc, Inc. has acquired Best Doctors, Inc. for \$440 million. Best Doctors provides access to the medical experts and treating physicians to provide a better diagnosis and treatment plan. Its services include reviewing a member's diagnosis and treatment plan in detail by a physician expert; and providing expert answers and advisory services to basic questions about a medical condition or treatment plan. The company was founded in 1989 and is based in Quincy, Massachusetts. (June 19, 2017)

## Notable Healthcare Industry Transactions (continued)

### *Selected Healthcare Transactions Q2 2017*

#### **NantCell, Inc. Acquires Altor BioScience Corporation**

NantCell, Inc. has acquired Altor BioScience Corporation for \$290 million. Altor engages in the discovery, development, and commercialization of immunotherapeutic agents for the treatment of cancer, viral infections, and inflammatory and autoimmune diseases. Its product candidates include ALT-801, a T-cell receptor-targeted immunotherapeutic for cancer; ALT-836, a monoclonal antibody-based tissue factor antagonist treatment of patients with acute respiratory distress syndrome and acute lung injury; and ALT-803, an IL-15 super-agonist for patients with solid and hematological tumors/metastatic melanoma. The company was founded in 2002 and is based in Miramar, Florida. (June 27, 2017)





#### **Quest Diagnostics Incorporated Acquires Cape Cod Healthcare, Inc., Laboratory Services Business**

Quest Diagnostics Incorporated has acquired Cape Cod Healthcare, Inc., Laboratory Services Business for an undisclosed amount. Cape Cod Healthcare, Inc., Laboratory Services Business comprises the business operations that offer outreach laboratory services to local physicians and patients that are separate from hospital inpatient or outpatient care. The company was founded in 1993 and is located throughout the US. (June 27, 2017)

*\*Source: Transaction material sourced from S&P Capital IQ Database and mergermarket.com*



## FOCUS Healthcare and Life Sciences Transactions

<p>This announcement appears as a matter of record only</p>  <p>has acquired</p>  <hr/> <p>The undersigned initiated this transaction, assisted in the negotiations, and acted as financial advisor to ncgCARE.</p> <hr/> 	<p>This announcement appears as a matter of record only</p>  <p>has obtained growth financing from</p>  <hr/> <p>The undersigned initiated this transaction, assisted in the negotiations, and acted as financial advisor to ncgCARE, Inc.</p> <hr/> 	<p>This announcement appears as a matter of record only</p>  <p>has been acquired by</p>  <hr/> <p>The undersigned initiated this transaction, assisted in the negotiations, and acted as financial advisor to ACI Support Specialists, Inc.</p> <hr/> 
<p>This announcement appears as a matter of record only</p>  <p>has acquired</p>  <hr/> <p>The undersigned initiated this transaction, assisted in the negotiations, and acted as financial advisor to ncgCARE.</p> <hr/> 	<p>This announcement appears as a matter of record only</p>  <p>has been acquired by</p>  <hr/> <p>The undersigned initiated this transaction, assisted in the negotiations and acted as financial advisor to Alpha Systems.</p> <hr/> 	<p>This announcement appears as a matter of record only</p>  <p>sold its home and community based services business to</p>  <hr/> <p>The undersigned initiated this transaction, assisted in the negotiations and acted as financial advisor to Arrow Child &amp; Family Ministries.</p> <hr/> 

“We are grateful for the expertise and professionalism FOCUS brought to this transaction. The sale of Alpha Systems to Databank would not have gone as seamlessly as it did had it not been for FOCUS. They understand the needs of both buyers and sellers and ensured the transaction went as smoothly as possible. Their bankers bring a methodical execution strategy that delivers consistent results. This is the second transaction FOCUS has completed for us, which demonstrates the confidence we have in their process and in their firm.” **Brett Griffith**, President, Alpha Systems

*\*Testimonials may not be representative of the experience of all clients; testimonials are not a guarantee of future performance or success.*

# FOCUS Healthcare and Life Sciences Transactions

This announcement appears as a matter of record only



Forging Momentum

has been sold to




PIVOTAL PERFORMANCE

The undersigned initiated this transaction, assisted in the negotiations and acted as financial advisor to Forgentum.


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**FOCUS**  
Investment Banking

This announcement appears as a matter of record only



Sidby, England  
has been acquired by



Northwood, Ohio

The undersigned initiated this transaction, assisted in the negotiations and acted as financial advisor to Medvance.

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**FOCUS**  
Investment Banking

This announcement appears as a matter of record only



Stirling, Scotland  
has been acquired by




Verona, Italy

The undersigned initiated this transaction, assisted in the negotiations and acted as financial advisor to Pleiad Devices, LTD.


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**FOCUS**  
Investment Banking

This announcement appears as a matter of record only



has acquired




The undersigned initiated this transaction, assisted in the negotiations, and acted as financial advisor to PositiveID Corporation.


