

MPG | MADISON PARK GROUP

Life Sciences Software Market Update

January 2022

Connect with us   



Trusted Advisor to the Life Sciences/Healthcare Market MADISON PARK GROUP

Market Coverage Model: Symbiotic Dialogue With All Market Constituents

Extensive Track Record ...

BLUEPRINT
Research Group

Strategic Sale

Commercial Analytics

M3 USA

7 Acquisitions

Physician/Clinical Sites

anju
LIFE SCIENCES SOFTWARE

7 Acquisitions

Clinical & Med. Affairs Data

nextdocs

Strategic Sale

Clinical Content Mgmt.

anju
LIFE SCIENCES SOFTWARE

Majority Recap

abry partners

Life Sciences Software

Polaris

Strategic Sale

HCP Contract Compliance

R²

Strategic Sale

imshealth

Sunshine Act Compliance

Verilogue
SOUND INSIGHT

Strategic Sale

Pharma Branding Analytics

... and Constant Dialogue with Potential Acquirers, Partners & Targets...

Incumbents with Exposure to Representative Subsectors



...Supported by Longstanding Dedication to Primary Research



Table of Contents

MPG Life Sciences Market Update

I. Industry Trends

II. Featured Companies

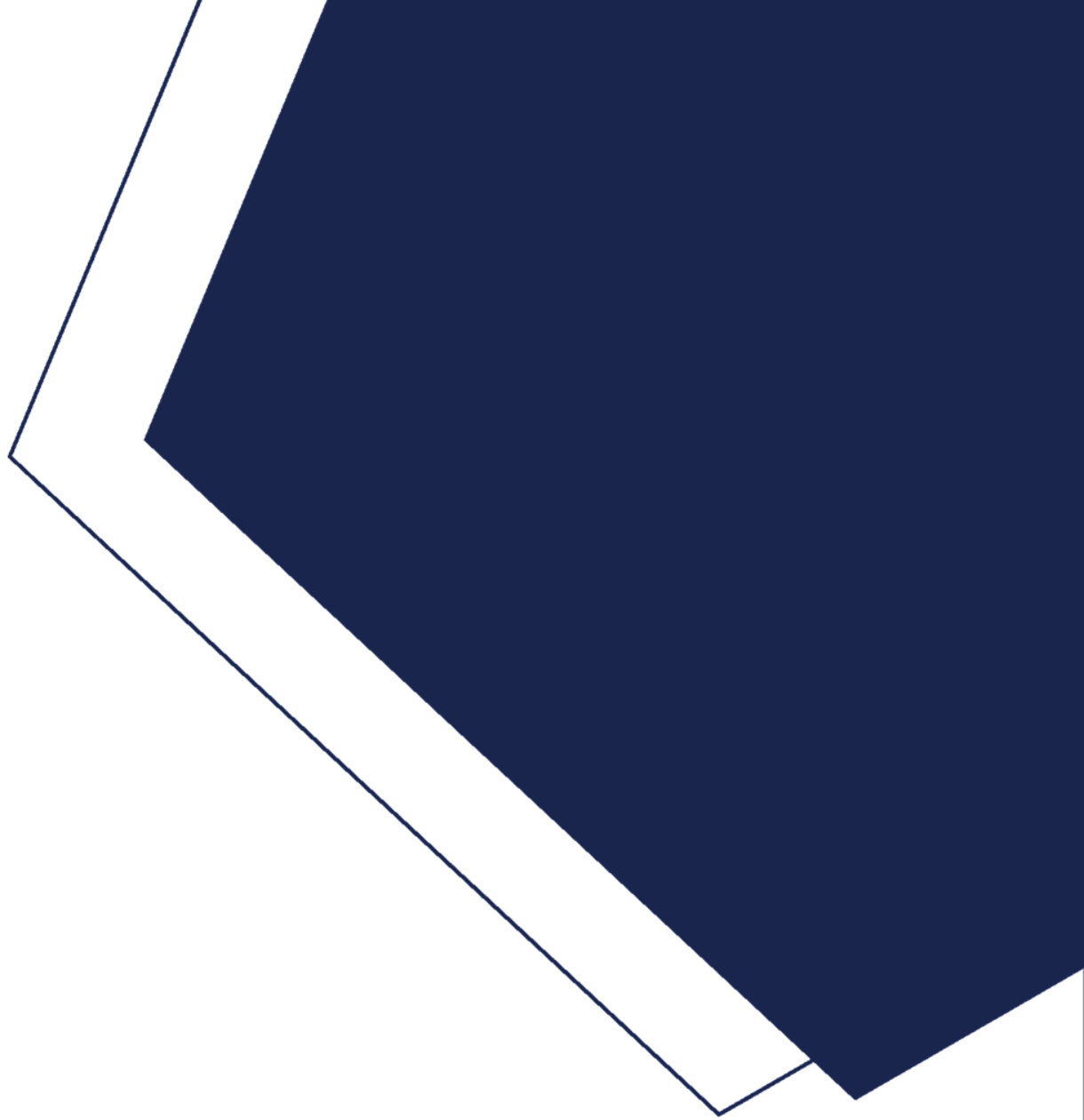
III. Market Comparables

IV. About Us

I.



Industry Trends



Inside the Industry

Market Trends and Notable Transactions

Key Industry Trends

- 1 Pharmaceutical sponsors and CROs have accelerated adoption of virtual trial applications in light of COVID-19, enabling increasingly agile trial responses
- 2 Significant transaction activity in the quality management software market as life sciences manufacturers continue to digitize operations and compliance functions
- 3 Interest in commercialization services is reaching fever pitch as pharma/med device aggressively expand new therapies pipelines amidst rising demand through the pandemic
- 4 Emphasis on robust data assets and insights-based decision making is driving M&A and investment activity across pre-market and post-market data & analytics vendors
- 5 Clinical Data Repositories are becoming the next frontier of clinical and patient data management, providing a unified view of patient health data across multiple eClinical sources
- 6 While electronic data capture (EDC) was classically used for trial data acquisition, emerging eSource technologies (ePRO / eCOA) are driving the next wave of patient data capture
- 7 There is aggressive financial sponsor interest in life sciences software, with multiple tier-one software private equity firms recently placing bets on platforms
- 8 Life sciences software vendors have taken advantage of frothy public market valuations through IPOs, joining what was once a close-knit group of publicly traded providers

In Case You Missed These Transactions

Slide

Advarra acquired Bio-Optronics <i>Clinical trial management software and other eClinical solutions</i>	11
Certara acquired Pinnacle 21 <i>CDISC submission and data management software</i>	15
Bioclinica and ERT merged to form Clario <i>Clinical endpoint and clinical imaging solutions</i>	16
Envision Pharma Group acquired doDoc <i>Document review and authoring software</i>	19
Insightful Science acquired Dotmatics <i>Scientific R&D data management platform</i>	21
Instem acquired PDS Life Sciences <i>SEND and laboratory information management solutions</i>	22
IQVIA acquired the remaining 40% of Q2 Solutions <i>Laboratory services and sample tracking software</i>	24
Komodo Health acquired Breakaway Partners <i>Life sciences market access and decision software</i>	25
Model N acquired Deloitte's life sciences assets <i>Pricing and contracting solutions business</i>	26
Carlyle acquired Saama <i>AI-based clinical analytics</i>	28
Veeva acquired Veracity Logic <i>Randomization and trial supply management software</i>	32
WCG acquired VeraSci <i>eCOA and trial outcome solutions</i>	33

Quality Management & Compliance Activity

Robust Interest As Manufacturers Undergo Rapid Digitization Initiatives

Honeywell

Honeywell Acquires Quality Management Software Vendor Sparta Systems For \$1.3 Billion

December 2020



Sparta Systems Key Stats

42

Of Top 50 Pharma Companies

2.5x

SaaS Customer Base Growth Since '17

8.4x

Estimated EV/Revenue

Transaction Rationale

Digital Transformation

Industrial Automation

Performance Management

Access to 400+ pharma and healthcare companies that Sparta has been serving on TrackWise Digital and QualityWise.ai

Combination of Honeywell's Forge performance management solution with Sparta's offerings will enhance the link between production and quality data

"We have strong conviction in the growth opportunities in the life sciences and pharmaceuticals space and in the synergies between Sparta and Honeywell both for Honeywell Connected Enterprise and Honeywell Forge as well as for Honeywell Process Solutions." Rajeev Gautam, CEO of Honeywell PM&T

Honeywell Life Sciences Initiatives

- Honeywell / Sparta acquisition review
 - Honeywell will use Sparta's QMS platform as a beachhead into the life sciences software market
- In September 2021, Honeywell continued executing on its life sciences strategy through the acquisition of Performix
 - Performix provides manufacturing execution system (MES) solutions for pharmaceutical manufacturing and biotech clients
 - Performix, in conjunction with Sparta and Forge, will enable Honeywell to provide complete production lifecycle solutions

Other QMS Transaction Activity

Company	Lead Investor	Date	Commentary
greenlight guru	JMI	May-21	Majority Recap
Qualio	TIGERGLOBAL	May-21	\$50.0 million (Series B)
COMPLIANCEQUEST <small>Quality. Compliance. Collaboration. Communication.</small>	INSIGHT PARTNERS	Sep-19	\$36.0 million (Series A)

"...combined offerings will make it easier for customers to gain critical insights from manufacturing and quality data that can improve their manufacturing processes while ensuring product quality, patient safety, and supply chain continuity." Que Dallara, president and CEO of Honeywell Connected Enterprise.

High Value Tech-Enabled Commercialization Services

Pace of M&A and Private Equity Investment Is Reaching Fever Pitch

Commercial Services Transaction Drivers

- Rising demand for new therapies amidst the pandemic is forcing pharma and medical device organizations to accelerate commercialization readiness and efforts
- Increased emphasis on outsourcing critical functions such as marketing, digital transformation, commercialization, market access and data analytics, with evidence-based solutions
- Fragmented industry provides attractive opportunity for consolidation by private equity-backed platforms
- Proprietary software and analytics offerings which enhance value of core services and drive customer stickiness
- Deep domain expertise in specific service offerings, market segments or geographies – e.g. market access / biotech

"The life sciences industry is in a period of revolution, where truly breakthrough science is being conducted at a breadth and pace like never before. As partner to the life sciences industry, our purpose is to accelerate the impact of these advancements through deep client partnerships and an evidence-first approach to strategic decision-making. The BluePrint Research Group is a highly regarded player in the life sciences space and shares our commitment to solution-oriented client partnership and a superlative client experience. We will leverage our collective history to enable our clients' success and ultimately to improve the lives of patients around the globe. We are proud to welcome their first-class team to our organization, and to continue our journey together."











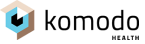


-David Fitzhenry, CEO of Trinity, on the acquisition of BluePrint

Highlight Transactions – EBITDA Multiple Premiums

Buyer	Target	Enterprise Value	Est. Multiple	Date
 NOVO HOLDINGS	 MEDICAL KNOWLEDGE GROUP	\$1.2b	20.5x EBITDA	Jan-22
 KOHLBERG & COMPANY	 TRINITY	\$1.4b	22.0x EBITDA	Nov-21
 ARES	 LOCKWOOD	\$360.0m	21.0x EBITDA	Oct-21
 EVERSANA	 INTOUCH GROUP™	\$950.0m	4.32x Revenue 19.0x EBITDA	Oct-21
 TPG	 BGB GROUP	\$760.0m	17.0x EBITDA	Oct-21
 GHO CAPITAL	 CLEARVIEW Healthcare Partners	\$730.0m	17.0x EBITDA	Sep-21
 TRINITY	 BLUEPRINT Research Group	Confidential	Confidential	Dec-20

Data & Analytics at the Core of Innovation

Continued Emphasis On Insights-Based Decision Making

Buyer	Target	Target Description	EV (Funding)	Est. Multiples	Date	Commentary
		Cloud-based data platform for healthcare and life sciences	\$7.3b	9.74x Rev. 33.2x EBITDA	Nov-21	<p><i>"The importance of leveraging data and advanced analytics to drive improved healthcare outcomes and economics continues to grow. As new partners to Inovalon, we look forward to supporting the leadership team and exceptional associates across the organization as they continue to empower customer success through data-driven healthcare."</i></p> <p>- Deven Parekh, Managing Director at Insight Partners</p>
  		Medical info & healthcare professional data network	\$750.0m (Series C, \$100.0m)	n/a (250% ARR growth)	Nov-21	<p><i>"H1 has amassed a treasure trove of data, seeking to help healthcare organizations make better, more informed and actionable decisions - data that we believe has become a must-have in today's fast-changing healthcare environment. We're excited to back such an innovative company that's helping fulfill a large and urgent market need."</i></p> <p>- Pauline Yang, Partner at Altimeter Capital</p>
		CDISC submission and data management software	\$310.0m	13.19x Rev.	Oct-21	<p><i>"With Pinnacle 21's software for high-quality clinical data standardization, we can together provide a broader portfolio of industry-leading software and technology-driven services to our customers worldwide. This transaction amplifies our capabilities to inform critical decisions that further de-risk and expedite the drug development process."</i></p> <p>- William F. Feehery, Ph.D., CEO of Certara</p>
 		Pre-market and post-market data solutions	\$3.3b (Series E, \$220.0m)	n/a	Mar-21	<p><i>"It's not going to be enough to build platforms based on incomplete data sets and it's also not going to be enough to have a complete data set that doesn't plug into existing workflows. That's where we see the biggest growth coming from in the months ahead..."</i></p> <p>- Dr. Arif Nathoo, Co-Founder and CEO of Komodo Health</p>
		Medical and scientific expert data platform	\$60.0m	6.32x 2020E ARR	Oct-20	<p><i>"The acquisition of Monoclon brings together two powerful intelligence platforms to provide best-in-class data, analytics and insight that will help biotech and pharmaceutical companies accelerate clinical research and commercialization of new drugs and therapies..."</i></p> <p>- Jason Krantz, founder and CEO of Definitive Healthcare</p>

Key Participants Across Life Sciences Software

Market Snapshot

Highlighted Companies



Inclusion Criteria

Madison Park Group (MPG) actively tracks the life sciences software landscape. Consolidation of a highly fragmented market continues, with a convergence of pre and post-market functions, coupled with submission & compliance capabilities. The segments that MPG tracks include:



- | Pre-Clinical | Clinical | Medical Affairs | Commercial |
|--|---|---|--|
| <ul style="list-style-type: none"> ✓ Animal care information system (ACIS) | <ul style="list-style-type: none"> ✓ Electronic clinical outcome assessment (eCOA) | <ul style="list-style-type: none"> ✓ Adverse event reporting | <ul style="list-style-type: none"> ✓ Channel data management |
| <ul style="list-style-type: none"> ✓ Data analysis & visualization | <ul style="list-style-type: none"> ✓ Clinical trial management system (CTMS) | <ul style="list-style-type: none"> ✓ Aggregate spend compliance | <ul style="list-style-type: none"> ✓ Commercial content management |
| <ul style="list-style-type: none"> ✓ Electronic lab notebook (ELN) | <ul style="list-style-type: none"> ✓ Electronic data capture (EDC) | <ul style="list-style-type: none"> ✓ Content management | <ul style="list-style-type: none"> ✓ Customer relationship management (CRM) |
| <ul style="list-style-type: none"> ✓ Laboratory information management systems (LIMS) | <ul style="list-style-type: none"> ✓ Electronic patient reported outcomes (ePRO) | <ul style="list-style-type: none"> ✓ Key opinion leader (KOL) management | <ul style="list-style-type: none"> ✓ Events management |
| <ul style="list-style-type: none"> ✓ R&D budgeting | <ul style="list-style-type: none"> ✓ Electronic trial master file (eTMF) | <ul style="list-style-type: none"> ✓ Medical information management | <ul style="list-style-type: none"> ✓ Master data management |
| <ul style="list-style-type: none"> ✓ SEND submissions management | <ul style="list-style-type: none"> ✓ Interactive response technology (IRT) | <ul style="list-style-type: none"> ✓ Product complaints | <ul style="list-style-type: none"> ✓ Pricing management |
| <ul style="list-style-type: none"> ✓ Toxicology resource planning | <ul style="list-style-type: none"> ✓ Risk-based monitoring (RBM) | <ul style="list-style-type: none"> ✓ Publication planning | <ul style="list-style-type: none"> ✓ Territory management |

MPG Team



Rohan Khanna
 Managing Director
rkhanna@madisonparkgrp.com
[LinkedIn](#)



Jon Adler
 Managing Director
jadler@madisonparkgrp.com
[LinkedIn](#)

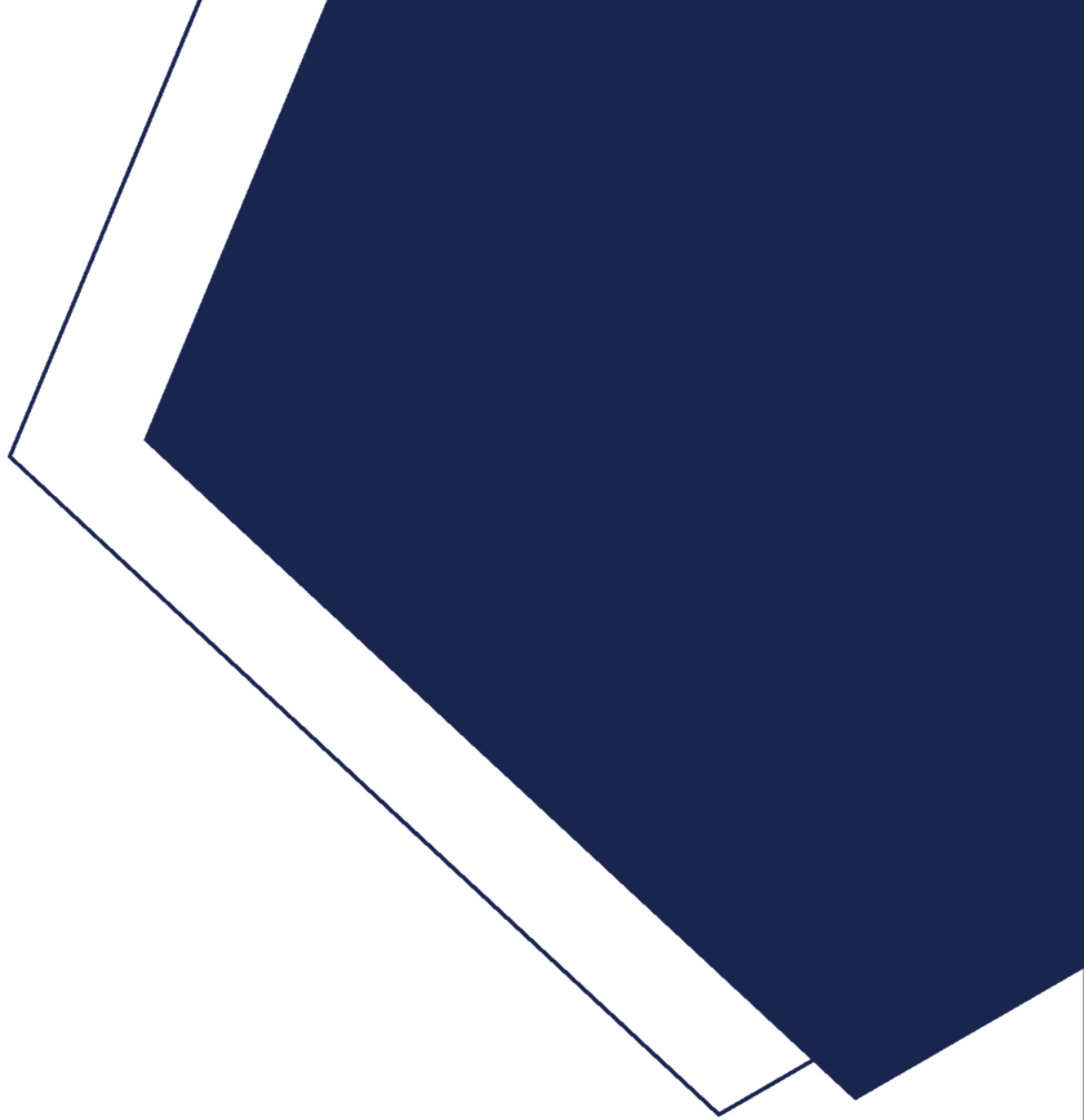


James Tomasullo
 Senior Associate
jtomasullo@madisonparkgrp.com
[LinkedIn](#)

II.



Featured Companies



Advarra

Business Overview

(\$ in millions)

Headquarters: Columbia, MD

Employees (1-Year Growth): 946 (▲17%)

Website: advarra.com

Ownership Status: PE-Backed (*Genstar Capital*)

Disclosed Acquisitions: 10 (Including Entities From Merger)



Pre-Clinical



Clinical



Medical Affairs







Commercial

Description:

Provider of institutional review board (IRB), institutional biosafety committee (IBC) and research quality compliance consulting and solutions in North America. The company serves 3,200+ research institutions, hospital systems, and academic medical centers

Select Funding / Transaction History

Date	Lead Investor	Amount
Nov-20	 BARINGS	\$133.0 million
Jul-19	 GENSTAR	\$1.3 billion (buyout)
Feb-19	 ARES	Undisclosed (debt)
Nov-17	 ARES	Undisclosed (debt)

Sources: Pitchbook, Capital IQ, corporate websites, press releases, LinkedIn, Appliedclinicaltrials.com

News & Notes

Strong M&A Appetite Leads to Growth Milestone

» A Series of Acquisitions In The First Half Of 2021

- In [July 2021](#), Advarra announced the acquisition of Watermark Research Partners, Inc., an independent data safety monitoring board (DSMB) service provider
 - With the addition of Watermark, Advarra broadens and globally expands its independent research review solutions
- In [March 2021](#), Advarra announced the acquisition of Bio-Optronics, the maker of CCTrialSuite
 - The acquisition of Bio-Optronics reinforces Advarra's continued commitment to clinical research and its objective to connect the clinical trial ecosystem
- In [January 2021](#), Advarra announced the acquisition of YourEncore, a provider of drug development and commercialization advisory and consulting services
 - Bolsters Advarra's consulting capacity, allowing it to penetrate biopharma, device manufacturers, academic medical centers, health systems, and institutions in over 50 countries

» Site Network, "Gene Therapy Ready" Reaches Growth Milestone

- In [June 2021](#), Advarra's *Gene Therapy Ready* site network became one of the largest administrators of institutional biosafety committees (IBCs), passing the 500+ registered research sites milestone

» New Chief Officers Appointed

- In [May 2021](#), Advarra announced the appointment of Jeff Sidell as CTO
 - Jeff previously worked at RDC (now part of Moody's Analytics), which he joined in 2019, and had most recently served as Chief Technology Officer
- In [December 2020](#), Advarra announced Steven Buonaiuto as CFO
 - In his new role, Buonaiuto will manage finance, contracts, and information technology functions

Anju Software

Business Overview

(\$ in millions)

Headquarters: Tempe, AZ

Employees (1-Year Growth): +300 (▲3%)

Website: anjusoftware.com

Ownership Status: PE-Backed ([Abry Partners](#))

Disclosed Acquisitions: 7



Description:

Horizontal life sciences enterprise software platform with a focus on eClinical, medical affairs and commercial technologies. The company's strategy is to consolidate vendors and create an integrated life sciences software platform

Select Funding / Transaction History

Date	Lead Investor	Amount
Mar-19	abry partners	Confidential
Jun-16	PROVIDENCE EQUITY	Confidential

News & Notes

New Product Releases Boost Data Quality and Efficiency

» Paradigm Shift In Scientific Publication Management Software With New Product Releases

- In [June 2021](#), Anju launched TrialMaster 5.1 to reduce clinical study build times
 - *Nick Campbell, Chief Revenue Officer at Anju Software*, commented “With the development of Parameterized Edit Check in the TrialMaster 5.1 platform, we believe we have solved a major bottleneck in the inability of the industry to bring more promising therapies through the clinical development process with greater speed and efficiency.”
- In [February 2021](#), Anju incorporated PUBSTRAT MAX, a content management system, into its AnjuSafe platform
 - New features include online document collaboration, built-in workflow functionality, weekly updates to journal and conference data (integrated in Anju’s ta-Scan 360 data technology platform), and an enhanced comprehensive reporting package
- In [January 2021](#), Anju released ta-Scan 360, a data platform optimizing multiple sources for integrated views of clinical trials
 - The platform includes the enhanced ability to comprise multiple sources of data into a trusted data pool without the customer needing to construct complex data warehouses
- In [November 2020](#), Anju launched RTSM Randomization Simulator, which allows statisticians at pharma sponsors and CROs to determine the best model for a clinical study’s results

» Life Sciences Innovator Joins Board of Directors

- In [November 2021](#), Steve Rosenberg, former executive at Oracle’s clinical software business, joined Anju Software’s board of directors
 - *Rosenberg*, commented, “Anju has a strong modern technology platform and significant experience in working with a wide range of Pharma and CROs globally. I look forward to helping Anju develop new solutions that will help optimize how and where to conduct trials using insights from data that is collected and analyzed.”

ArisGlobal

Business Overview

(\$ in millions)

Headquarters:	Miami, FL
Employees (1-Year Growth):	1,807 (▲5%)
Website:	arisglobal.com
Ownership Status:	PE-Backed (Nordic Capital)
Disclosed Acquisitions:	1



Pre-Clinical



Clinical



Medical Affairs



Commercial

Description:

Provider of cloud-based software solutions for pharmacovigilance and drug safety, clinical development, regulatory, and medical affairs

Select Funding / Transaction History

Date	Lead Investor	Amount
May-21	NORDIC CAPITAL	n/a
Jun-19	NORDIC CAPITAL	\$700.0 million (buyout)

News & Notes

Further Investment From Nordic With Innovation In Mind

» Leading Healthcare and Technology Investor Provides Further Investment

- In [May 2021](#), Nordic Capital announced further investment in ArisGlobal, acquiring additional shares from the founding Abbhi family
 - With this further investment, ArisGlobal will focus on innovation and automation, as well as continued investment in its talent, technology, and customer experience

» New eTMF for Cross-Platform File Sharing

- In [June 2021](#), ArisGlobal released LifeSphere eTMF, one of the first electronic Trial Master File systems that supports cross-platform file sharing

» Strategic Partnership Aimed At Automation and Integration

- In [December 2020](#), ArisGlobal announced a strategic partnership with EVERIANA
 - The partnership was initiated with the goal of safer and more effective healthcare through the digitalization of end-to-end pharmacovigilance services

» ArisGlobal Makes Key Executive Hires to Accelerate Global Growth

- In [December 2020](#), ArisGlobal made multiple key executive hires:
 - Steve Nuckols* joined ArisGlobal as Chief Revenue Officer; Nuckols brings 25 years of experience leading commercial teams, corporate growth strategy, global accounts, and general management in the Healthcare & Life Sciences sector
 - Pat Jenakanandhini*, a product executive with 15+ years' experience leading large-scale B2B products in the areas of SaaS, mobile, cloud computing, platform, CAD, BIM and content management, joined as Chief Product Officer
 - Dan Cooper* joined as Senior Vice President of Professional Services; Cooper brings 30+ years of experience in various operational and technical leadership roles with prominent technology and healthcare companies

Bruker

Business Overview

(\$ in millions)

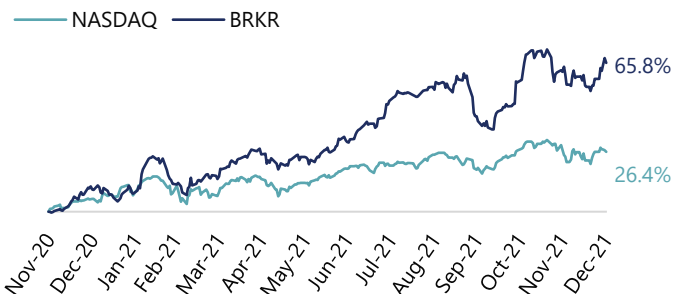
Headquarters:	Billerica, MA
Employees (1-Year Growth):	3,420 (▲7%)
Website:	bruker.com
Ownership Status:	Public (Nasdaq: BRKR)
Disclosed Acquisitions:	46
LTM Revenue	\$2,360.0



Description:

Bruker develops scientific instruments based on magnetic resonance, mass spectrometry, and X-ray technologies. The company also manufactures superconducting materials primarily used in magnetic resonance imaging, nuclear magnetic resonance, and fusion energy research

TTM December 2021 Market Pricing



Sources: Pitchbook, Capital IQ, corporate websites, press releases, LinkedIn, market data as of 12/31/2021

(1) Per company press release "Bruker Announces Acquisition of MOLECUBES NV"
 (2) Per company press release "Bruker Announces Acquisition of Canopy Biosciences"

News & Notes

Assisting In Breakthrough Discoveries With NMI Acquisition

» Key Acquisitions With Nuclear Molecular Imaging in Focus

- In [November 2021](#), Bruker announced the acquisition of Molecubes, a provider of benchtop preclinical nuclear molecular imaging (NMI) systems, for \$5.6m⁽¹⁾
 - The acquisition further solidifies Bruker's position as a top NMI solutions provider in preclinical and translational imaging research
 - Bruker's preclinical imaging products and global footprint, coupled with the modular benchtop cubes systems of Molecubes, will deliver an expansive NMI offering, accelerating worldwide adoption of preclinical NMI in academic medical centers and biopharma companies
- In [September 2020](#), Bruker announced the acquisition of Canopy Biosciences for \$29.2m⁽²⁾
 - The acquisition enhances Bruker's footprint in targeted multi-omics and fluorescence-based imaging techniques

» A Strategic Investment in Spatial Biology

- In [March 2021](#), Bruker announced the completion of its \$4.5m investment in Acuity Spatial Genomics⁽³⁾
 - The investment will allow Bruker to accelerate the pathway for enabling scientific discoveries in basic and translational research leveraging Acuity Spatial Genomics' innovative technologies

» Bruker Announces Two New Revolutionary Tools at eXceed Symposia 2021

- In [June 2021](#), at Bruker's virtual 4D-Proteomics eXceed Symposium, the company announced the launch of two new *timsTOF* instruments: *timsTOF SCP* and *TimsTOF Pro 2*
 - With the launch of these two new tools, Bruker continues to develop unbiased proteomics, epiproteomics/PTM characterization, and unbiased deep multiomic biomarker discoveries

Certara

Business Overview

(\$ in millions)

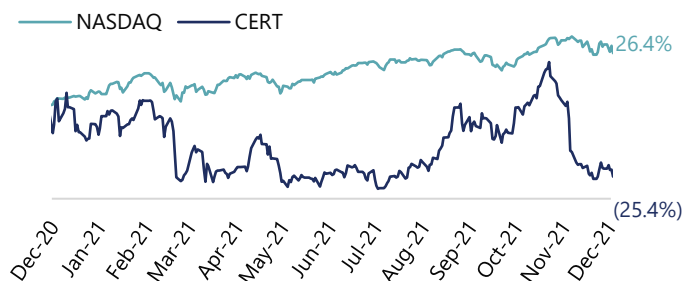
Headquarters:	Princeton, NJ
Employees (1-Year Growth):	960 (▲10%)
Website:	certara.com
Ownership Status:	Public (Nasdaq: CERT)
Disclosed Acquisitions:	14



Description:

Provider of drug development technology and consultancy services spanning the discovery, preclinical and clinical stages of drug development. The company also provides software for drug modeling and simulation

TTM December 2021 Market Pricing



Sources: Pitchbook, Capital IQ, corporate websites, press releases, LinkedIn, market data as of 12/31/2021

1) Per company press release, "Certara Completes Acquisition of Pinnacle 21"
 2) Per company press release, "Certara Announces Closing of Public Offering of Common Stock"
 3) Per company press release "Certara Announces Launch of Initial Public Offering"

News & Notes

Certara Goes On Acquisition Spree After Successful IPO

» New Acquisitions Increase Global Footprint

- In [October 2021](#), Certara completed its acquisition of Pinnacle 21, a provider of clinical data fitness, regulatory compliance, and submission readiness SaaS solutions, for \$310.0m⁽¹⁾
 - William F. Feehery, Ph.D., CEO of Certara*, commented, "With Pinnacle 21's software for high-quality clinical data standardization, we can together provide a broader portfolio of industry-leading software and technology-driven services to our customers worldwide. This transaction amplifies our capabilities to inform critical decisions that further de-risk and expedite the drug development process."
- In [June 2021](#), Certara announced the acquisition of Insight Medical Writing, a regulatory services and medical writing provider
 - The acquisition expands Certara's regulatory science capabilities in the UK and Europe
- In [March 2021](#), Certara announced the acquisition of AUTHOR!, a provider of medical writing and statistical analysis of clinical trial data

» First-Of-Its-Kind Secondary Pharmacology Intelligence Software

- In [May 2021](#), Certara announced the launch of its Secondary Intelligence software
 - Software that quantitatively projects the risk of adverse effects and safety issues derived from secondary pharmacology that may disrupt the clinical development of a drug

» IPO & Current Performance

- In [December 2020](#), Certara raised \$668.0m in its initial public offering on the Nasdaq Stock Exchange under the ticker symbol CERT⁽³⁾
 - A total of 29.1 million shares were sold at a price of \$23 per share⁽³⁾
- On December 31, 2021, Certara stock traded at \$28.42, up ~24% from its IPO price

Clario

Business Overview

(\$ in millions)

Headquarters: Philadelphia, PA
 Employees (1-Year Growth): 6,429 (▲16%)
 Website: clario.com
 Ownership Status: PE-Backed ([Cinven](#) / [Ares](#))
 Disclosed Acquisitions: 28



Description:

Provider of clinical development technologies. The company's suite of eClinical solutions span patient engagement, risk-based monitoring, randomization, EDC, CTMS, medical imaging, and cardiac safety

Select Funding / Transaction History

Date	Lead Investor	Amount
Apr-21		n/a
Jan-21		\$905.0 million (debt)
Jan-20		n/a (buyout)
Apr-16		\$1.8 billion (buyout)

News & Notes

ERT and Bioclinica Rebrand to Become Clario

» Combination of Powerhouse Clinical Development Technologies

- In [April 2021](#), Bioclinica and ERT announced the close of its merger, valued at \$6.0b with total revenues of \$800.0m⁽¹⁾
 - The merger combines ERT's experience in eCOA, cardiac safety, respiratory, and wearables with Bioclinica's imaging, eClinical software, and drug safety solutions
 - Nordic and Astorg will each maintain 40% stakes with Novo and Cinven holding 10% each
 - ERT is currently ~70% recurring revenue and 30% derived from services
- In [November 2021](#), the combined company rebranded to Clario
 - Joe Eazor, CEO of Clario*, commented, Clario is much more than the merger of two companies. We have combined decades of scientific expertise and unrivaled global scale to create the broadest endpoint technology platform poised to expedite the clinical trial process, simplify trial experiences and unlock composite endpoints. Our purpose is clear – we transform lives by unlocking better evidence."

» Two New Solutions Announced

- In [May 2021](#), Bioclinica announced a specialized program for the adjudication of adverse events that could result from COVID-19 infection
 - This solution combines an experienced adjudication management team and medical expertise to help evaluate and determine if COVID-19 endpoint adjudication pathways should be added
- In [February 2021](#), ERT announced a new solution for facilitating the collection, processing and analysis of photos and audio as part of clinical trial eCOA assessments
 - This solution delivers a holistic view of a patient's condition, providing a more convenient tool for site personnel to monitor any changes over time, while streamlining any patient compliance associated with data collection

Dassault Systèmes / Medidata

Business Overview

(\$ in millions)

Headquarters:	Vélizy-Villacoublay, France
Employees (1-Year Growth):	+17,000 (▲4%)
Website:	3ds.com , medidata.com
Ownership Status:	Public (PAR: DSY)
Disclosed Acquisitions:	61 (Dassault + Medidata)
LTM Revenue:	\$5,630.0



Pre-Clinical



Clinical



Medical Affairs

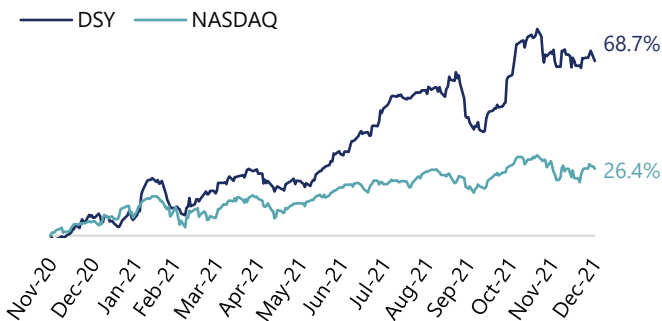


Commercial

Description:

Provider of 3D design and engineering software. The company's products serve multiple regulated industries, such as aerospace and defense, industrial equipment, marine and offshore, and consumer goods

TTM December 2021 Market Pricing



Source: Pitchbook, Capital IQ, corporate websites, press releases, LinkedIn, market data as of 12/31/2021

News & Notes

Software Additions and Partnerships Cultivate Continued Growth

» New Additions to Suite of Software

- In [June 2021](#), Medidata announced the launch of the Medidata Decentralized Clinical Trials (DCT) Program, offering full decentralization across the clinical trial continuum through a set of unified, secure technologies
 - The Medidata DCT Program has the capability to capture participant data remotely at any time, from anywhere
 - The platform aggregates the collected data and monitors for quality assurance, mitigating risk to ensure patient safety
- In [June 2021](#), Medidata announced the launch of myMedidata Registries, a new technology that expands and enhances the myMedidata patient portal
- In [April 2021](#), Medidata announced Medidata Risk Management, the latest addition to its Risk-Based Quality Management (RBQM) suite

» Strategic Partnerships Build Upon Shared Mission

- In [March 2021](#), Medidata announced its expanded partnership with Karyopharma Therapeutics (Nasdaq: KPTI)
 - Glen de Vries, co-founder and co-CEO of Medidata*, commented, "Medidata is pleased to play a key role in supporting Karyopharm's mission of bringing novel therapies to market, providing hope for patients. This agreement is a clear demonstration of our shared mission to advance analytics and technology to make a difference in health care."
- In [February 2021](#), Medidata announced its expanded partnership with Horizon Therapeutics plc (NASDAQ: HZNP)
 - Tarek Sherif, co-founder and co-CEO of Medidata*, commented, "Medidata's goal is to facilitate Horizon's path forward using advanced analytics and technology. We're looking forward to further supporting the company's vision, especially as it relates to improving efficiencies and speeding the completion of clinical studies."

Definitive Healthcare

Business Overview

(\$ in millions)

Headquarters:	Framingham, MA
Employees (1-Year Growth):	626 (▲6%)
Website:	definitivehc.com
Ownership Status:	Public (Nasdaq: DH)
Disclosed Acquisitions:	5



Pre-Clinical



Clinical



Medical Affairs



Commercial

Description:

A commercial intelligence software solutions provider for the healthcare industry. The company's solutions transform data and analytics into comprehensive intelligence, optimizing go-to-market planning and market execution

Select Funding / Transaction History

Date	Lead Investor	Amount
Sep-21	Initial Public Offering	\$420.0 million
Aug-19	OWL ROCK	\$176.4 million (debt)
Jun-19	 Advent International GLOBAL PRIVATE EQUITY	n/a (debt)

Sources: Pitchbook, Capital IQ, corporate websites, press releases, LinkedIn

(1) Per company press release "Definitive Healthcare Announces Pricing of Follow-On Offering"

(2) "Definitive Healthcare Announces Closing of Public Offering" (Businesswire, 9/20/2021)

News & Notes

Successful IPO and Follow-On Offering to End 2021

» Successful IPO Leads to Follow-On Offering

- In [November 2021](#), Definitive Healthcare raised \$396.0m in its follow-on offering on the Nasdaq Stock Exchange⁽¹⁾
- In [September 2021](#), Definitive Healthcare raised \$420.0m in its initial public offering on the Nasdaq Stock Exchange under the ticker symbol DH ⁽²⁾
 - A total of 15.5 million shares were sold at \$27 per share

» Enhanced Scientific Expert Data and Insights with Monocl Acquisition

- In [October 2020](#), Definitive Healthcare announced the acquisition of Monocl, a cloud-based provider of medical and scientific expert data and insights
 - The acquisition expands Definitive's support of clients within its life sciences segment by adding Monocl's analytics and data assets with the goal of commercializing innovative drugs and therapies
 - Jason Krantz, founder and CEO of Definitive Healthcare*, commented, "The acquisition of Monocl brings together two powerful intelligence platforms to provide best-in-class data, analytics and insight that will help biotech and pharmaceutical companies accelerate clinical research and commercialization of new drugs and therapies."