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**FOCUS**  
Investment Banking

This announcement appears as a matter of record only



has been acquired by



Inspired Science. Trusted Solutions.®

The undersigned initiated this transaction, assisted in the negotiations, and acted as financial advisor to Bioline.

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**FOCUS**  
Investment Banking

This announcement appears as a matter of record only

VERIFY SOLUTIONS

has been acquired by



The undersigned initiated this transaction, assisted in the negotiations and acted as financial advisor to Verify Solutions, LLC.

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**FOCUS**  
Investment Banking

This announcement appears as a matter of record only



has been recapitalized by



\$8,000,000 Series A Preferred Stock

The undersigned initiated this transaction, assisted in the negotiations, and acted as financial advisor to Agentek, Inc.

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**FOCUS**  
Investment Banking

This announcement appears as a matter of record only



has acquired



BENEFIT MARKETING SOLUTIONS

The undersigned initiated negotiations and acted as financial advisor to Alliance HealthCard.


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**FOCUS**  
Investment Banking

This announcement appears as a matter of record only

PROTECT Emergency Response Systems, Inc.

has been sold to



The undersigned initiated the transaction, acted as financial advisor to, and assisted in the negotiations as the representative of PROTECT Emergency Response Systems, Inc.

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**FOCUS**  
Investment Banking

## FOCUS Healthcare and Life Sciences Team



### **Jonathan Wilfong**

*Regional Managing Partner, Southeast, and  
Healthcare and Life Sciences Team Leader*  
Atlanta

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Jonathan E. Wilfong has almost 40 years of broad industry experience in mergers and acquisitions, business development, and capital formation. He was a founder and co-founder of two physician practice management companies.



### **Mark L. Braunstein, MD**

*Senior Advisor*

Atlanta

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Dr. Braunstein teaches health informatics and is involved in fostering research and community outreach aimed at the wider adoption of health information technology to improve the quality and efficiency of care delivery.



### **Gareth Clarke**

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Mr. Clarke is a seasoned, internationally experienced CEO with a background featuring strong strategic, financial and marketing skills with a particular emphasis on the healthcare sector. Mr. Clarke currently serves as Chairman & CEO at Innovation Technologies Inc. a privately held medical device company, marketing Irrisept, a product focused upon reducing surgical site infections.



### **Greg Hagfors**

*Senior Advisor*

Los Angeles, CA

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Greg Hagfors, a healthcare executive for over 25 years, specializes in strategy development and deployment, operational and financial performance enhancement, and leadership development. He has an M.S. in Business Administration from Minnesota State University.



### **James "Jim" W. Hawkins, MBA, PhD**

*Managing Director*

Washington, DC

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202-470-1971

Jim Hawkins, former President and CEO of five early stage biotechnology companies, has experience in all major areas of the biopharmaceutical industry.



### **Les Mace**

*Senior Advisor*

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Les Mace has over 35 years of experience in the medical device industry including co-founder, market research, technology assessment, manufacturing operations, and much more.



### **Michael J. McGregor**

*Managing Director*

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Michael McGregor has 10 years of experience advising on business transfers, capital raises, and management buyouts. He has been a founder or co-founder of three start-up businesses, and received his M.B.A. from The University of Pennsylvania's Wharton School of Business.



### **Barry Michael**

*Senior Advisor*

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Barry Michael has more than 30 years' experience in medical devices. Previously Mr. Michael held marketing and sales positions at Abbott Diagnostics as well as senior positions at Kimberly-Clark Professional Healthcare.

**James Snodgrass***Managing Director*

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Jim Snodgrass is an astute business leader with experience driving multimillion-dollar revenue production and organizational change. Jim has a B.A. in Economics from Virginia Tech, an M.B.A. from Northwestern University Kellogg Graduate School of Management, and a J.D. from Chicago-Kent College of Law.

**Gerald Turner***Managing Director*

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Gerald Turner has over 25 years of executive level experience in a wide range of sectors including diverse financial services, direct marketing, specialty retailing, commercial data base management, and consumer brand marketing and packaging.

**Timothy Tankosic, MD***Senior Advisor*

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Dr. Tankosic has over 25 years of experience as a consultant, advisor, and director for pharmaceutical, biotechnology, diagnostics, and device industries. He has broad experience in major therapeutic areas and technologies and expertise in neuroscience and oncology.

## About FOCUS Investment Banking LLC

FOCUS Investment Banking LLC provides a range of middle market investment banking services with an emphasis on mergers, acquisitions, divestitures and corporate finance. FOCUS is a national firm serving clients from offices in major cities across the United States. FOCUS specializes in business units with transactions or revenues in the \$5-300 million range, serving entrepreneurs, corporate owners and various types of investors across a broad range of industries, throughout the U.S. and worldwide. FOCUS bankers are seasoned operating and financial executives with extensive transaction experience. Securities transactions conducted by FOCUS Securities LLC, an affiliated company, registered Broker/Dealer and member FINRA/SIPC. For more information on FOCUS, visit [www.focusbankers.com](http://www.focusbankers.com).

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# FOCUS

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