» No Time Wasted After Acquisition with New Product Announcement

- In [March 2021](#), Definitive Healthcare announced the availability of Monocl Professional Claims Extension
 - This new product incorporates clinical insights from medical claims data providing enhanced analysis of patient interactions
- In [February 2021](#), Definitive Healthcare announced significant enhancements to its solution suite for biopharma companies and medical device manufacturers
 - These enhancements provide new real-time insights and comprehensive market data, helping clients accelerate their go-to-market strategies

Envision Pharma Group

Business Overview

(\$ in millions)

Headquarters:	England, U.K.
Employees (1-Year Growth):	766 (▲6%)
Website:	envisionpharmagroup.com
Ownership Status:	PE-Backed (GHO Capital)
Disclosed Acquisitions:	5



Pre-Clinical



Clinical



Medical Affairs



Commercial

Description:

Provider of technology and scientific communication solutions to the life sciences community. The company's medical affairs offerings include publication planning, project management and journal databases

Select Funding / Transaction History

Date	Lead Investor	Amount
Nov-20		n/a (buyout)
Jul-16	ARDIAN	\$368.0 million (buyout)
Jun-13		n/a (buyout)
Apr-08		n/a (buyout)

Sources: Pitchbook, Capital IQ, corporate websites, press releases, LinkedIn

(1) Per company press release "Envision Pharma Group Acquires Two Labs to Advance its Position as a Global Strategic Partner to Pharma"

News & Notes

Expansion of iEnvision Platform and New Head of Technology

» New Acquisition Adds Updated Feature to iEnvision

- In [March 2021](#), Envision announced its acquisition of doDOC, enabling document collaboration on its global medical affairs platform iEnvision
- In [November 2020](#), Envision announced the acquisition of Two Labs, a provider of market-leading commercialization, strategic consulting, market access, and market intelligence solutions

» 90TEN Expands to U.S. Market With Kate Paxton as Head

- In [October 2021](#), global healthcare communications consultancy 90TEN, a subsidiary of Envision, appointed Kate Paxton as its U.S. Head
 - David Thompson, CEO of Envision Pharma Group, commented "Kate's long history of building strategic and creative programs for healthcare clients of every size and scope – in addition to her deep understanding of how agencies grow and thrive – makes her ideally suited to lead 90TEN through this next, exciting phase."*

» Two Labs Pharma and Parent Company Envision Pharma Launch MSL Solutions

- In [June 2021](#), Envision and its subsidiary Two Labs Pharma Services launched MSL Solutions
 - The new solution provides physicians the ability to engage in conversations with trained scientific personnel on a peer level to ensure critical patient needs are addressed

» New Global Head of Envision Technology Solutions

- In [March 2021](#), Envision Pharma Group appointed Manish Goel as Global Head of Envision Technology solutions
 - David Thompson, CEO of Envision Pharma Group, commented "With his technology pedigree, healthcare experience, and impressive track record, we are delighted to have Manish join Envision. As a proven leader, we look forward to embracing his tremendous expertise in writing the next chapter for iEnvision – establishing it as the gold standard for the medical affairs function as we identify, invest, and develop capabilities that enable us to spread beyond our medical affairs client base."*

Eversana

Business Overview

(\$ in millions)

Headquarters:	Milwaukee, WI
Employees (1-Year Growth):	2,045 (▲18%)
Website:	eversana.com
Ownership Status:	PE-Backed (JLL & Water Street)
Disclosed Acquisitions:	15



Description:

Provider of commercialization software and services for patient engagement, market pricing and access, branding, and channel partner distribution. Eversana was formed as a platform between JLL Partners and Water Street Healthcare Partners. In October 2018, the two investment groups merged Dohmen Life Sciences Services, The Access Group, Alliance Life Sciences, Health Strategies Group, Triplefin, and Patient Experience Project

Select Funding / Transaction History

Date	Lead Investor	Amount
Oct-18	 	n/a (Platform Creation)

News & Notes

Acquisitions & Partnerships Are Main Growth Contributors in 2021

» Reinventing Commercial Approaches With Patients and Clients In Mind

- In [October 2021](#), Eversana completed its acquisition of Intouch Group for \$950.0m implying a 19.0x EV/EBITDA valuation⁽¹⁾
 - Jim Lang, CEO of Eversana, commented "With the added power of Intouch and millions more invested in data, analytics and digital transformation, we are reinventing commercial approaches for the benefit of our clients and their patients."*
- In [October 2021](#), Eversana announced the acquisition of Protean, a market access healthcare consulting firm delivering insights into strategic planning and implementation
 - The acquisition strengthens Eversana's integrated commercial services platform, enhancing the data and analytics used to tackle specific barriers in pricing, access, reimbursement, promotion, adherence, or delivery challenges in the global life sciences industry
- In [July 2021](#), Eversana announced the acquisition of Accelera Canada
 - With this acquisition, Eversana continues to scale its global footprint in commercialization services, while incorporating decades of experience in patient advocacy and market access

» EVERSANA COMPLETE Leads to Increased Partnerships

- In [November 2021](#), Eversana announced its partnership with Q BioMed Inc. to accelerate the rollout of Strontium89, Q BioMed's FDA-approved cancer bone palliation radiotherapy
 - The partnership allows Q BioMed to leverage the *EVERSANA COMPLETE Commercialization* model to underpin the product's launch
- In [June 2021](#), Eversana announced partnership with U.K. based GENinCode
 - The partnership allows GENinCode to access the U.S. market with its portfolio of polygenic cardiovascular disease products
- In [May 2021](#), Eversana announced its partnership with MedRhythms, a Portland-based digital therapeutics company
 - Together, they will launch and commercialize *MR-001*, MedRhythms' patented software-based medical device designed to treat chronic stroke walking deficits

Insightful Science

Business Overview

(\$ in millions)

Headquarters: San Diego, CA

Employees (1-Year Growth): +100 (▲42%)

Website: insightfulscience.com

Ownership Status: PE-Backed ([Insight Partners](#))

Disclosed Acquisitions: 8



Description:

Provider of visualization, graphics, and bioinformatics data management solutions to the scientific research community. Insightful Sciences is the parent entity of four brands across two divisions, Data Analysis & Visualization and Bioinformatics

Select Funding / Transaction History

Date	Lead Investor	Amount
Apr-21		\$187.9 million (debt)
Jul-19		n/a (debt)
Apr-19		n/a (debt)
Nov-17		n/a (buyout)

News & Notes

Acquisitions Expand Company Footprint in Laboratory Data

» Numerous Acquisitions Advance Mission to Become Scientific Research Information Hub

- In [December 2021](#), Insightful Science acquired Protein Metrics, a proteomics analysis software provider
 - The acquisition addresses the data analysis bottlenecks associated with protein studies
- In [November 2021](#), Insightful Science acquired LabArchives
 - LabArchives is a cloud-based scientific research data management software application intended for organizing and sharing laboratory data and information
 - The combined company will account for more than 2 million users and 5,000 customers worldwide, making it one of the world's largest cloud-based scientific R&D solutions
 - LabArchives already integrates with the company's current products, GraphPad and SnapGene
- In [September 2021](#), Insightful Science acquired De Novo Software, the developer of the flow cytometry data analysis solution *FCS Express*
 - By Inheriting *FCS Express*, Insightful Science continues to add to its growing portfolio of scientific research data solutions, helping over 1 million scientists worldwide gain data-driven insights
- In [March 2021](#), Insightful Science acquired Dotmatics, a developer of cloud-based unified scientific informatics software solutions
 - By integrating Dotmatics' cloud-first enterprise data management solution, Insightful Science creates an end-to-end scientific research application, accelerating scientific innovation and fostering enhanced efficiency within the laboratory

Instem

Business Overview

(\$ in millions)

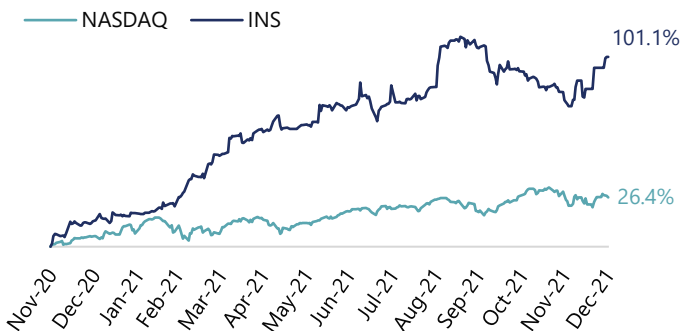
Headquarters:	England, U.K.
Employees (1-Year Growth):	293 (▲6%)
Website:	instem.com
Ownership Status:	Public (LSE: INS)
Disclosed Acquisitions:	9
LTM Revenue:	\$47.0



Description:

Provider of drug research & development solutions for the pre-clinical and clinical markets. Products include animal care information systems, electronic lab notebooks, genetic toxicology and regulatory information management

TTM December 2021 Market Pricing



Source: Pitchbook, Capital IQ, corporate websites, press releases, LinkedIn, market data as of 12/31/2021

(1) Per company press release "Instem Acquires PDS Life Sciences"

(2) Per company press release "Instem Announces Acquisition of The Edge"

News & Notes

Instem Extends Its Reach Within Discovery R&D

» Acquisitions Add to Suite of R&D Solutions and Nonclinical Data Reporting (SEND)

- In [September 2021](#), Instem announced the acquisition of PDS Life Sciences, a SaaS and managed services provider for SEND reporting (Standard for Exchange of Nonclinical Data) and Laboratory information management solutions, for \$15.6m⁽¹⁾
 - Gregor Grant Executive, Vice President at Instem, commented "For decades, both Instem and PDS have been providing innovative solutions that help organizations accelerate non-clinical development, and we have always been impressed with their highly experienced team. This acquisition will enable us to concentrate our investment into a single line of products, and we are looking forward to advancing what will be a very exciting roadmap."*
- In [March 2021](#), Instem announced the acquisition of d-wise, a provider of clinical trial analysis and data anonymization solutions
 - Phil Reason, CEO at Instem, commented "The d-wise organization is well known for its drive to transform the life sciences through open and flexible access to data. They act as strategic advisors to many of Instem's existing clients and are one of the leading IT solution engineering and integration partners in the market today."*
- In [March 2021](#), Instem announced the acquisition of The Edge Software Consultancy, a provider of drug discovery R&D software, for \$11.5m⁽²⁾

» Instem Expands *In Silico* Technology Amid Growing Demand

- In [November 2021](#), Instem announced further enhancement of its *Predict™* In Silico Toxicology service to meet growing demand
 - To address new regulatory guidance, Instem added four new services to its portfolio: Establishing Acceptable Limits for N-nitrosamines, Assessment for Abuse Liability, Assessing Bioactivation, SD File Generation
- In [December 2020](#), Instem announced the launch of its *Predict™* In Silico Toxicology service
 - Predict™* leverages Leadscope's (an Instem company) computational database solutions and incorporates them with expert scientific review, delivering unbiased, high-quality assessments of chemical safety

IntegriChain

Business Overview

(\$ in millions)

Headquarters:	Philadelphia, PA
Employees (1-Year Growth):	423 (▲24%)
Website:	integrichain.com
Ownership Status:	PE-Backed (Accel-KKR)
Disclosed Acquisitions:	4



Description:

Provider of commercial data and analytics solutions for life sciences manufacturers to derive insights from payer, patient and distribution data. The company services organizations in the pharma, biopharma, generics and medtech sectors

Select Funding / Transaction History

Date	Lead Investor	Amount
Feb-16		n/a (buyout)
Sep-15		\$6.0 million (debt)
Apr-11		\$3.0 million (Series C)
Jul-09		\$2.0 million (Series B)
Oct-06		\$2.1 million (Series A)

Sources: Pitchbook, Capital IQ, corporate websites, press releases, LinkedIn

News & Notes

Numerous Key Hires In 2021

» Safety in Mind With Datavant Partnership

- In [January 2021](#), IntegriChain entered a preferred partnership with Datavant, a developer of patient privacy software solutions
 - IntegriChain will utilize Datavant's patient de-identification and tokenization solutions to enhance the quality and security of patient-level data asset integration
 - Josh Halpern, co-founder and Executive Vice President of IntegriChain*, commented, "Datavant has developed an unrivalled network of data providers that are utilizing its tokenization technology. We're excited to offer our Life Sciences customers new ways to compliantly and securely integrate their ecosystems of patient-level data assets while also gaining better control over integration quality."

» IntegriChain Makes Key Hires to Expand Services Business

- In [July 2021](#), IntegriChain announced the appointment of seasoned industry veterans to key roles to support expansion of its Advisory and Managed Services businesses
 - Jessica Chung, Director, Advisory Services: She joins IntegriChain after nearly 15 years at Teva Pharmaceuticals in various Market Access reporting and analytics roles
 - Thomas Benton, Senior Manager, Advisory Services: He joins IntegriChain from Deloitte, where he served in the Risk & Financial Advisory life sciences practice
 - Benjamin Fanelli, Senior Manager, GP Advisory: Prior to joining IntegriChain, he served in Government Pricing for manufacturing at Lupin U.S. and previously held positions in the Highpoint and EY consulting practices
 - Samer Allabadi, Senior Director, Channel and Patient Advisory: He joins IntegriChain from Capgemini and will partner with Trade and Patient Access teams on key data mining, analytics, and visualization projects
 - Brittany Honeycutt, Director, Gross-to-Net Managed Services: She has more than nine years of industry experience in gross-to-net and six year in servicing Life Sciences customers on a managed services offering at Deloitte

IQVIA

Business Overview

(\$ in millions)

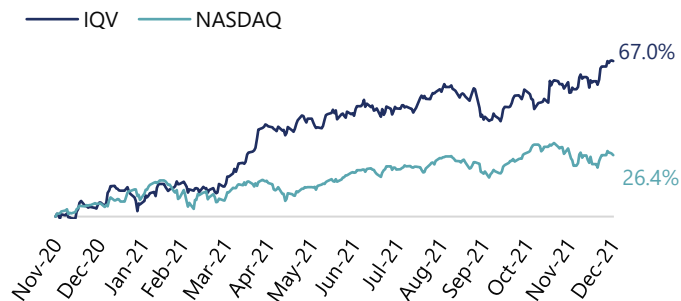
Headquarters:	Durham, NC
Employees (1-Year Growth):	+64,000 (▲10%)
Website:	iqvia.com
Ownership Status:	Public (NYSE: IQV)
Disclosed Acquisitions:	90
LTM Revenue:	\$13,536.0



Description:

Comprehensive provider of software and CRO services to the life sciences market. The company's technology offerings horizontally span pre-market and post-market functions such as clinical, manufacturing, medical affairs and commercial

TTM December 2021 Market Pricing



Sources: Pitchbook, Capital IQ, corporate websites, press releases, LinkedIn, Argus Equity Research, market data as of 12/31/2021
 (1) Valuation via Pitchbook

News & Notes

IQVIA Continues Acquisition Spree

» Recent Acquisitions And Investments – Many in Europe

- Although IQVIA does not typically disclose its transactions through press releases, we have identified the following transactions since the release of MPG's October 2020 market update report:
 - In [September 2021](#), IQVIA announced the acquisition of Davaso (claims/billing services)
 - In August 2021, IQVIA announced the acquisition of DMD Marketing (multi-channel marketing)
 - In July 2021, IQVIA announced the acquisition of Evigrade (healthcare research) for \$5.4m⁽¹⁾
 - In [April 2021](#), IQVIA announced the acquisition of the remaining 40% stake in Q2 Solutions (laboratory services and biospecimen tracking software)
 - In March 2021, IQVIA announced the acquisition of Kairos (biomedical research portal)

» New Products Driven By Insights

- In [June 2021](#), IQVIA introduced Clinical Data Analytics Suite (CDAS), a new SaaS-based clinical data analytics platform, standardizing the process of combining structured and unstructured data from clinical trials
 - This platform incorporates A.I. and machine learning to increase the speed of predictive analytics in clinical trials to ensure viable decision making and compliance with all regulatory requirements
- In [April 2021](#), IQVIA announced the launch of Connected Intelligence™, further integrating IQVIA's portfolio of analytical and data capabilities
 - This solution helps accelerate global clinical research studies by connecting proper insights and resources, providing a new approach for increasing innovations and scientific breakthroughs in the healthcare industry

Komodo Health

Business Overview

(\$ in millions)

Headquarters:	San Francisco, CA
Employees (1-Year Growth):	473 (▲61%)
Website:	komodohealth.com
Ownership Status:	VC-Backed (Tiger Global)
Disclosed Acquisitions:	2



Description:

Komodo is a provider of a healthcare insights platform utilizing artificial intelligence to provide data-driven tools that enable healthcare and life sciences industries to enhance patient care

Select Funding / Transaction History

Date	Lead Investor	Amount
Mar-21	TIGERGLOBAL	\$220.0 million (Series E)
Jan-21	ICONIQ	\$44.0 million (Series D)
Aug-19	andressen.horowitz	\$50.0 million (Series C)
Jun-18	n/a	\$12.5 million (Series B)
Mar-15	IA VENTURES	\$1.0 million (Seed)

Sources: Pitchbook, Capital IQ, corporate websites, press releases, LinkedIn

News & Notes

Executing on Acquisition and Partnership Initiatives

» Inorganic Initiatives in Play Post Series D/E

- In [July 2021](#), Komodo announced the acquisition of Breakaway Partners, a developer of market access and decision software for the life sciences industry
 - The acquisition integrates Komodo’s Healthcare Map™ with Breakaway Partners’ automated software solutions for tracking formulary changes, medical and pharmacy policy criteria, and payer coverage, providing real-time insights worldwide
- In [January 2021](#), Komodo announced the acquisition of Mavens, a developer of cloud-based medical information solutions and Salesforce consulting services to tackle commercialization challenges and streamline patient journeys
 - Arif Nathoo, MD, CEO and co-founder of Komodo Health*, commented, “This acquisition disrupts the status quo, unlocking a fundamentally different opportunity for life sciences companies to gain access to differentiated insights through technology. Purchasing fragmented and costly data assets, custom solutions, and expensive consulting projects will be a thing of the past as Komodo Health delivers a seamless, data-driven platform across R&D, Commercial, Medical Affairs and Patient workflows.”

» New Partnership Enhances Clinical Development

- In [March 2021](#), Komodo announced an agreement with Janssen Research & Development, LLC to accelerate clinical development using real-world data and AI software
 - The partnership allows for optimization of site and patient selection for clinical trials

» Bride Brings 20 Years of Experience to the CFO Role

- In [March 2021](#), Komodo announced *Laurent Bride* as the company’s new Chief Technology Officer
 - Arif Nathoo, MD, CEO and co-founder of Komodo Health*, commented, “Laurent’s industry-leading expertise will help grow our cloud-based enterprise platform, integrating it with Komodo’s Healthcare Map™ to transform systems of record into systems of insight that will provide faster and more efficient ways to get life-saving therapies to the patients who need them most.”

Model N

Business Overview

(\$ in millions)

Headquarters:	San Mateo, CA
Employees (1-Year Growth):	1,212 (▲6%)
Website:	modeln.com
Ownership Status:	Public (NYSE: MODN)
Disclosed Acquisitions:	5
LTM Revenue:	\$193.5



Pre-Clinical



Clinical



Medical Affairs

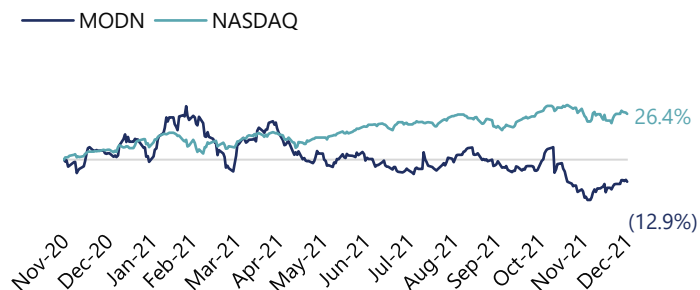


Commercial

Description:

Enterprise revenue management and configure-price-quote (CPQ) solutions to the life sciences, manufacturing and high-tech industries. Pharma products include pricing management and provider / payer management

TTM December 2021 Market Pricing



Sources: Pitchbook, Capital IQ, corporate websites, press releases, LinkedIn, market data as of 12/31/2021

(1) Model N press release "Model N to Acquire Deloitte's Life Sciences Price and Contracting Solutions Business"

News & Notes

Finding Growth Opportunities Through Collaboration

» New Deal Management Solution Increases Efficiency

- In [June 2021](#), Model N announced the availability of *Deal Management for Life Sciences*, a new solution part of the Model N Revenue Cloud for Life Sciences
 - This solution delivers real-time intelligence data with speed and transparency among providers and distributors in the life sciences industry
 - Its capabilities enable enhanced collaboration between every aspect of commercial transactions, increased visibility into transactions and approval outcomes, reduced risk of mispricing, and fully compliant processes

» Enabling Data-Powered Insights Through Scalable Technology and Services

- In [April 2021](#), Model N announced a strategic life sciences industry partnership with Global Pricing Innovations (GPI), a provider of analytics, insights, and integrated commercial strategy development solutions
 - The partnership combines Model N's experience in global price management and international reference pricing, with GPI's pricing data and analytics, creating a deeply-integrated optimal solution

» Acquisition of Deloitte's Life Sciences Pricing & Contracting Technology

- In [December 2020](#), Model N announced it entered into a definitive agreement to acquire Deloitte's life sciences pricing and contracting solutions business and underlying technology for \$60.0m ⁽¹⁾
 - The acquisition positions Model N's portfolio to better serve a larger segment of the market
 - Jason Blessing, President and CEO of Model N*, commented, "We are very excited to welcome Deloitte's life sciences pricing and contracting solutions customers and employees to the Model N community. We believe the acquisition of this business allows us to offer revenue management to the broader life sciences market. Deloitte's cloud software and expert services solution are purpose built to help companies scale from pre-commercial to billion-dollar enterprises. Model N has not historically gone after the pre-commercial segment, so this is an exciting addition to our total addressable market."

Oracle

Business Overview

(\$ in millions)

Headquarters:	Austin, TX
Employees (1-Year Growth):	+213,000 (▲4%)
Website:	oracle.com
Ownership Status:	Public (Nasdaq: ORCL)
Disclosed Acquisitions:	133
LTM Revenue:	\$40,840.0



Pre-Clinical



Clinical



Medical Affairs

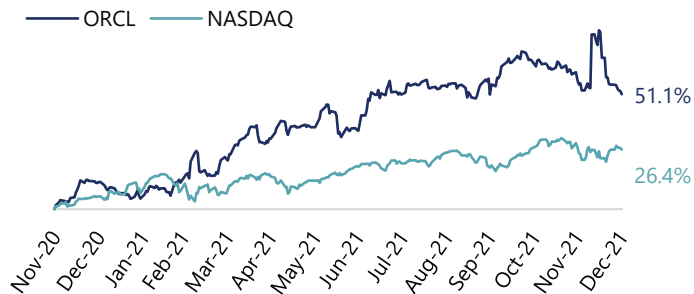


Commercial

Description:

Provider of on-premise and cloud-based enterprise software applications and platform services. The company has life sciences specific offerings, including clinical trial management and pharmacovigilance

TTM December 2021 Market Pricing



Sources: Pitchbook, Capital IQ, corporate websites, press releases, LinkedIn, market data as of 12/31/2021

(1) Per company press release "Oracle Buys Cerner"

News & Notes

Aggressive Push Into Healthcare Through Landmark Acquisition

» Big Ticket Acquisition to End the Year

- In [December 2021](#), Oracle announced an agreement to acquire Cerner for \$28.3 billion⁽¹⁾
 - The acquisition allows Oracle to continue its goal toward lower overall healthcare costs and modernizing electric health care records on secure cloud applications

» Saama Enters into Partnership With Oracle

- In [March 2021](#), Oracle and Saama formed a technology partnership
 - The collaboration is intended to streamline clinical trial data flow with the goal of increasing insights and reducing R&D timeline
- In [January 2021](#), Oracle and Cognizant announced the integration of Cognizant's Shared Investigator Platform (SIP) with Oracle Health Science solutions
 - The integration will help standardize administrative tasks and processes into one unified system, with the goal of reduced study startup time and streamlined clinical trial management

Saama Analytics

Business Overview

(\$ in millions)

Headquarters:	Campbell, CA
Employees (1-Year Growth):	1,287 (▲19%)
Website:	saama.com
Ownership Status:	PE-Backed (Carlyle)
Disclosed Acquisitions:	3



Pre-Clinical



Clinical



Medical Affairs



Commercial

Description:

Provider of an enterprise platform intended to assist medical companies regarding business risk decisions by offering data analytics services improving business outcomes and reducing risk

Select Funding / Transaction History

Date	Lead Investor	Amount
Oct-21	CARLYLE	\$430.0 million (buyout)
Apr-20	 Western Alliance Bancorporation	\$4.6 million (debt, PPP)
Mar-19	 PERCEPTIVE ADVISORS	\$40.0 million (growth equity)
Nov-17	 CARRICK Investing more than capital	\$35.7 million (Series A)

Sources: Pitchbook, Capital IQ, corporate websites, press releases, LinkedIn

(1) Per company press release "Carlyle and Leading Healthcare-Focused Venture Funds Announce Strategic Growth Investment"

News & Notes

Strategic Growth Investment From Carlyle Fuels AI and R&D

» Carlyle Provides Strategic Growth Investment

- In [October 2021](#), Saama was acquired for \$430.0m by an investor group led by The Carlyle Group⁽¹⁾
 - The acquisition will enable Saama to expand upon its AI-driven data management and analytical capabilities, and accelerate its strategic initiatives by investing further in AI research and development
 - The acquisition comes after Saama collaborated with Pfizer to accelerate its vaccine trials for COVID-19
 - Joe Brees, Managing Director at Carlyle*, commented "A big part of our partnership with Saama is our belief that these types of efficiencies which were deployed to accelerate the Pfizer COVID-19 vaccine trial should be broadly deployed to all clinical trials across the industry, because the approach saves money and helps get drugs to market faster."

» Two Big Collaborations Announced in March

- In [March 2021](#), Saama announced a strategic partnership with Datavant to map patient journeys across different real-world and clinical datasets through Saama's Life Science Analytics Cloud (LSAC)
 - Suresh Katta, Founder and CEO of Saama Technologies*, commented "Combining Datavant's ability to join datasets with our leading AI capabilities enables a robust and deep understanding of patient behaviors, drug safety, and drug efficacy, which will help biopharma companies improve their patient services and offerings. We're excited to partner with Datavant to continue transforming the life sciences industry by providing innovative solutions that inform and accelerate drug development and delivery for improved human health."
- In [March 2021](#), Oracle and Saama partnered on integrated clinical trial technology
 - The collaboration is intended to streamline clinical trial data flow with the goal of increasing insights and reducing R&D timeline

Sartorius

Business Overview

(\$ in millions)

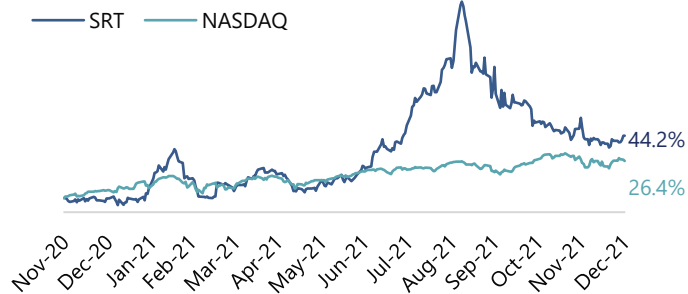
Headquarters:	Goettingen, Germany
Employees (1-Year Growth):	6,482 (▲20%)
Website:	sartorius.com
Ownership Status:	Public (XTRA: SRT)
Disclosed Acquisitions:	16
LTM Revenue	\$3,689.0



Description:

International provider of pharmaceutical and laboratory equipment solutions. The company has two business divisions, Bioprocess Solutions and Lab Products & Services, with +60 production and sales locations globally.

TTM December 2021 Market Pricing



Sources: Pitchbook, Capital IQ, corporate websites, press releases, LinkedIn, market data as of 12/31/2021

(1) Sartorius Strengthens Product Portfolio for Cell and Gene Therapies by Acquiring majority Stake in CellGenix"

(2) "Sartorius Acquires Filtration Expert WaterSep BioSeparations"

News & Notes

Expanding Cell and Gene Therapy Footprint

» Strengthened Product Portfolio for Cell and Gene Therapies With Key Acquisitions

- In [July 2021](#), Sartorius announced the acquisition of Xell AG, a global supplier of raw and ancillary materials for the cell and gene therapy market
 - The acquisition provides enhancement to the Sartorius' current cell culture media business, with newly added focus on gene therapeutics and vaccines
- In [July 2021](#), Sartorius announced the acquisition of a majority stake in CellGenix for \$118.3m⁽¹⁾
 - Additionally, Sartorius plans to acquire the remaining shares of CellGenix at the beginning of 2023 and 2026
 - Felicia Rosenthal, CEO and co-founder of CellGenix*, commented, "For us, Sartorius is an ideal partner with a highly complementary product portfolio that will accelerate our development with its global sales team, enabling us to usher in our next phase of growth."
- In [January 2021](#), Sartorius announced the acquisition of Novasep's chromatography process equipment division
 - The acquisition boosts Sartorius' positioning in downstream bioprocessing, providing customers with more options for their manufacturing processes
- In [December 2020](#), Sartorius announced the acquisition of WaterSep BioSeparations, a U.S.-based purification provider, for \$32.7m⁽²⁾
 - Dr. Rene Faber, Head of the Sartorius Bioprocess Solutions Division*, commented, "This acquisition nicely complements our current offering for cell and gene therapy applications, cell harvesting and various solutions for intensified bioprocessing."

» Strategic Partnership With RoosterBio Aimed to Accelerate Break-Through Developments

- In [January 2021](#), Sartorius signed a strategic collaboration with RoosterBio, a supplier of human mesenchymal stem/stromal cell (hMSC) working cell banks and bioprocess systems
 - The partnership aims to reduce process development efforts by leveraging both companies' solutions with hopes to accelerate break-through developments of cell-based regenerative cures

Signant Health

Business Overview

(\$ in millions)

Headquarters:	Blue Bell, PA
Employees (1-Year Growth):	1,819 (▲11%)
Website:	signanthealth.com
Ownership Status:	PE-Backed (Genstar Capital)
Disclosed Acquisitions:	6



Description:

Provider of clinical research development solutions. The company's offerings include electronic clinical outcomes assessments, randomization and trial supply management, rater training & quality assurance and patient engagement

Select Funding / Transaction History

Date	Lead Investor	Amount
Dec-2020	BDCA <small>Business Development Corporation of America</small>	\$5.3 million (debt)
Nov-2020	Antares Capital	\$60 million (debt)
Mar-2020	Antares Capital	\$9.7 million (debt)
Dec-2018	OWL ROCK	\$43.2 million (debt)
Jul-2018	OWL ROCK	\$805.0 million (debt)
Oct-2017	Antares Capital	\$175.0 million (debt)
Mar-2017	GENSTAR <small>CAPITAL</small>	\$452.9 million (buyout)

Sources: Pitchbook, Capital IQ, corporate websites, press releases, LinkedIn

News & Notes

New Solutions Designed to Accelerate Study Set-Up Timelines

» Clinical Trial Startup Timelines Reduced With Launch of eCOA Acceleration Program

- In [June 2021](#), Signant Health announced the launch of its eCOA acceleration program and remote assessment capabilities for Central Nervous System (CNS) studies
 - The program leverages Signant's eCOA science expertise to provide reduced study setup timelines without compromising data quality, accelerating reliable study outcomes to deliver life-improving treatments and therapies
 - Sanjiv Waghmare, Chief Product Officer at Signant*, commented, "By developing a robust eCOA library up front and supporting it through a comprehensive clinical rater and data quality management program, we can improve efficiency and reduce startup timelines without compromising quality, especially for decentralized trials which are now widely accepted and normalized since the COVID-19 pandemic."
- In [March 2021](#), Signant announced the launch of their pre-configured SmartSignals eCOA solution designed for oncology studies
 - The new solution aims to reduce study costs and accelerate study start-ups with consistently high-quality data collection of trial patient outcomes

» COVID-19 Accelerates Signant's Mission to Further Digitally Enhance Trial Sites

- In [November 2020](#), Signant Health announced the acquisition of VirTrial, a provider of virtual care management
 - The acquisition expands Signant's software stack to further digitize trial sites and enhance support sites for sponsors looking to accelerate their trial strategies
 - Roger Smith, CEO of Signant Health*, commented "COVID-19 has created a widespread and urgent need for contingency planning in clinical trial operations and has forever changed how our industry plans and executes trials. Signant and VirTrial are passionate about supporting the trial ecosystem with software, analytics, and logistics solutions to conduct studies and generate data across all modalities while improving, respecting, and honoring the role investigators and coordinators play in collaborating with patients to advance clinical research."

Thermo Fisher Scientific

Business Overview

(\$ in millions)

Headquarters:	Waltham, MA
Employees (1-Year Growth):	+64,000 (▲11%)
Website:	thermofisher.com
Ownership Status:	Public (NYSE: TMO)
Disclosed Acquisitions:	76
LTM Revenue	\$39,060.0

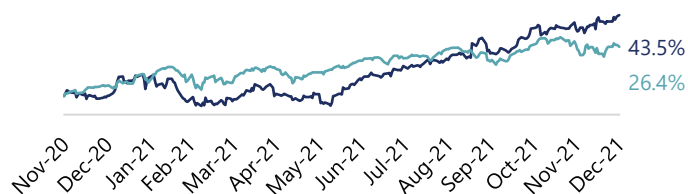


Description:

Thermo Fisher develops scientific instruments, services, and software solutions to the life sciences and healthcare community. Thermo Fisher operates under multiple brands, including Thermo Scientific, Applied Biosystems, Invitrogen, Fisher Scientific, and Unity Lab Services

TTM December 2021 Market Pricing

— TMO — NASDAQ



Sources: Pitchbook, Capital IQ, corporate websites, press releases, LinkedIn, market data as of 12/31/2021

(1) Per company press release "Thermo Fisher Scientific Completes Acquisition of PPD, Inc."

(2) Per the company press release "Thermo Fisher Scientific Completes Acquisition of Mesa Biotech"

(3) Per the company press release "Thermo Fisher Scientific Acquires Viral Vector Manufacturing Business from Novasep"

News & Notes

Aggressive M&A Initiatives

» A Year Full of Promising Acquisitions

- In [December 2021](#), Thermo Fisher closed its acquisition of Pharmaceutical Product Development (PPD) for \$20.9b⁽¹⁾
 - The transaction is expected to add \$1.50 to Thermo Fisher's adjusted earnings per share in 2022⁽¹⁾
- In [November 2021](#), Thermo Fisher announced the acquisition of PharmaFluidics, the developer of the µPAC range of micro-chip-based chromatography columns
- In [February 2021](#), Thermo Fisher acquired Mesa Biotech, a privately held point-of-care molecular diagnostic company, for \$471.0m⁽²⁾
- In [February 2021](#), Thermo Fisher announced the acquisition of cell sorting technology assets from Propel Labs, a wholly owned subsidiary of SIDIS
- In [January 2021](#), Thermo Fisher acquired Novasep's viral vector manufacturing business in Belgium for \$834.0m⁽³⁾

» In-Air SARS-CoV-2 Surveillance Solution

- In [March 2021](#), Thermo Fisher announced the launch of the Thermo Scientific *AerosolSense Sampler*
 - The new surveillance solution is designed to deliver fast, high-quality insight into the presence of in-air pathogens, including SARS-CoV-2
 - The solutions enables organizations to comply with the continuously changing rigorous pandemic health and safety protocols for indoor facilities

Veeva Systems

Business Overview

(\$ in millions)

Headquarters:	Pleasanton, CA
Employees (1-Year Growth):	5,381 (▲19%)
Website:	veeva.com
Ownership Status:	Public (NYSE: VEEV)
Disclosed Acquisitions:	8
LTM Revenue:	\$1,660.0

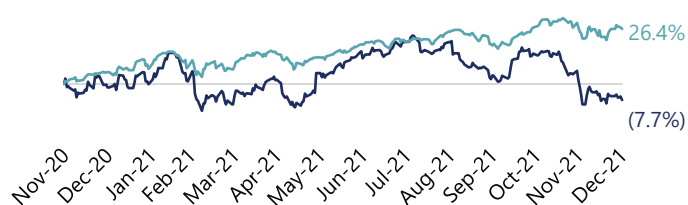


Description:

Provider of cloud-based solutions for the global life sciences industry. While the company's core product is a CRM platform, Veeva has expanded its product portfolio to encompass a suite of solutions spanning clinical, regulatory, quality, safety, medical and commercial solutions

TTM December 2021 Market Pricing

— VEEV — NASDAQ



Sources: Pitchbook, Capital IQ, corporate websites, press releases, LinkedIn, market data as of 12/31/2021

News & Notes

Various Partnerships Linked Veeva's Commercialization Expertise

» Commercialization at The Forefront of Strategic Partnerships

- In [May 2021](#), Veeva announced a strategic partnership with Oncoceptives to support the launch of *PEPAXTRO*, Oncoceptives' first commercial product
 - Through the utilization of *Veeva Link*, Veeva's real-time customer intelligence solution, Oncoceptives swiftly identified top scientific and clinical experts during its pre-commercial planning
- In [April 2021](#), Veeva and Parexel announced a strategic partnership to advance clinical trial technology and processes with the goal of improving study efficiency
 - Peter Gassner, Founder and CEO of Veeva*, commented, "We're proud to partner with Parexel to drive customer success and speed innovations in clinical research. Together, we can accelerate how our customers bring new vaccines, diagnostics, devices, and therapies to patients in need."
- In [February 2021](#), Veeva and Impel NeuroPharma announced a strategic partnership to collaborate on prelaunch preparations for Impel's migraine treatment, *TRUDHESA™*
 - Impel will leverage *Veeva Commercial Cloud* platform to meet aggressive commercial timelines and help propel the launch of *TRUDHESA™*

» Randomization / Trial Supply Management and eLearning Acquisitions

- In [December 2021](#), Veeva announced the acquisition of Veracity Logic, a provider of cloud-based randomization and trial supply management solutions
- In [August 2021](#), Veeva announced the acquisition of Learnaboutgmp, a GxP eLearning content and accreditation provider
 - Together, Veeva and Learnaboutgmp collectively provide an eLearning library, assisting organizations with GxP training while reducing costs and improving training outcomes
 - Kent Malmros, Senior Director of Veeva's Vault Training*, commented, "Learnaboutgmp is a leading eLearning content provider that consistently delivers training excellence for its customers. By bringing together industry-leading learning technology and content, we aim to help customers drive more strategic training programs that improve job competency and compliance."

WCG Clinical

Business Overview

(\$ in millions)

Headquarters:	Princeton, NJ
Employees (1-Year Growth):	461 (▲8%)
Website:	wgcclinical.com
Ownership Status:	PE-Backed (Leonard Green)
Disclosed Acquisitions:	30



Pre-Clinical



Clinical



Medical Affairs



Commercial

Description:

Provider of regulatory and ethical review services for human research. The company also offers complementary software products with capabilities spanning patient consent, electronic data management and clinical outcome assessment

Select Funding / Transaction History

Date	Lead Investor	Amount
Oct-2020	 BARCLAYS	\$125.0 million (debt)
Nov-2019	 LEONARD GREEN & PARTNERS	\$3.2 billion (buyout)
Apr-2018	 Churchill Asset Management	\$125.0 million (debt)
Apr-2017	 Churchill Asset Management	\$131.0 million (debt)
Jan-2013	 maranon	\$1.4 billion (debt)

Sources: Pitchbook, Capital IQ, corporate websites, press releases, LinkedIn

(1) Per company press release "WCG Acquires Intrinsic Imaging, Leading Full-Service Medical Imaging Core Lab

(2) "Clinical Trial Solutions Provider WCG Clinical Officially Withdraws \$720 million IPO"

News & Notes

Multiple Organic And Inorganic Initiatives Despite IPO Pullback

» M&A Events

- In [July 2021](#), WCG announced the acquisition of VeraSci, a provider of cognition and clinical assessment software
 - The acquisition adds expertise to WCG's scientific and patient engagement capabilities, addressing the increased demand for remote data capture
- In [July 2021](#), WCG announced the acquisition of Intrinsic Imaging, a medical imaging core lab software service for \$80.0m⁽¹⁾
 - Donald A. Deieso, Ph.D., Executive Chairman and CEO of WCG*, commented, "The growing need to visually demonstrate safety and efficacy to regulators, patients, providers, payers and other research stakeholders is driving the increasingly critical role medical imaging is playing in clinical trials."
- In [May 2021](#), WCG announced the acquisition of The Avoca Group, a life sciences consulting firm
 - The acquisition strengthens WCG's position for accelerating clinical trial quality management, with increased focus on mitigating risk in clinical trials and enhancing process quality
- In [December 2020](#), WCG announced the acquisition of Trifecta, provider of clinical qualifications management solutions including a comprehensive site communication platform InvestigatorSpace®, virtual training programs and safety documentation services

» New Platform Released After Avoca Acquisition

- In [September 2021](#), WCG announced the expansion of WCG Avoca Quality Consortium (AQC), its forum devoted to the standardization of performance measures for cross-industry collaboration

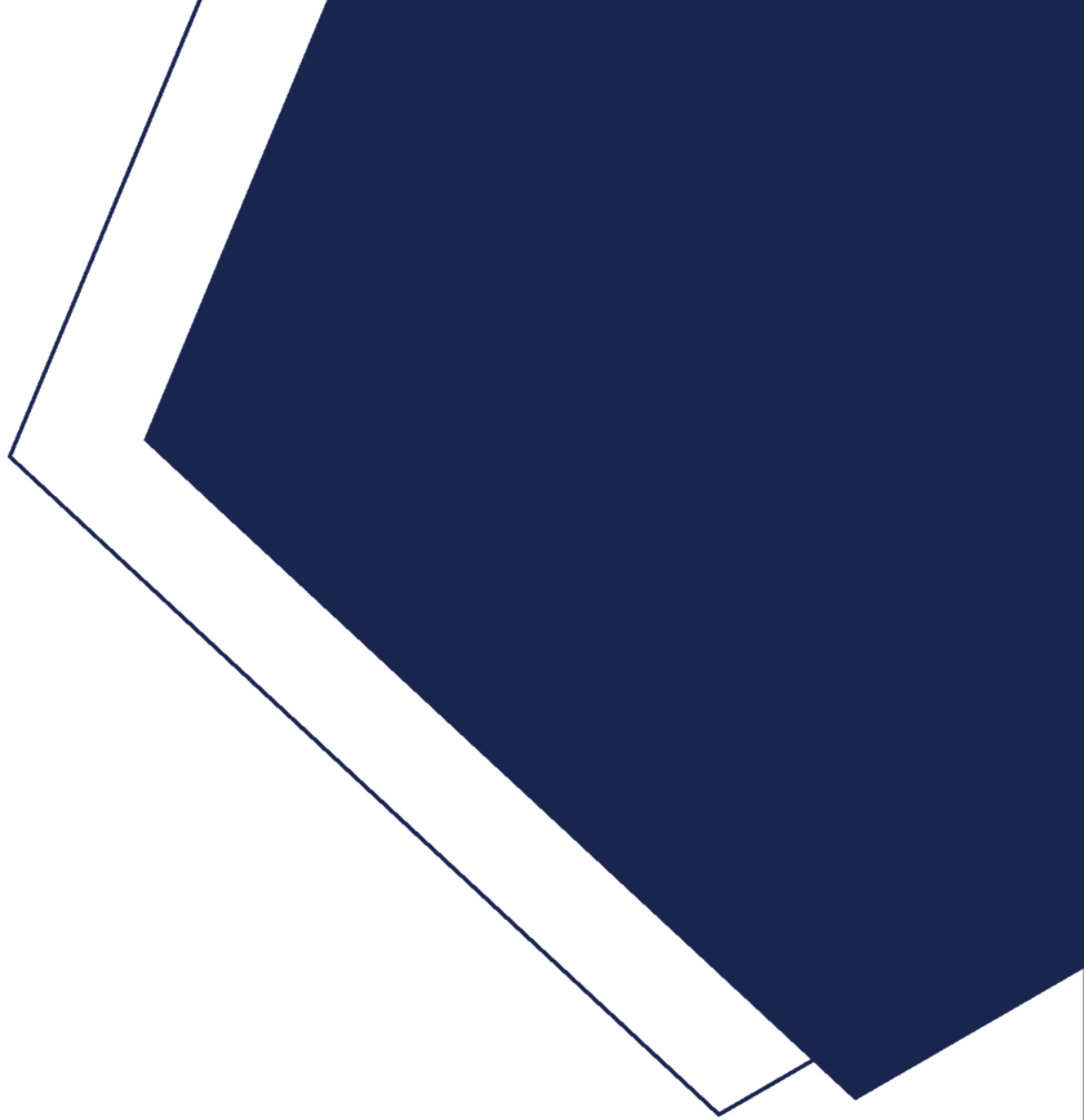
» WCG Withdraws its IPO

- In October 2021, WCG officially withdrew its \$720.0m IPO⁽²⁾

III.



Market Comparables



Precedent Life Science M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

		(\$ in Millions)						
		Target Overview						
Date	Target	Description	Estimated Revenue	EBITDA	Deal Value	Deal Value / Revenue	Estimated EBITDA	
Advarra	Instem							
Anju Software	IntegriChain							
ArisGlobal	IQVIA							
Bruker	Komodo Health							
Certara	Model N							
Clario (formerly ERT / Bioclinica)	Oracle							
Dassault / Medidata	Saama Analytics							
Definitive Healthcare	Sartorius							
Envision Pharma	Signant Health							
Eversana	Thermo Fisher Scientific							
Insightful Science	Veeva Systems							
	WCG Clinical							
		Total Disclosed M&A Deal Value: n/a						
Jul-21	Watermark Research Partners	Data safety monitoring services	n/a	n/a	n/a	n/a	n/a	
Mar-21	Bio-Optronics	Clinical management services software	n/a	n/a	n/a	n/a	n/a	
Jan-21	YourEncore	Commercialization consulting services	n/a	n/a	n/a	n/a	n/a	
Nov-20	Longboat	Cloud-based clinical trial platform	n/a	n/a	n/a	n/a	n/a	
Nov-20	IntegReview	Ethical and institutional review board services	n/a	n/a	n/a	n/a	n/a	
May-20	IRB Company	IRB services	n/a	n/a	n/a	n/a	n/a	
Sep-19	Forte Research Systems	Clinical research management software	n/a	n/a	n/a	n/a	n/a	
Mar-19	Quorum Review IRB	IRB services & Kinetiq tech consulting division	n/a	n/a	n/a	n/a	n/a	
Nov-17	Chesapeake IRB	IRB services (merged with Schulman)	n/a	n/a	n/a	n/a	n/a	
Nov-17	Schulman Associates IRB	IRB services (merged with Chesapeake)	n/a	n/a	n/a	n/a	n/a	
		Total Disclosed M&A Deal Value: \$80 Million						
Sep-19	OmniComm	eClinical software and services	\$25.6	\$2.0	\$80.0	3.13x	n/m	
Oct-18	Zephyr Health	Commercial and medical affairs intelligence	Confid.	Confid.	Confid.	Confid.	Confid.	
Jun-18	MDCPartners	Clinical optimization and KOL intelligence	Confid.	Confid.	Confid.	Confid.	Confid.	
Mar-18	Sylogent	Publication planning and clinical disclosure	Confid.	Confid.	Confid.	Confid.	Confid.	
Jul-17	ClinPlus	eClinical solutions including CTMS and EDC	Confid.	Confid.	Confid.	Confid.	Confid.	
Apr-17	OpenQ	Key opinion leader (KOL) management	Confid.	Confid.	Confid.	Confid.	Confid.	
Jun-16	Online Business Applications	Medical information management software	Confid.	Confid.	Confid.	Confid.	Confid.	
		Total Disclosed M&A Deal Value: n/a						
Jun-15	Medsight Solutions	Risk-assessment, reporting and compliance	n/a	n/a	n/a	n/a	n/a	
		Total Disclosed M&A Deal Value: \$1.7 Billion						
Nov-21	Molecubes	Benchtop preclinical NMI systems	\$6.3	n/a	n/a	n/a	n/a	
Feb-21	Acuity Spatial Genomics	3D genome-wide visualization platform	n/a	n/a	\$4.5	n/a	n/a	
Sep-20	Canopy Biosciences	Biomarker imaging and gene editing	n/a	n/a	n/a	n/a	n/a	
Aug-20	Integrated Proteomics	Search engine and proteomics workflow	n/a	n/a	\$3.0	n/a	n/a	
Oct-19	Magenetech	Electronic measuring instruments	n/a	n/a	\$9.3	n/a	n/a	
Jul-19	PMOD Technologies LLC	Research-use-only medical imaging	n/a	n/a	\$8.9	n/a	n/a	
Apr-19	RAVE LLC	Developer of nanomachining techniques	\$25.0	n/a	\$56.6	2.26x	n/a	
Mar-19	Arxspan, LLC	Cloud-based scientific software	n/a	n/a	\$16.6	n/a	n/a	
Nov-18	Alicona Imaging GmbH	Optical 3D surface metrology systems	n/a	n/a	\$54.0	n/a	n/a	
Nov-18	Aegilops Applications	Technological agents for seed treatment	\$5.0	\$2.0	n/a	n/a	n/a	
Aug-18	Hain Lifescience	Manufacturer of in-vitro diagnostics	n/a	n/a	\$73.2	n/a	n/a	
Jul-18	JPK Instruments AG	Life science microscopy	\$10.0	n/a	\$20.7	2.07x	n/a	
Jul-18	Lactotronic B.V.	Analytical instruments for the dairy sector	n/a	n/a	n/a	n/a	n/a	
Jun-18	Sierra Sensors GmbH	Manufacturer of biosensor tools	n/a	n/a	n/a	n/a	n/a	
Apr-18	Anasys Instruments Corporation	Nanoscale spectroscopy imaging	n/a	n/a	\$32.3	n/a	n/a	
Feb-18	IRM2	High-speed infrared (IR) imaging	n/a	n/a	n/a	n/a	n/a	
Sep-17	MERLIN Diagnostika	Developer of diagnostic equipment	n/a	n/a	\$2.5	n/a	n/a	
Aug-17	XGLab	Manufacturer of electronic instruments	n/a	n/a	\$5.5	n/a	n/a	
May-17	Luxendo GmbH	Light-sheet fluorescence instruments	n/a	n/a	\$21.9	n/a	n/a	

Sources: Capital IQ, Public Filings, Press Releases, PitchBook, proprietary Madison Park Group research based on publicly available information
 Note: All EBITDA Multiples >30x are considered not to be meaningful as valuation of business clearly influenced by factors other than profitability

Precedent Life Science M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

		(\$ in Millions)						
		Target Overview						
Date	Target	Description	Estimated Revenue	EBITDA	Deal Value	Deal Value / Revenue	Estimated EBITDA	
Advarra	Instem							
Anju Software	IntegriChain							
ArisGlobal	IQVIA							
Bruker	Komodo Health							
Certara	Model N							
Clario (formerly ERT / Bioclinica)	Oracle							
Dassault / Medidata	Saama Analytics							
Definitive Healthcare	Sartorius							
Envision Pharma	Signant Health							
Eversana	Thermo Fisher Scientific							
Insightful Science	Veeva Systems							
WCG Clinical								
		Total Disclosed M&A Deal Value: \$1.7 Billion						
		Jan-17 Hysitron Incorporated	Nanomechanical test instruments	n/a	n/a	\$28.8	n/a	n/a
		Jan-17 SCiLS GmbH	Software for mass spectrometry data	n/a	n/a	\$3.1	n/a	n/a
		Jan-17 InVivo BioTech Services	Monoclonal antibodies and proteins	\$5.0	n/a	\$9.1	1.82x	n/a
		Dec-16 Active Spectrum, Inc.	Electron Spin Resonance spectroscopy	n/a	n/a	\$2.8	n/a	n/a
		Nov-16 Oxford Instruments	Manufacturer of superconducting wires	\$25.8	n/a	\$17.5	0.68x	n/a
		Sep-16 Oncovision (Assets)	Preclinical PET imaging business	n/a	n/a	\$7.4	n/a	n/a
		Jun-16 Yingsheng Technology	Mineral identification software	n/a	n/a	\$1.7	n/a	n/a
		Oct-15 Jordan Valley Semiconductors	Semiconductor metrology equipment	\$22.0	n/a	\$32.7	1.49x	n/a
		Jul-14 Vutara	Super-resolution microscopes	n/a	n/a	n/a	n/a	n/a
		Sep-12 Carestream	Preclinical imaging business	n/a	n/a	n/a	n/a	n/a
		Apr-12 SkyScan	Microtomography instruments	\$19.1	\$3.7	\$25.4	1.33x	6.9x
		Jan-12 Hecus X-ray	X-ray systems	n/a	n/a	n/a	n/a	n/a
		Oct-11 Center for Tribology	Tribology and mechanical test equipment	n/a	n/a	\$12.5	n/a	n/a
		Apr-11 Michrom Bioresources	Microfluidic products for life sciences	n/a	n/a	\$3.8	n/a	n/a
		Jan-11 PROTECT-US	Radiation detection instruments	n/a	n/a	n/a	n/a	n/a
		Dec-10 Sigma ElectroOptics	Remote gas sensing products	\$1.3	n/a	n/a	n/a	n/a
		Oct-10 Veeco Instruments	Optical industrial metrology and microscopy	\$130.0	n/a	\$230.4	1.77x	n/a
		May-10 Varian (Three Product Lines)	Lab GC, GC-QQQ-MS and ICP-MS products	n/a	n/a	\$37.5	n/a	n/a
		Apr-09 ACCEL	Therapy instruments for cancer treatment	n/a	n/a	\$0.4	n/a	n/a
		Feb-08 BioSpin	Life science & analytical research instruments	\$447.0	\$76.7	\$914.0	2.04x	11.9x
		Jun-07 Analys-Konsult AB	Scientific instruments	n/a	n/a	\$0.8	n/a	n/a
		Jun-07 Spectral Solutions	Advanced research instruments	n/a	n/a	n/a	n/a	n/a
		Jan-07 Keca Metal Products	Specialized machining services	n/a	n/a	\$0.6	n/a	n/a
		Jul-06 KeyMaster Technologies	Portable X-ray systems	n/a	n/a	\$10.0	n/a	n/a
		Oct-05 Rontec	X-ray elemental and structural analysis	n/a	n/a	\$6.6	n/a	n/a
		Jun-03 VAC	Magnetic materials	n/a	n/a	n/a	n/a	n/a
		May-02 MAC Science	X-ray instrument products	n/a	n/a	n/a	n/a	n/a
		Total Disclosed M&A Deal Value: \$464.3 Million						
		Aug-21 Pinnacle 21	Pharmaceutical data standardization software	\$23.5	n/a	\$310.0	13.19x	n/a
		Jun-21 Insight Medical Writing	Regulatory services and medical writing	n/a	n/a	n/a	n/a	n/a
		Mar-21 AUTHOR!	Medical writing and biostatistics services	n/a	n/a	n/a	n/a	n/a
		Sep-18 Pirana	Pharmacometrics modeling workbench	n/a	n/a	\$40.0	n/a	n/a
		Apr-18 Analytica Laser	Tech-enabled drug value assessment	n/a	n/a	n/a	n/a	n/a
		Feb-18 BaseCase	Data visualization software	n/a	n/a	\$25.3	n/a	n/a
		Mar-17 GlobalSubmit (Synchrogenix)	Regulatory submissions software	n/a	n/a	n/a	n/a	n/a
		Sep-16 d3 Medicine	Drug development program planning	n/a	n/a	n/a	n/a	n/a
		Dec-15 Xenologiq	Quantitative systems consulting	n/a	n/a	n/a	n/a	n/a
		Dec-14 ClinGenuity (Synchrogenix)	AI-powered clinical trial reporting	n/a	n/a	n/a	n/a	n/a
		Apr-14 Synchrogenix	Strategic regulatory services	n/a	n/a	n/a	n/a	n/a
		Aug-13 Great Lakes Drug Develop.	Support services for drug development	n/a	n/a	n/a	n/a	n/a
		Feb-12 Simcyp	Drug modeling and simulation platform	n/a	n/a	\$32.0	n/a	n/a
		Nov-08 Pharsight	Drug development software and services	\$28.8	\$1.9	\$57.0	1.98x	n/m

Sources: Capital IQ, Public Filings, Press Releases, PitchBook, proprietary Madison Park Group research based on publicly available information
 Note: All EBITDA Multiples >30x are considered not to be meaningful as valuation of business clearly influenced by factors other than profitability

Precedent Life Science M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

		(\$ in Millions)						
		Target Overview						
Date	Target	Description	Estimated Revenue	EBITDA	Deal Value	Deal Value / Revenue	Estimated EBITDA	
Advarra	Instem							
Anju Software	IntegriChain							
ArisGlobal	IQVIA							
Brucker	Komodo Health							
Certara	Model N							
Clario (formerly ERT / Bioclinica)	Oracle							
Dassault / Medidata	Saama Analytics							
Definitive Healthcare	Sartorius							
Envision Pharma	Signant Health							
Eversana	Thermo Fisher Scientific							
Insightful Science	Veeva Systems							
WCG Clinical								
		Total Disclosed M&A Deal Value: \$359.3 Million						
Apr-21	Bioclinica (E)	Imaging and other eClinical solutions	n/a	n/a	n/a	n/a	n/a	
Jan-21	Saliency (B)	AI-based research image technology	n/a	n/a	n/a	n/a	n/a	
Sep-20	Clinical Trials Imaging (B)	Consulting services for medical imaging	n/a	n/a	n/a	n/a	n/a	
Jun-20	APDM Wearable Technologies (E)	Movement monitoring technologies	n/a	n/a	\$6.3	n/a	n/a	
Dec-17	iCardiac (E)	Cardiac safety solutions	\$20.5	n/a	n/a	n/a	n/a	
Nov-17	MDDX Research & Informatics (B)	Medical research image management	n/a	n/a	n/a	n/a	n/a	
Sep-17	Biomedical Systems (E)	Imaging solutions	n/a	n/a	\$185.0	n/a	n/a	
May-17	ImageIQ (E)	Cloud-based imaging technology	n/a	n/a	n/a	n/a	n/a	
Dec-16	Exco inTouch (E)	Patient engagement and data capture	\$17.7	(\$1.6)	n/a	n/a	n/a	
Jul-16	Compass Research(B)	Clinical research services	n/a	n/a	n/a	n/a	n/a	
Jan-16	Clinverse (B)	Online platform for clinical payments	n/a	n/a	n/a	n/a	n/a	
Sep-15	Synnowledge (B)	Drug safety and regulatory affairs	n/a	n/a	n/a	n/a	n/a	
Jul-15	MediciGlobal (B)	Patient recruitment and retention services	n/a	n/a	n/a	n/a	n/a	
May-15	PHT (E)	Electronic patient reported outcomes	n/a	n/a	n/a	n/a	n/a	
Nov-14	eClinical Insights (E)	Clinical trials management software	n/a	n/a	n/a	n/a	n/a	
Jun-14	Blueprint Clinical (B)	Risk based monitoring technology	n/a	n/a	n/a	n/a	n/a	
Mar-14	SYNARC (B)	Medical image analysis	n/a	n/a	n/a	n/a	n/a	
Mar-13	CoreLab Partners (B)	Cardiac safety monitoring and imaging	n/a	n/a	n/a	n/a	n/a	
Jul-12	Invivodata E	Electronic patient reported outcomes	n/a	n/a	n/a	n/a	n/a	
Jun-10	CareFusion E	Research services division	n/a	n/a	\$80.8	n/a	n/a	
Mar-10	TranSenda International (B)	Clinical management software	\$1.0	(\$0.5)	\$2.5	2.50x	n/m	
Sep-09	Tourtellotte Solutions (B)	Interactive voice response technology	\$5.0	n/a	\$6.6	1.32x	n/a	
Sep-09	CardioNow (B)	Medical image transmission	n/a	n/a	\$1.0	n/a	n/a	
Mar-08	Phoenix Data Systems (B)	Electronic data capture	\$12.1	\$1.4	\$24.0	1.98x	17.1x	
Nov-07	Covance Cardiac Safety Serv.	Cardiac safety services	n/a	n/a	\$49.2	n/a	n/a	
Feb-07	Theralyis (B)	Imaging CRO services	n/a	n/a	\$3.9	n/a	n/a	
Dec-04	Heart Core (B)	Quantitative image analysis services	n/a	n/a	n/a	n/a	n/a	
May-99	Bona Fide (B)	Quality assurance and quality control	n/a	n/a	n/a	n/a	n/a	
		Total Disclosed M&A Deal Value: \$11.6 Billion						
Jul-21	Iterop	Low-code business process management solution	n/a	n/a	n/a	n/a	n/a	
Nov-20	NuoDB	Cloud-native distributed SQL database	n/a	n/a	\$114.0	n/a	n/a	
Oct-20	MC10 (Assets) (Medidata)	Remote digital biomarker business	n/a	n/a	\$2.5	n/a	n/a	
Jul-20	Proxem	AI-based semantic processing software	n/a	n/a	n/a	n/a	n/a	
Dec-19	COSMOlogic	Fluid phase computational chemistry software	\$2.2	n/a	n/a	n/a	n/a	
Jun-19	Medidata	eClinical solutions	\$661.0	\$85.4	\$5,763.8	8.72x	n/m	
Feb-19	Trace Software (Assets)	Electrical design, product line & IP assets	n/a	n/a	n/a	n/a	n/a	
Jan-19	IQMS	Manufacturing ERP software & SaaS	\$65.0	n/a	\$425.0	6.54x	n/a	
Jul-18	Centric Software	PLM software for operations management	\$61.0	n/a	\$228.1	3.74x	n/a	
Jun-18	No Magic	BPM software & SaaS	\$13.4	n/a	n/a	n/a	n/a	
Jun-18	SHYFT Analytics (Medidata)	Commercial and clinical analytics solutions	\$20.0	n/a	\$195.0	9.75x	n/a	
Nov-17	Exa Corporation	Simulation & engineering software & SaaS	\$73.0	\$1.5	\$400.0	5.48x	n/m	
Jun-17	Outscale	Provider of IaaS	n/a	n/a	n/a	n/a	n/a	

Sources: Capital IQ, Public Filings, Press Releases, PitchBook, proprietary Madison Park Group research based on publicly available information
 Note: All EBITDA Multiples >30x are considered not to be meaningful as valuation of business clearly influenced by factors other than profitability

Precedent Life Science M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

		Target Overview							
		(\$ in Millions)					Deal Value	Deal Value / Estimated Revenue	Estimated EBITDA
Date	Target	Description	Revenue	EBITDA	Deal Value	Revenue	EBITDA		
Advarra	Instem								
Anju Software	IntegriChain								
ArisGlobal	IQVIA								
Braker	Komodo Health								
Certara	Model N								
Clario (formerly ERT / Bioclinica)	Oracle								
Dassault / Medidata	Saama Analytics								
Definitive Healthcare	Sartorius								
Envision Pharma	Signant Health								
Eversana	Thermo Fisher Scientific								
Insightful Science	Veeva Systems								
WCG Clinical									
		Total Disclosed M&A Deal Value: \$11.6 Billion							
Jun-17	AITAC	Marine and offshore engineering software	n/a	n/a	n/a	n/a	n/a	n/a	
Apr-17	Mytrus (Medidata)	Patient consent solutions	n/a	n/a	n/a	n/a	n/a	n/a	
Feb-17	Chita (Medidata)	Content management and collaboration	n/a	n/a	\$14.7	n/a	n/a	n/a	
Dec-16	Next Limit Dynamics	Graphics simulation software asset	n/a	n/a	n/a	n/a	n/a	n/a	
Jul-16	CST	Electromagnetic field simulation software	\$47.0	n/a	\$243.7	5.18x	n/a	n/a	
Jun-16	Ortems	Manufacturing planning software & SaaS	n/a	n/a	n/a	n/a	n/a	n/a	
Apr-16	Intelemage (Medidata)	Clinical trial image file sharing	n/a	n/a	\$17.1	n/a	n/a	n/a	
Apr-16	3DPLM Software Solutions	Software development & implementation	n/a	n/a	n/a	n/a	n/a	n/a	
Apr-15	Modelon	German engineering CAD & simulation software	n/a	n/a	n/a	n/a	n/a	n/a	
Oct-14	Patient Profiles (Medidata)	Patient report software	n/a	n/a	n/a	n/a	n/a	n/a	
Jul-14	Quitiq	Supply planning & optimization software	\$96.0	n/a	\$337.0	3.51x	n/a	n/a	
Jul-14	SIMPACT	Multi-body simulation software provide	n/a	n/a	n/a	n/a	n/a	n/a	
Jan-14	Accelrys	Scientific PLM software	\$174.0	n/a	\$750.0	4.31x	n/a	n/a	
Jan-14	Real time Technology	3D visualization technology	\$95.1	n/a	\$245.4	2.58x	n/a	n/a	
Oct-13	Inceptra	Horizontal PLM software	n/a	n/a	n/a	n/a	n/a	n/a	
Sep-13	Safety Technology	Supplier of safety training and equipment	n/a	n/a	\$1.0	n/a	n/a	n/a	
Jul-13	SFE	CAE-driven development software	n/a	n/a	n/a	n/a	n/a	n/a	
Jul-13	Apriso	Manufacturing execution system	\$50.0	n/a	\$205.0	4.10x	n/a	n/a	
Apr-13	Archividéo	Production of 3D images for construction	\$1.3	n/a	n/a	n/a	n/a	n/a	
Apr-13	Fe-Design	Simulation and automation software	n/a	n/a	n/a	n/a	n/a	n/a	
Apr-13	Simpoe	Plastic injection-molding simulation software	n/a	n/a	n/a	n/a	n/a	n/a	
Jan-13	SquareClock	Provides 3D space planning solutions	\$2.7	n/a	n/a	n/a	n/a	n/a	
Dec-12	Tuscany Design Automation	Engineering software for circuit design	n/a	n/a	n/a	n/a	n/a	n/a	
Jul-12	Gemcom	Supplier of mining productivity solutions	\$90.0	n/a	\$354.9	3.94x	n/a	n/a	
Feb-12	Netvibes	Personalized dashboard publishing platform	\$2.8	(\$2.5)	n/a	n/a	n/a	n/a	
Oct-11	Elsys International	Collaborative management software	\$0.7	(\$0.2)	n/a	n/a	n/a	n/a	
Oct-11	Simulayt	Draping simulation technology services	\$1.1	\$3.0	n/a	n/a	n/a	n/a	
Jun-11	Clinical Force (Medidata)	SaaS-based CTMS	n/a	n/a	\$7.8	n/a	n/a	n/a	
Apr-11	Enginuity PLM	R&D software for chemical companies	n/a	n/a	n/a	n/a	n/a	n/a	
Mar-11	Intercim	Provider of operations management software	n/a	n/a	\$36.5	n/a	n/a	n/a	
Jun-10	Geensoft	Design tools and services for software systems	n/a	n/a	\$6.7	n/a	n/a	n/a	
Jun-10	Exalead	Unified search technology platform	n/a	n/a	\$164.9	n/a	n/a	n/a	
Apr-10	IBM (Assets)	Support services for PLM software	n/a	n/a	\$600.0	n/a	n/a	n/a	
Jul-08	Engineous Software	Process integration and design optimization	n/a	n/a	\$40.0	n/a	n/a	n/a	
Mar-08	Fast Track Systems (Medidata)	Clinical trial document solutions	n/a	n/a	\$18.1	n/a	n/a	n/a	
Jan-08	Deneb Robotics	Digital manufacturing software	n/a	n/a	\$105.0	n/a	n/a	n/a	
Sep-07	Seemage	Software for 3D CAD models	\$2.6	(\$2.4)	n/a	n/a	n/a	n/a	
Jun-07	ICEM	Modeling, analysis, and design software	n/a	n/a	\$108.2	n/a	n/a	n/a	
May-06	MatrixOne	Collaborative PLM software	\$135.5	(\$11.3)	\$410.0	3.03x	n/m	n/m	
Oct-05	Dassault Systèmes Simulia	Software for advanced finite element analysis	n/a	n/a	\$413.0	n/a	n/a	n/a	
Jul-05	Virtools	Real-time 3D and multi-user applications	\$3.9	(\$1.2)	\$14.5	3.72x	n/m	n/m	
Jan-05	Transcat PLM	PLM software	n/a	n/a	n/a	n/a	n/a	n/a	
Jul-04	Inceptra	PLM software	n/a	n/a	n/a	n/a	n/a	n/a	

Sources: Capital IQ, Public Filings, Press Releases, PitchBook, proprietary Madison Park Group research based on publicly available information

Note: All EBITDA Multiples >30x are considered not to be meaningful as valuation of business clearly influenced by factors other than profitability

Precedent Life Science M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

		(\$ in Millions)						
		Target Overview						
Date	Target	Description	Estimated Revenue	EBITDA	Deal Value	Deal Value / Revenue	Estimated EBITDA	
Advarra	Instem							
Anju Software	IntegriChain							
ArisGlobal	IQVIA							
Brucker	Komodo Health							
Certara	Model N							
Clario (formerly ERT / Bioclinica)	Oracle							
Dassault / Medidata	Saama Analytics							
Definitive Healthcare	Sartorius							
Envision Pharma	Signant Health							
Eversana	Thermo Fisher Scientific							
Insightful Science	Veeva Systems							
	WCG Clinical							
		Total Disclosed M&A Deal Value: \$11.6 Billion						
May-03	Athys	Workcell control software	n/a	n/a	\$3.8	n/a	n/a	
Apr-02	Ortems	Supply-chain advanced planning software	n/a	n/a	\$8.9	n/a	n/a	
Nov-00	Spatial (3D Modeling)	3D modeling for application development	n/a	n/a	n/a	n/a	n/a	
Jan-00	Structural Research & Analysis	Analysis for computer aided design (CAD)	n/a	n/a	\$22.0	n/a	n/a	
Jul-97	Solidworks	Mechanical design software for Windows	n/a	n/a	\$325.0	n/a	n/a	
		Total Disclosed M&A Deal Value: \$89.8 Million						
Oct-20	Monocl	Medical and scientific expert data	\$9.5	n/a	\$60.0	6.32x	n/a	
Dec-19	PatientFinder	Life sciences software analytics provider	n/a	n/a	n/a	n/a	n/a	
Jan-19	HIMSS Analytics	Healthcare research and advisory firm	n/a	n/a	\$29.8	n/a	n/a	
Jun-16	Billian's HealthDATA	Healthcare data and analytics	n/a	n/a	n/a	n/a	n/a	
Oct-15	US Lifeline	Supply-chain information database	n/a	n/a	n/a	n/a	n/a	
		Total Disclosed M&A Deal Value: \$280 Million						
Mar-21	doDOC	Cloud-based document review software	n/a	n/a	n/a	n/a	n/a	
Nov-20	Two Labs	Pharmaceutical consultancy services	n/a	\$19.0	\$280.0	n/a	14.7x	
Apr-20	90ten	Healthcare communication consultancy	n/a	n/a	n/a	n/a	n/a	
Sep-15	Alligent Biopharm Consulting	Medical affair agency services	n/a	n/a	n/a	n/a	n/a	
Jan-14	ProScribe	Medical writing services	n/a	n/a	n/a	n/a	n/a	
		Total Disclosed M&A Deal Value: \$950 Million						
Oct-21	Protean	Healthcare consulting firm	n/a	n/a	n/a	n/a	n/a	
Oct-21	Intouch Group	Pharma marketing and advertising services	\$220.0	\$50.0	\$950.0	4.32x	19.0x	
Jul-21	Accelera Canada	Full-service field learning and development	n/a	n/a	n/a	n/a	n/a	
Sep-20	Alkemy Partners	Market access, and clinical engagement solutions	n/a	n/a	n/a	n/a	n/a	
Jul-20	HVH Precision Analytics	AI-based predictive analytics platform	n/a	n/a	n/a	n/a	n/a	
Nov-19	Cornerstone Research Group	Health economics and market research	n/a	n/a	n/a	n/a	n/a	
May-19	Alamo Pharma Services	Sales, marketing and clinical services	\$144.0	n/a	n/a	n/a	n/a	
May-19	BexR Logistix	Logistical support and management services	n/a	n/a	n/a	n/a	n/a	
Oct-18	Seeker Health	Patient identification technology platform	n/a	n/a	n/a	n/a	n/a	
Oct-18	Dohmen Life Science Services	Medical communication services	n/a	n/a	n/a	n/a	n/a	
Oct-18	The Access Group	Communications and consulting	n/a	n/a	n/a	n/a	n/a	
May-18	The Patient Experience Project	Patient-centric communication services	\$16.9	n/a	n/a	n/a	n/a	
May-18	Triplefin	Reimbursement and patient assistance	n/a	n/a	n/a	n/a	n/a	
Dec-17	Alliance Life Sciences	Pricing software and services	n/a	n/a	n/a	n/a	n/a	
Dec-17	Health Strategies Group	Market research solutions	n/a	n/a	n/a	n/a	n/a	
		Total Disclosed M&A Deal Value: \$680 Million						
Dec-21	Protein Metrics	Protein analysis and biotherapeutics software	n/a	n/a	n/a	n/a	n/a	
Oct-21	LabArchives	Cloud-based lab data organizing software	n/a	n/a	n/a	n/a	n/a	
Sep-21	De Novo Software	Flow cytometry software	n/a	n/a	n/a	n/a	n/a	
Apr-21	Dotmatics	Informatics platform facilitating scientific data	\$41.8	n/a	\$680.0	16.26x	n/a	
Jun-20	Statsols (nQuery)	Sample size software	\$1.6	n/a	n/a	n/a	n/a	

Sources: Capital IQ, Public Filings, Press Releases, PitchBook, proprietary Madison Park Group research based on publicly available information
 Note: All EBITDA Multiples >30x are considered not to be meaningful as valuation of business clearly influenced by factors other than profitability

Precedent Life Science M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

		(\$ in Millions)							
		Date	Target	Description	Estimated Revenue	EBITDA	Deal Value	Deal Value / Estimated Revenue	EBITDA
Advarra	Instem	Target Overview							
Anju Software	IntegriChain	Total Disclosed M&A Deal Value: \$680 Million							
ArisGlobal	IQVIA	May-20	Cytapex Bioinformatics	Bioinformatics CRO	n/a	n/a	n/a	n/a	n/a
		Aug-19	SnapGene	Bioinformatics technology	n/a	n/a	n/a	n/a	n/a
		Apr-19	Biomatters	Geneious DNA data analysis solutions	n/a	n/a	n/a	n/a	n/a
		Nov-17	GraphPad	Data analysis, statistics and graphing software	n/a	n/a	n/a	n/a	n/a
Bruker	Komodo Health	Instem Total Disclosed M&A Deal Value: \$80.3 Million							
		Sep-21	PDS Pathology Data Systems	Non-clinical study management software	\$6.8	\$0.8	\$15.6	2.29x	19.5x
		Mar-21	d-Wise	Life science solutions and technology consulting	\$24.1	\$3.6	\$31.0	1.29x	8.6x
		Mar-21	The Edge Software Consultancy	Pharmaceutical R&D software	\$3.6	\$2.3	\$11.8	3.27x	5.2x
		Nov-19	Leadscope	Advanced informatics and prediction technology	\$1.9	\$0.4	\$3.4	1.76x	8.4x
		Sep-16	Notocord	New drug development data analysis	\$2.4	\$0.5	\$4.9	2.04x	9.2x
Certara	Model N	May-16	Samarind RMS	Regulatory information management	\$1.2	n/a	\$3.3	2.73x	n/a
		Nov-13	Perceptive Instruments	Image analysis for toxicology assays	\$1.1	\$0.4	\$1.8	1.57x	4.6x
		May-13	Logos Technologies	Electronic data capture software	\$1.9	\$0.4	\$6.7	3.53x	16.8x
		May-11	Biowisdom	Healthcare intelligence solutions	\$1.8	\$0.4	\$1.9	1.06x	5.3x
Clario (formerly ERT / Bioclinica)	Oracle	IntegriChain Total Disclosed M&A Deal Value: n/a							
		May-20	Cumberland	Revenue management services	n/a	n/a	n/a	n/a	n/a
Dassault / Medidata	Saama Analytics	Mar-19	daVIZta	G2N automation and government pricing	n/a	n/a	n/a	n/a	n/a
		Feb-18	Medical Communication Tech.	Government pricing and contracting solutions	n/a	n/a	n/a	n/a	n/a
		Apr-17	PharmaMetrics	Contract operations outsourcing solutions	n/a	n/a	n/a	n/a	n/a
Definitive Healthcare	Sartorius	IQVIA Total Disclosed M&A Deal Value: \$13.6 Billion							
		Oct-21	Davaso	Integrated management systems for healthcare	n/a	n/a	n/a	n/a	n/a
		Aug-21	DMD Marketing	Medical and healthcare marketing solutions	n/a	n/a	n/a	n/a	n/a
		Jul-21	Evigrade	Healthcare research and consulting services	n/a	n/a	\$5.4	n/a	n/a
		Apr-21	Q2 Solutions	Clinical trial laboratory services	\$500.0	\$35.0	\$1,895.0	3.79x	n/m
		Mar-21	Kairos	Holistic biomedical research platform	n/a	n/a	n/a	n/a	n/a
Envision Pharma	Signant Health	Oct-20	Quality Health (UK)	Specialist health & social care survey organization	n/a	n/a	n/a	n/a	n/a
		Sep-20	Allcare Plus Pharmacy	Healthcare patient support services	n/a	n/a	n/a	n/a	n/a
		Sep-19	GCE Solutions	Bio-metrics clinical research organization	n/a	n/a	\$200.0	n/a	n/a
Eversana	Thermo Fisher Scientific	Aug-19	CoreZetta	Healthcare technology provider	n/a	n/a	n/a	n/a	n/a
		Aug-19	Jäger Health Group	OTC healthcare marketing agency	n/a	n/a	n/a	n/a	n/a
		Aug-19	Aposphäre	Educational training for pharmacists	n/a	n/a	n/a	n/a	n/a
		Feb-19	Linguamatics	NLP solutions for patient insights	n/a	n/a	n/a	n/a	n/a
		Nov-18	ValueCentric	BI for pharma manufacturers	n/a	n/a	n/a	n/a	n/a
Insightful Science	Veeva Systems	Jul-18	Acuta	Regulatory information management	n/a	n/a	n/a	n/a	n/a
		May-18	Statfinn	Clinical trial data management services	n/a	n/a	n/a	n/a	n/a
		May-18	Advanced Health Media	HCP engagement software	n/a	n/a	\$127.5	n/a	n/a
		Apr-18	159 Solutions	Commercial analytics	n/a	n/a	\$13.0	n/a	n/a
		Mar-18	Optimum Contact	Audit compliance SaaS system	n/a	n/a	n/a	n/a	n/a
		Nov-17	Chemical Information Serv.	Chemical & pharmaceutical marketplace	n/a	n/a	n/a	n/a	n/a
		Oct-17	Pilgrim Quality Solutions	Quality & compliance management	n/a	n/a	n/a	n/a	n/a
WCG Clinical									

Sources: Capital IQ, Public Filings, Press Releases, PitchBook, proprietary Madison Park Group research based on publicly available information
 Note: All EBITDA Multiples >30x are considered not to be meaningful as valuation of business clearly influenced by factors other than profitability

Precedent Life Science M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

		(\$ in Millions)						
		Target Overview						
Date	Target	Description	Estimated Revenue	EBITDA	Deal Value	Deal Value / Revenue	Estimated EBITDA	
Advarra	Instem							
Anju Software	IntegriChain							
ArisGlobal	IQVIA							
Bruker	Komodo Health							
Certara	Model N							
Clario (formerly ERT / Bioclinica)	Oracle							
Dassault / Medidata	Saama Analytics							
Definitive Healthcare	Sartorius							
Envision Pharma	Signant Health							
Eversana	Thermo Fisher Scientific							
Insightful Science	Veeva Systems							
WCG Clinical								
		Total Disclosed M&A Deal Value: \$13.6 Billion						
Oct-17	HighPoint Solutions	Life sciences IT systems integration	n/a	n/a	n/a	n/a	n/a	
Jul-17	DrugDev	Clinical site data sharing platform	n/a	n/a	n/a	+5.00x	n/a	
Jul-17	Cote Orphan	Orphan drug regulatory services	n/a	n/a	n/a	n/a	n/a	
May-17	Polaris Management	Spend compliance software and consulting	Confid.	Confid.	Confid.	Confid.	Confid.	
Apr-17	Themis Analytics	Pharma data management	n/a	n/a	n/a	n/a	n/a	
Mar-17	Wingspan	eTMF software	n/a	n/a	n/a	n/a	n/a	
Feb-17	STI Technologies	Patient support program technology	n/a	n/a	\$200.0	n/a	n/a	
Dec-16	TKL Research	Clinical research services	n/a	n/a	n/a	n/a	n/a	
Nov-16	Kadridge	eDetailing & multi-channel promotions	n/a	n/a	n/a	n/a	n/a	
Sep-16	Healthcost	Healthcare costing consulting	n/a	n/a	n/a	n/a	n/a	
May-16	Privacy Analytics	Health data anonymization software	n/a	n/a	n/a	n/a	n/a	
May-16	IMS Health	Clinical data management & trial services	\$5,737.6	\$774.4	\$10,425.0	1.82x	13.5x	
Feb-16	Dimensions Healthcare	Healthcare informatics & consulting	n/a	n/a	n/a	n/a	n/a	
Feb-16	AlphalmpactRx	Primary biopharma research & analysis	n/a	n/a	n/a	n/a	n/a	
Dec-15	Iasist	Clinical & economic information	n/a	n/a	n/a	n/a	n/a	
Sep-15	R-Squared	Spend management & compliance	Confid.	Confid.	Confid.	Confid.	Confid.	
Aug-15	Boston Biomedical	In Vitro Diagnostics consulting	n/a	n/a	n/a	n/a	n/a	
Aug-15	MediMedia Health Solutions	Multi-channel marketing services	n/a	n/a	n/a	n/a	n/a	
Jul-15	Healthcare Data Solutions	Healthcare data services	n/a	n/a	n/a	n/a	n/a	
Jul-15	Effektor	SQL software	n/a	n/a	n/a	n/a	n/a	
Jul-15	Rehfeld Partners	Data maintenance software	n/a	n/a	n/a	n/a	n/a	
Jun-15	VIS Research	Online feasibility platform	n/a	n/a	n/a	n/a	n/a	
Jun-15	Mercurial	Sales & marketing consulting	n/a	n/a	n/a	n/a	n/a	
May-15	Dataline Software	Big data healthcare analytics	n/a	n/a	n/a	n/a	n/a	
Apr-15	Cegedim (Assets)	Customer relationship management	\$465.0	\$72.0	\$415.5	0.89x	5.8x	
Aug-14	GCMS	Multi-channel marketing services	n/a	n/a	n/a	n/a	n/a	
Jul-14	Aileron Solutions	Healthcare data analytics	n/a	n/a	n/a	n/a	n/a	
May-14	Forcea	Hospital business intelligence	n/a	n/a	n/a	n/a	n/a	
Apr-14	Semantelli	Healthcare social media analytics	n/a	n/a	n/a	n/a	n/a	
Dec-13	Pygargus	Pharma market research consulting	n/a	n/a	n/a	n/a	n/a	
Dec-13	HGS Europe	Pharma market access services	n/a	n/a	n/a	n/a	n/a	
Dec-13	The Amundsen Group	Pharma strategic consulting	n/a	n/a	n/a	n/a	n/a	
Oct-13	HCM BIOS	Pharma business intelligence	n/a	n/a	n/a	n/a	n/a	
Sep-13	BroadReach Healthcare	Pharma / biotech program management	n/a	n/a	n/a	n/a	n/a	
Sep-13	Diversinet	Mobile care coordination platform	n/a	n/a	n/a	n/a	n/a	
Jun-13	Incential Software	Medical sales performance management	n/a	n/a	n/a	n/a	n/a	
May-13	360 Vantage	Life sciences sales & marketing technology	n/a	n/a	n/a	n/a	n/a	
Mar-13	Appature	Enterprise healthcare marketing technology	n/a	n/a	n/a	n/a	n/a	
Jan-13	Nielsen (Assets)	European consumer health services	n/a	n/a	n/a	n/a	n/a	
Dec-12	Vedere Group	Sales & marketing performance tools	n/a	n/a	n/a	n/a	n/a	
Nov-12	Pharmexpert Group	Pharma market intelligence	n/a	n/a	n/a	n/a	n/a	
Aug-12	Life Science Partners	Healthcare / biotech services	n/a	n/a	n/a	n/a	n/a	
Aug-12	TTC	Clinical grant database & benchmarking	n/a	n/a	n/a	n/a	n/a	

Sources: Capital IQ, Public Filings, Press Releases, PitchBook, proprietary Madison Park Group research based on publicly available information

Note: All EBITDA Multiples >30x are considered not to be meaningful as valuation of business clearly influenced by factors other than profitability

Precedent Life Science M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

		(\$ in Millions)							
		Target Overview							
Date	Target	Description	Estimated Revenue	EBITDA	Deal Value	Deal Value / Revenue	Estimated EBITDA		
Advarra	Instem								
Anju Software	IntegriChain								
ArisGlobal	IQVIA								
Brucker	Komodo Health								
Certara	Model N								
Clario (formerly ERT / Bioclinica)	Oracle								
Dassault / Medidata	Saama Analytics								
Definitive Healthcare	Sartorius								
Envision Pharma	Signant Health								
Eversana	Thermo Fisher Scientific								
Insightful Science	Veeva Systems								
	WCG Clinical								
		Total Disclosed M&A Deal Value: \$13.6 Billion							
Aug-12	Pharmadeals	Pharma / biotech industry research	n/a	n/a	n/a	n/a	n/a	n/a	
Apr-12	DecisionView	Clinical optimization solutions	n/a	n/a	n/a	n/a	n/a	n/a	
Jan-12	PharmARC Analytics	Life sciences commercial analytics	n/a	n/a	n/a	n/a	n/a	n/a	
Jan-12	Marina Consulting	Pharma / biotech consulting services	n/a	n/a	n/a	n/a	n/a	n/a	
Jan-12	Pharmadata	Pharma data solutions	n/a	n/a	n/a	n/a	n/a	n/a	
Jan-12	SLD	Pharma market data	n/a	n/a	n/a	n/a	n/a	n/a	
Oct-11	SDI Health	Healthcare data & market research	n/a	n/a	n/a	n/a	n/a	n/a	
Aug-11	Ardentia	Healthcare data management platform	n/a	n/a	n/a	n/a	n/a	n/a	
Jun-11	Med-Vantage	Consumer health transparency analytics	n/a	n/a	n/a	n/a	n/a	n/a	
Jul-10	Brogan	Healthcare IT research & consulting	n/a	n/a	n/a	n/a	n/a	n/a	
Jun-10	ORG	Proprietary healthcare research apps	n/a	n/a	n/a	n/a	n/a	n/a	
Oct-08	Skura (Assets)	Life sciences services & consulting	n/a	n/a	n/a	n/a	n/a	n/a	
Apr-08	Health Benchmarks	Healthcare data research services	n/a	n/a	n/a	n/a	n/a	n/a	
Mar-08	Robinson & James Research	Medical research center	n/a	n/a	n/a	n/a	n/a	n/a	
Jan-08	RMBC Pharma	Pharma market intelligence	n/a	n/a	\$7.8	n/a	n/a	n/a	
Dec-07	Aremis Consultants	Health economic consulting services	n/a	n/a	n/a	n/a	n/a	n/a	
Nov-07	MIHS Holdings	Healthcare analytics holding company	n/a	n/a	\$80.0	n/a	n/a	n/a	
Mar-07	ValueMedics Research	Life sciences research & communications	n/a	n/a	n/a	n/a	n/a	n/a	
Jan-07	Brynlake	Data research & consulting services	n/a	n/a	n/a	n/a	n/a	n/a	
Jan-07	Datasurf	Japanese healthcare services	n/a	n/a	n/a	n/a	n/a	n/a	
Jan-07	GCE Servicios	Healthcare device manufacturer	n/a	n/a	n/a	n/a	n/a	n/a	
Jan-07	Merg Forschungsgruppe	Medical research services	n/a	n/a	n/a	n/a	n/a	n/a	
Dec-06	Strategic Decisions Group	Life sciences strategic consulting	n/a	n/a	n/a	n/a	n/a	n/a	
Aug-05	PharMetrics	Pharma market & managed care insights	n/a	n/a	n/a	n/a	n/a	n/a	
Dec-03	ORG IMS Research	Healthcare research services	n/a	n/a	n/a	n/a	n/a	n/a	
Jun-03	AzyX Geopharma	Europeans pharma marketing information	n/a	n/a	\$18.1	n/a	n/a	n/a	
Jun-98	Walsh International	Pharma information management system	n/a	n/a	\$177.0	n/a	n/a	n/a	
Jan-73	Cambridge Computer	Drug distribution data	n/a	n/a	n/a	n/a	n/a	n/a	
		Total Disclosed M&A Deal Value: n/a							
Jul-21	Breakaway Partners	Life sciences market access and decision software	n/a	n/a	n/a	n/a	n/a	n/a	
Jan-21	Mavens Consulting Services	Post-market software and services	n/a	n/a	n/a	n/a	n/a	n/a	
		Total Disclosed M&A Deal Value: \$128.4 Million							
Dec-20	Deloitte (LS Solutions Business)	Life sciences pricing and contracting solutions	n/a	n/a	\$60.0	n/a	n/a	n/a	
Jan-17	Revitas	Revenue and compliance management	\$30.0	n/a	\$52.8	1.76x	n/a	n/a	
Oct-15	Channelinsight	Channel sales CRM	n/a	n/a	\$12.6	n/a	n/a	n/a	
Feb-12	LeapFrogRx	Marketing analytics and BI	n/a	n/a	\$3.0	n/a	n/a	n/a	
Mar-06	Azerity	Pricing and quoting software	n/a	n/a	n/a	n/a	n/a	n/a	
		Total Disclosed M&A Deal Value: \$90.3 Billion							
Dec-21	Federos	AI-optimized assurance solutions	n/a	n/a	n/a	n/a	n/a	n/a	
Dec-21	Cerner	Healthcare information technology solutions	\$5,707.0	\$1,462.0	\$28,055.0	4.92x	19.2x		

Sources: Capital IQ, Public Filings, Press Releases, PitchBook, proprietary Madison Park Group research based on publicly available information
 Note: All EBITDA Multiples >30x are considered not to be meaningful as valuation of business clearly influenced by factors other than profitability

Precedent Life Science M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

		Target Overview							
		Date	Target	Description	Estimated Revenue	EBITDA	Deal Value	Deal Value / Estimated Revenue	EBITDA
Advarra	Instem								
Anju Software	IntegriChain								
ArisGlobal	IQVIA								
Bruker	Komodo Health								
Certara	Model N								
Clario (formerly ERT / Bioclinica)	Oracle								
Dassault / Medidata	Saama Analytics								
Definitive Healthcare	Sartorius								
Envision Pharma	Signant Health								
Eversana	Thermo Fisher Scientific								
Insightful Science	Veeva Systems								
WCG Clinical									
		Total Disclosed M&A Deal Value: \$90.3 Billion							
		Jun-21	GloriaFood	Online food ordering platform	n/a	n/a	n/a	n/a	n/a
		Apr-21	FarApp	eCommerce, logistics, retail, hospitality services	n/a	n/a	n/a	n/a	n/a
		Dec-20	Nor1	Hospitality management solution	n/a	n/a	n/a	n/a	n/a
		Apr-20	Sauce Video	Video content creation solutions	n/a	n/a	n/a	n/a	n/a
		Apr-20	LiveData Utilities	Real time data solution provider	n/a	n/a	n/a	n/a	n/a
		Nov-19	CrowdTwist	Cloud based customer loyalty platform	n/a	n/a	n/a	n/a	n/a
		Jun-19	Oxygen Systems (Brazil)	Provider of localization solutions in Brazil	n/a	n/a	n/a	n/a	n/a
		Jun-19	Takeda PRA	JV buyout of Takeda Pharmaceutical	n/a	n/a	n/a	n/a	n/a
		Dec-18	goBalto	Clinical feasibility solutions	n/a	n/a	n/a	n/a	n/a
		Nov-18	Talari Networks	Wide area network technology	n/a	n/a	n/a	n/a	n/a
		Nov-18	DataFox	Company research platform	n/a	n/a	n/a	n/a	n/a
		Oct-18	Iridize	Customer training and on-boarding	n/a	n/a	n/a	n/a	n/a
		Jun-18	Datascience.com	Data science platform	n/a	n/a	n/a	n/a	n/a
		May-18	Grapeshot	Content placement optimization	\$30.6	\$4.2	\$400.0	13.07x	n/m
		Apr-18	Vocado	Financial aid management platform	n/a	n/a	\$139.0	n/a	n/a
		Apr-18	Sparkline Data	Provider of data warehouse platform	n/a	n/a	n/a	n/a	n/a
		Dec-17	Aconex	Construction document management	\$122.3	\$5.7	\$1,198.7	9.80x	n/m
		Sep-17	Symphony Health	Pharmaceutical market intelligence	\$200.0	n/a	\$530.0	2.65x	n/a
		May-17	Parallel 6	Patient engagement software	n/a	n/a	\$39.4	n/a	n/a
		Apr-17	Moat	Marketing analytics platform	n/a	n/a	\$85.0	n/a	n/a
		Apr-17	Wercker	Code deployment platform	n/a	n/a	n/a	n/a	n/a
		Apr-17	Webtrends (Infinity)	Big data analytics	n/a	n/a	n/a	n/a	n/a
		Jan-17	apiary	API documentation development	n/a	n/a	n/a	n/a	n/a
		Nov-16	Dyn	Internet performance management	\$100.0	n/a	\$650.0	6.50x	n/a
		Nov-16	NetSuite	ERP solutions for SMB	\$897.5	(\$55.6)	\$8,838.9	9.85x	n/m
		Sep-16	Palerra	Cloud security automation	n/a	n/a	n/a	n/a	n/a
		Sep-16	LogFire	Warehousing & in-store inventory platform	n/a	n/a	\$36.0	n/a	n/a
		May-16	Opower	Utilities customer engagement	\$152.0	(\$32.8)	\$471.2	3.10x	n/m
		Apr-16	Textura	Commercial construction collaboration	\$92.2	(\$5.4)	\$698.3	7.57x	n/m
		Apr-16	Crosswise (Assets)	Cross device data services	n/a	n/a	\$50.0	n/a	n/a
		Mar-16	Nextrials	Clinical trial management solutions	n/a	n/a	\$7.7	n/a	n/a
		Feb-16	Ravello Systems	Nested virtualization software	n/a	n/a	\$500.0	n/a	n/a
		Jan-16	AddThis	Social infrastructure and data platform	n/a	n/a	\$200.0	n/a	n/a
		Dec-15	StackEngine	Docker management platform	n/a	n/a	n/a	n/a	n/a
		Sep-15	Maxymiser	Multivariate testing & personalization	n/a	n/a	n/a	n/a	n/a
		Aug-15	CloudMonkey Mobile	Mobile software application testing	n/a	n/a	n/a	n/a	n/a
		Jul-15	Value Health Solutions	Clinical development software	n/a	n/a	\$2.5	n/a	n/a
		Jan-15	Datalogix	Online advertising data & technology	\$125.0	n/a	\$1,200.0	9.60x	n/a
		Oct-14	Front Porch Digital	Content storage management	n/a	n/a	n/a	n/a	n/a
		Sep-14	MICROS Systems	Hospitality & retail management solutions	\$1,405.4	\$291.3	\$5,701.2	4.06x	19.6x
		Jul-14	TOA Technologies	Mobile workforce software	n/a	n/a	n/a	n/a	n/a
		Jul-14	BlueKai	Enterprise marketing data activation	n/a	n/a	\$425.0	n/a	n/a
		Jun-14	LiveLOOK	Customer collaboration tools	n/a	n/a	n/a	n/a	n/a

Sources: Capital IQ, Public Filings, Press Releases, PitchBook, proprietary Madison Park Group research based on publicly available information
 Note: All EBITDA Multiples >30x are considered not to be meaningful as valuation of business clearly influenced by factors other than profitability

Precedent Life Science M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

		(\$ in Millions)						
		Target Overview						
Date	Target	Description	Estimated Revenue	EBITDA	Deal Value	Deal Value / Revenue	Estimated EBITDA	
Advarra	Instem							
Anju Software	IntegriChain							
ArisGlobal	IQVIA							
Brucker	Komodo Health							
Certara	Model N							
Clario (formerly ERT / Bioclinica)	Oracle							
Dassault / Medidata	Saama Analytics							
Definitive Healthcare	Sartorius							
Envision Pharma	Signant Health							
Eversana	Thermo Fisher Scientific							
Insightful Science	Veeva Systems							
WCG Clinical								
		Total Disclosed M&A Deal Value: \$90.3 Billion						
Jun-14	GreenBytes	Desktop virtualization	n/a	n/a	n/a	n/a	n/a	
Mar-14	Corente	Enterprise network security	n/a	n/a	n/a	n/a	n/a	
Dec-13	Responsys	Email marketing	\$194.3	\$13.8	\$1,500.0	7.72x	n/m	
Dec-13	Nirvanix	Internet storage services	n/a	n/a	n/a	n/a	n/a	
Nov-13	BigMachines	Product configuration & quoting	\$58.0	n/a	\$400.0	6.90x	n/a	
Nov-13	Bitzer Mobile	Enterprise mobility management	n/a	n/a	n/a	n/a	n/a	
Nov-13	CRI Worldwide	Clinical research service	n/a	n/a	n/a	n/a	n/a	
Oct-13	Compendium	Content marketing start-up	n/a	n/a	n/a	n/a	n/a	
Sep-13	ReSearch Pharm. Services	Clinical development services	n/a	n/a	\$350.0	n/a	n/a	
Jun-13	Tekelec	Network signaling applications	n/a	n/a	n/a	n/a	n/a	
Mar-13	Acme Packet	Session delivery network	\$274.4	\$8.4	\$1,741.5	6.35x	n/m	
Mar-13	Eloqua	Marketing automation software	\$95.8	(\$8.6)	\$871.0	9.10x	n/m	
Mar-13	Nimbula	Cloud infrastructure software	n/a	n/a	\$100.0	n/a	n/a	
Mar-13	Clinstar	Clinical research and enrollment services	n/a	n/a	n/a	n/a	n/a	
Dec-12	DataRaker	Utilities big data analytics	n/a	n/a	n/a	n/a	n/a	
Nov-12	Instantis	Project portfolio management	n/a	n/a	n/a	n/a	n/a	
Sep-12	SelectMinds	Social talent sourcing	n/a	n/a	n/a	n/a	n/a	
Aug-12	Involver	Video campaign marketing	n/a	n/a	n/a	n/a	n/a	
Jul-12	Xsigo Systems	Virtualized infrastructure services	n/a	n/a	n/a	n/a	n/a	
Jul-12	Skire	Facility management solutions	n/a	n/a	n/a	n/a	n/a	
Jul-12	Collective Intent	Social media analytics	n/a	n/a	n/a	n/a	n/a	
May-12	Vitruve	Social media marketing services	n/a	n/a	\$300.0	n/a	n/a	
Apr-12	ClearTrial	Clinical trials operations	n/a	n/a	n/a	n/a	n/a	
Apr-12	Taleo	Talent management software	\$308.9	\$16.2	\$608.1	1.97x	n/m	
Jan-12	RightNow Tech.	CRM and customer service software	\$216.2	\$22.3	\$1,500.0	6.94x	n/m	
Dec-11	Endeca Technologies	Information management software	n/a	n/a	\$1,080.0	n/a	n/a	
Oct-11	GoAhead	Integrated middleware for manufacturers	n/a	n/a	n/a	n/a	n/a	
Jul-11	InQuira	Natural language search	n/a	n/a	n/a	n/a	n/a	
Jul-11	Ksplice	Linux update software	n/a	n/a	n/a	n/a	n/a	
Jul-11	Pillar Data Systems	Network storage systems	n/a	n/a	n/a	n/a	n/a	
Jun-11	FatWire Software	Web experience management	n/a	n/a	n/a	n/a	n/a	
Jun-11	Datanomic	Compliance screening software	n/a	n/a	n/a	n/a	n/a	
May-11	Kinship Technologies	Clinical data management	n/a	n/a	n/a	n/a	n/a	
Jan-11	Art Technology Group	Cross-channel commerce	\$193.9	\$25.5	\$848.0	4.37x	n/m	
Oct-10	Passlogix	Single sign on services	n/a	n/a	n/a	n/a	n/a	
Aug-10	Phase Forward	Clinical research software	\$227.7	\$14.5	\$744.6	3.27x	n/m	
Aug-10	eServGlobal	Telecom software	\$55.5	n/a	\$96.4	1.74x	n/a	
May-10	Market2Lead	Marketing automation software	n/a	n/a	n/a	n/a	n/a	
May-10	Secerno	Database security and compliance	n/a	n/a	n/a	n/a	n/a	
Feb-10	Convergin	Network service mediation	n/a	n/a	n/a	n/a	n/a	
Feb-10	AmberPoint	SOA visibility and management	n/a	n/a	n/a	n/a	n/a	
Jan-10	Sun Microsystems	Network infrastructure services	\$10,702.0	\$50.0	\$5,019.0	0.47x	n/m	
Jan-10	Silver Creek Systems	Data usability solutions	n/a	n/a	n/a	n/a	n/a	

Sources: Capital IQ, Public Filings, Press Releases, PitchBook, proprietary Madison Park Group research based on publicly available information
 Note: All EBITDA Multiples >30x are considered not to be meaningful as valuation of business clearly influenced by factors other than profitability

Precedent Life Science M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

		Target Overview							
		(\$ in Millions)					Estimated	Deal	Deal Value / Estimated
Date	Target	Description	Revenue	EBITDA	Value	Revenue	EBITDA		
Advarra	Instem								
Anju Software	IntegriChain								
ArisGlobal	IQVIA								
Bruker	Komodo Health								
Certara	Model N								
Clario (formerly ERT / Bioclinica)	Oracle								
Dassault / Medidata	Saama Analytics								
Definitive Healthcare	Sartorius								
Envision Pharma	Signant Health								
Eversana	Thermo Fisher Scientific								
Insightful Science	Veeva Systems								
WCG Clinical									
		Total Disclosed M&A Deal Value: \$90.3 Billion							
Oct-09	Sophoi	IP rights & royalty management	n/a	n/a	n/a	n/a	n/a		
Sep-09	HyperRoll	Data warehouse performance management	n/a	n/a	n/a	n/a	n/a		
Jul-09	GoldenGate Software	Transactional data management	n/a	n/a	n/a	n/a	n/a		
Jul-09	Relsys International	Drug safety solutions	n/a	n/a	n/a	n/a	n/a		
Jun-09	mValent	Application configuration management	n/a	n/a	n/a	n/a	n/a		
Jun-09	Conformia Software	Life sciences PLM	n/a	n/a	n/a	n/a	n/a		
May-09	Virtual Iron Software	Server virtualization	n/a	n/a	n/a	n/a	n/a		
Nov-08	Tacit Software	Email analysis and information sharing	n/a	n/a	n/a	n/a	n/a		
Oct-08	Ruleburst Holdings	Policy automation software	n/a	n/a	\$103.2	n/a	n/a		
Oct-08	Primavera	Project portfolio management	n/a	n/a	n/a	n/a	n/a		
Oct-08	Visual Technology	3D space planning	n/a	n/a	n/a	n/a	n/a		
Sep-08	GKS	Self-service training automation	n/a	n/a	n/a	n/a	n/a		
Sep-08	ClearApp	Advertising measurement	n/a	n/a	n/a	n/a	n/a		
Jun-08	Skywire Software	Policy lifecycle support	\$95.2	n/a	\$240.0	2.52x	n/a		
Apr-08	BEA Systems	Application server software	\$1,535.8	\$347.4	\$6,998.3	4.56x	20.1x		
Mar-08	Empirix (Assets)	Software testing	n/a	n/a	n/a	n/a	n/a		
Oct-07	Interlace Systems	Business planning software	n/a	n/a	n/a	n/a	n/a		
Oct-07	LogicalApps	Enterprise GRC	n/a	n/a	n/a	n/a	n/a		
Sep-07	Bridgestream	Business roles automation	n/a	n/a	n/a	n/a	n/a		
Sep-07	Netsure Telecom	Network intelligence	n/a	n/a	n/a	n/a	n/a		
Sep-07	Active Reasoning	IT controls automation	n/a	n/a	n/a	n/a	n/a		
Jul-07	Agile Software	PLM software	\$130.1	(\$22.0)	\$330.6	2.54x	n/m		
Jun-07	Revenue Tech.	Business management software	n/a	n/a	n/a	n/a	n/a		
Apr-07	AppForge	Software development platform	n/a	n/a	n/a	n/a	n/a		
Apr-07	Lodestar	Energy management software	n/a	n/a	n/a	n/a	n/a		
Apr-07	Hyperion Solutions	Business performance management	\$830.9	\$142.3	\$2,813.6	3.39x	19.8x		
Dec-06	MetaSolv	CRM & order management	\$95.6	\$1.9	\$157.6	1.65x	n/m		
Nov-06	SPL WorldGroup	Utilities asset management	n/a	n/a	n/a	n/a	n/a		
Jul-06	Pharma Bio-Research	CRO services	n/a	n/a	\$108.0	n/a	n/a		
Jul-06	Portal Software	Revenue management	\$93.7	(\$77.2)	\$178.5	1.91x	n/m		
Jun-06	Demantra	POS platform	n/a	n/a	\$41.0	n/a	n/a		
Apr-06	Net4Call	Telecom data communication	n/a	n/a	n/a	n/a	n/a		
Feb-06	HotSip	eCommerce internet protocol	n/a	n/a	n/a	n/a	n/a		
Jan-06	Siebel Systems	Front office business applications	\$1,429.1	\$58.6	\$5,600.0	3.92x	n/m		
Jan-06	360Commerce	Retail workforce & store management	n/a	n/a	n/a	n/a	n/a		
Nov-05	Thor Technologies	Access rights management	n/a	n/a	n/a	n/a	n/a		
Nov-05	G-Log	Logistics management	n/a	n/a	\$90.0	n/a	n/a		
Aug-05	Context Media	Enterprise content integration	n/a	n/a	n/a	n/a	n/a		
Jul-05	ProfitLogic	Retail profit optimization	n/a	n/a	n/a	n/a	n/a		
Jun-05	TimesTen	Infrastructure management	n/a	n/a	n/a	n/a	n/a		
Mar-05	Oblix	Security infrastructure	n/a	n/a	n/a	n/a	n/a		
Jan-05	PeopleSoft	CRM & HR management	\$2,674.4	\$311.1	\$8,329.3	3.11x	26.8x		
Jan-03	UpShot	Hosted CRM service	n/a	n/a	\$56.0	n/a	n/a		

Sources: Capital IQ, Public Filings, Press Releases, PitchBook, proprietary Madison Park Group research based on publicly available information
 Note: All EBITDA Multiples >30x are considered not to be meaningful as valuation of business clearly influenced by factors other than profitability

Precedent Life Science M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

		(\$ in Millions)						
		Target Overview						
Date	Target	Description	Estimated Revenue	EBITDA	Deal Value	Deal Value / Revenue	Estimated EBITDA	
Advarra	Instem							
Anju Software	IntegriChain							
ArisGlobal	IQVIA							
Bruker	Komodo Health							
Certara	Model N							
Clario (formerly ERT / Bioclinica)	Oracle							
Dassault / Medidata	Saama Analytics							
Definitive Healthcare	Sartorius							
Envision Pharma	Signant Health							
Eversana	Thermo Fisher Scientific							
Insightful Science	Veeva Systems							
WCG Clinical								
		Total Disclosed M&A Deal Value: \$90.3 Billion						
Feb-02	NetForce	Drug safety monitoring	n/a	n/a	n/a	n/a	n/a	
Mar-00	Fibermarket.com	Forest products eCommerce	n/a	n/a	n/a	n/a	n/a	
Aug-98	Versatility	Customer interaction software	n/a	n/a	\$11.6	n/a	n/a	
Jan-97	Datalogix	Mobile asset tracking	n/a	n/a	\$94.0	n/a	n/a	
		Total Disclosed M&A Deal Value: \$3 Million						
Aug-19	Comprehend	Cloud-based clinical intelligence platform	n/a	n/a	n/a	n/a	n/a	
Jan-11	InfoSTEP India	Information technology consulting services	n/a	n/a	\$3.0	n/a	n/a	
Mar-10	Sypherlink	Information management software	n/a	n/a	n/a	n/a	n/a	
		Total Disclosed M&A Deal Value: \$1.8 Billion						
Dec-21	ALS Automated Lab Solutions	Laboratory solutions for life science applications	n/a	n/a	n/a	n/a	n/a	
Jul-21	Xell AG	Human and veterinary biotech products	n/a	n/a	n/a	n/a	n/a	
Jul-21	CellGenix	Raw & ancillary materials for cell/gene therapy	\$20.0	n/a	\$118.3	5.92x	n/a	
Dec-20	WaterSep BioSeparations	Hollow-fiber membrane devices	\$2.5	n/a	\$32.7	13.08x	n/a	
Dec-20	Novasep	Complex life sciences molecule production	\$41.6	n/a	n/a	n/a	n/a	
Oct-20	BIA Separations	Purification technology for biomolecules	\$29.4	n/a	\$424.0	14.40x	n/a	
May-20	Danaher (Assets)	Three units, including life sciences assets	\$100.0	n/a	\$275.0	2.75x	n/a	
Dec-19	Biological Industries	Developer of cell culture media	n/a	n/a	\$50.0	n/a	n/a	
May-17	MKS Data Analytics	Data analytics software for modeling	\$15.0	n/a	\$72.5	4.83x	n/a	
Mar-17	Essen BioScience	Live-cell imaging platform	\$60.0	n/a	\$320.0	5.33x	n/a	
Jul-16	kSep Systems, LLC	Single-use, scalable bio-processing	\$7.0	n/a	\$28.0	4.00x	n/a	
Jul-16	ViroCyt, LLC	Rapid quantification technology	n/a	n/a	\$16.0	n/a	n/a	
Jun-16	Intellicyt Corporation	Cell and bead-based screening	\$13.4	n/a	\$90.0	6.72x	n/a	
Dec-11	Biohit (Assets)	Liquid handling business	\$40.3	n/a	\$90.9	2.26x	n/a	
Jul-07	SSB	Biopharma fermentation tools	\$368.1	\$39.9	\$301.6	0.82x	7.6x	
Jan-07	toha-plast	Plastic components	n/a	n/a	n/a	n/a	n/a	
Aug-99	Denver Instrument	Laboratory instruments	n/a	n/a	n/a	n/a	n/a	
		Total Disclosed M&A Deal Value: \$1 Billion						
Nov-20	Virtrial	Virtual care management platform	n/a	n/a	n/a	n/a	n/a	
Sep-18	CRF Health	eCOA and eConsent solutions	n/a	n/a	\$1,000.0	n/a	n/a	
Oct-17	mProve Health	Mobile patient engagement software	n/a	n/a	n/a	4.40x	n/a	
Nov-16	CLINapps	Clinical supplies software	n/a	n/a	n/a	n/a	n/a	
Jun-15	Clintara	Clinical rater training services and technology	n/a	n/a	n/a	n/a	n/a	
Jul-11	Arrowhead Electronic	Electronic patient reported outcomes (ePRO)	n/a	n/a	n/a	n/a	n/a	
		Total Disclosed M&A Deal Value: \$77.2 Billion						
Dec-21	SystemLink	Transplant information system software	n/a	n/a	n/a	n/a	n/a	
Nov-21	PharmaFluidics	Micro-chip-based chromatography columns	n/a	n/a	n/a	n/a	n/a	
May-21	Combinati	Precision molecular detection platform	n/a	n/a	n/a	n/a	n/a	
Apr-21	PPD	Clinical trial and laboratory services	\$5,878.9	\$968.7	\$20,900.0	3.56x	21.6x	
Feb-21	Mesa Biotech	Molecular diagnostic tests	\$45.0	n/a	\$471.0	10.47x	n/a	

Sources: Capital IQ, Public Filings, Press Releases, PitchBook, proprietary Madison Park Group research based on publicly available information
 Note: All EBITDA Multiples >30x are considered not to be meaningful as valuation of business clearly influenced by factors other than profitability

Precedent Life Science M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

		(\$ in Millions)						
		Target Overview						
Date	Target	Description	Estimated Revenue	EBITDA	Deal Value	Deal Value / Revenue	Estimated EBITDA	
Advarra	Instem							
Anju Software	IntegriChain							
ArisGlobal	IQVIA							
Bruker	Komodo Health							
Certara	Model N							
Clario (formerly ERT / Bioclinica)	Oracle							
Dassault / Medidata	Saama Analytics							
Definitive Healthcare	Sartorius							
Envision Pharma	Signant Health							
Eversana	Thermo Fisher Scientific							
Insightful Science	Veeva Systems							
WCG Clinical								
		Total Disclosed M&A Deal Value: \$77.2 Billion						
Feb-21	Propel Labs (Assets)	Cell sorting technology	n/a	n/a	n/a	n/a	n/a	
Jan-21	Novasep Belgium	Molecule production and purification	\$441.3	\$70.6	\$834.0	1.89x	11.8x	
Dec-20	Phitonex	Molecular-scale optical devices	n/a	n/a	n/a	n/a	n/a	
Sep-19	GSK (Assets)	Irish API manufacturing site	n/a	n/a	\$99.2	n/a	n/a	
Jun-19	HighChem	Mass spectrometry software	n/a	n/a	n/a	n/a	n/a	
Apr-19	Brammer Bio	Viral vector for gene and cell therapies	\$140.0	n/a	\$1,674.0	11.96x	n/a	
Oct-18	Becton Dickinson (Assets)	Advanced bioprocessing business	\$100.0	n/a	\$477.0	4.77x	n/a	
Mar-18	IntegenX	Rapid DNA technology for human identification	n/a	n/a	\$65.0	n/a	n/a	
Dec-17	Phenom-World	Nanotechnology equipment	n/a	\$4.1	n/a	n/a	n/a	
Dec-17	EPTEK Technology (Assets)	Air quality monitoring assets	n/a	n/a	n/a	n/a	n/a	
Aug-17	Patheon	Pharma development & mfg. services	\$1,870.0	\$316.4	\$7,358.0	3.93x	23.3x	
Jul-17	Linkage Biosciences	Molecular diagnostics products	n/a	n/a	n/a	n/a	n/a	
Mar-17	Core Informatics	Laboratory data management software	\$10.0	n/a	\$94.0	9.40x	n/a	
Feb-17	Finesse Solutions	Bio-process mgmt. software & systems	\$50.0	n/a	\$221.0	4.42x	n/a	
Nov-16	MTI-GlobalStem	Human and mouse stem cell research products	n/a	n/a	n/a	n/a	n/a	
Sep-16	FEI	Nanoscale imaging, analysis and prototyping	\$930.0	\$167.6	\$4,082.1	4.39x	24.4x	
Mar-16	Affymetrix	Life science tools and diagnostic products	\$360.0	\$39.3	\$1,341.8	3.73x	n/m	
Feb-16	Inel	Real-time X-ray diffraction systems	\$1.4	n/a	n/a	n/a	n/a	
Sep-15	Alfa Aesar	Research chemicals	\$33.4	\$9.0	\$389.1	11.65x	n/m	
Feb-15	Advanced Scientifics	Bio-processing technology services	\$80.0	n/a	\$288.8	3.61x	n/a	
Mar-14	Prionics	Diagnostic services for farm animal diseases	n/a	n/a	n/a	n/a	n/a	
Feb-14	Invitrogen	Genetic testing equipment	\$3,870.0	\$1,097.4	\$15,303.8	3.95x	13.9x	
Jan-13	picoSpin	Nuclear magnetic resonance spectrometers	n/a	n/a	n/a	n/a	n/a	
Sep-12	One Lambda	Transplant diagnostics products	\$182.0	n/a	\$898.1	4.93x	n/a	
Jul-12	Princeton Security	Detector products	\$4.8	\$0.4	\$12.8	2.66x	n/m	
May-12	Doe & Ingalls Management	Specialty chemicals	\$110.0	n/a	\$176.4	1.60x	n/a	
Sep-11	Intrinsic Bioprobes	Clinical and diagnostic assays	n/a	n/a	n/a	n/a	n/a	
Aug-11	ImmunoDiagnostics	Blood testing systems	\$0.3	n/a	\$2,470.0	n/m	n/a	
Jul-11	Trek Diagnostic Systems	Microbiology-based diagnostic testing	n/a	n/a	n/a	n/a	n/a	
May-11	Sterilin	Plastic ware for clinical and laboratory use	n/a	n/a	n/a	n/a	n/a	
May-11	Dionex	Chromatography equipment	\$420.0	\$103.1	\$2,029.1	4.83x	19.7x	
Dec-10	Lomb Scientific	Lab chemicals, consumables and instruments	n/a	n/a	n/a	n/a	n/a	
Dec-10	TKA	Laboratory water purification systems	n/a	n/a	n/a	n/a	n/a	
Jul-10	Fermentas International	Molecular biological products	\$55.0	n/a	\$260.4	4.73x	n/a	
May-10	Polychromix	Material analysis & chemical sensing products	n/a	n/a	n/a	n/a	n/a	
Apr-10	Proxeon Biosystems	Medical devices for sample purification	n/a	(\$0.8)	n/a	n/a	n/a	
Mar-10	Finnzymes	Instruments for molecular biology analysis	\$20.0	n/a	\$58.3	2.92x	n/a	
Feb-10	Ahura Scientific	Handheld optical systems	\$45.0	n/a	\$166.4	3.70x	n/a	
Feb-10	NovaWave Technologies	Chemical sensors for environmental monitoring	\$4.0	n/a	n/a	n/a	n/a	
Nov-09	C2V	Analytical instruments and detectors	n/a	n/a	n/a	n/a	n/a	
Oct-09	BRAHMS	In-vitro diagnostics tests	\$109.2	n/a	\$481.6	4.41x	n/a	
Apr-09	Biolab (Assets)	Medical instruments	\$130.5	n/a	\$131.6	1.01x	n/a	
Apr-09	Bonsai Technologies Group	Medical, dental & hospital equipment	n/a	n/a	n/a	n/a	n/a	

Sources: Capital IQ, Public Filings, Press Releases, PitchBook, proprietary Madison Park Group research based on publicly available information
 Note: All EBITDA Multiples >30x are considered not to be meaningful as valuation of business clearly influenced by factors other than profitability

Precedent Life Science M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

		(\$ in Millions)						
		Target Overview						
Date	Target	Description	Estimated Revenue	EBITDA	Deal Value	Deal Value / Revenue	Estimated EBITDA	
Advarra	Instem							
Anju Software	IntegriChain							
ArisGlobal	IQVIA							
Bruker	Komodo Health							
Certara	Model N							
Clario (formerly ERT / Bioclinica)	Oracle							
Dassault / Medidata	Saama Analytics							
Definitive Healthcare	Sartorius							
Envision Pharma	Signant Health							
Eversana	Thermo Fisher Scientific							
Insightful Science	Veeva Systems							
WCG Clinical								
		Total Disclosed M&A Deal Value: \$77.2 Billion						
Nov-08	Raymond A. Lamb	Histology and anatomical pathology products	n/a	n/a	n/a	n/a	n/a	
Aug-08	Afora	Laboratory glassware	n/a	n/a	n/a	n/a	n/a	
Aug-08	AquaSensors	Water measurement systems	n/a	n/a	n/a	n/a	n/a	
Jul-08	FIBERLite Centrifuge	Centrifuge rotors	n/a	n/a	\$17.0	n/a	n/a	
Jul-08	ABR--Affinity BioReagents	Monoclonal and polyclonal antibodies	n/a	n/a	n/a	n/a	n/a	
Jul-08	Open Biosystems	RNA interference and gene expression	\$14.0	n/a	n/a	n/a	n/a	
Jun-08	Chemito Technologies (Assets)	Analytical tools & environment instrumentation	n/a	n/a	n/a	n/a	n/a	
Jan-08	Nascent BioSciences	Liquid handling consumables	n/a	n/a	\$10.0	n/a	n/a	
Dec-07	La-Pha-Pack	Laboratory products	\$21.0	n/a	\$46.0	2.19x	n/a	
Oct-07	NanoDrop Technologies	Micro volume equipment	\$27.0	n/a	\$155.8	5.77x	n/a	
Oct-07	Priority Solutions International	Pharma supply chain management services	\$96.0	n/a	\$163.7	1.71x	n/a	
Sep-07	Davis Inotek (Assets)	Technical instruments and industrial equipment	n/a	n/a	n/a	n/a	n/a	
Sep-07	Qualigens Fine Chemicals	Laboratory chemicals and products	\$24.0	n/a	\$59.0	2.46x	n/a	
Mar-07	Oryx Instruments	Semiconductor testing systems	n/a	n/a	n/a	n/a	n/a	
Jan-07	SwissAnalytic Group	Mass spectrometry and HPLC pumps	\$22.0	n/a	n/a	n/a	n/a	
Dec-06	Cohesive Technologies	Advanced sample extraction products	\$13.5	n/a	\$70.9	5.25x	n/a	
Jun-06	EGS Gauging	Measurement & instruments for process control	\$25.0	n/a	\$28.4	1.14x	n/a	
May-06	Fisher Scientific	Analytical equipment and technology	\$5,400.0	n/a	\$12,560.0	2.33x	n/a	
Apr-06	Biolmage	Protein visualization tools	n/a	n/a	n/a	n/a	n/a	
Mar-06	Athena Diagnostics	Molecular diagnostic & immunodiagnostic tests	\$55.0	n/a	\$283.0	5.15x	n/a	
Aug-05	Eurofins Lancaster	Commercial testing laboratory services	\$60.0	n/a	\$150.0	2.50x	n/a	
Jul-05	McKesson Bioservices	Clinical supply and biological specimen mgmt.	n/a	n/a	\$60.0	n/a	n/a	
Jan-05	Cellomics	High content screening systems	\$13.0	n/a	\$49.0	3.77x	n/a	
Aug-04	Apogent Technologies	Diagnostic products	\$1,168.9	\$199.8	\$2,612.0	2.23x	13.1x	
Apr-04	GE Healthcare Dharmacon	Research tools for biotechnology research	n/a	n/a	\$80.0	n/a	n/a	
Feb-04	Oxoid	Microbiological products	n/a	n/a	\$325.3	n/a	n/a	
Sep-01	Cole-Parmer	Laboratory equipment, instruments & supplies	\$170.0	n/a	\$205.0	1.21x	n/a	
May-01	Medical Analysis Systems	Diagnostic products for clinical laboratories	\$30.0	n/a	n/a	n/a	n/a	
Jul-96	SensorMedics	Cardio pulmonary & other medical instruments	\$69.2	n/a	\$70.0	1.01x	n/a	
		Total Disclosed M&A Deal Value: \$611.1 Million						
Dec-21	Veracity Logic	Randomization and trial supply management software	n/a	n/a	n/a	n/a	n/a	
Aug-21	learnaboutgmp	Life sciences online training & education	n/a	n/a	n/a	n/a	n/a	
Nov-19	Physicians World	Speakers bureau services	\$20.0	n/a	\$41.0	2.05x	n/a	
Sep-19	Crossix	US patient data analytics platform	\$80.0	n/a	\$428.0	5.35x	n/a	
Sep-15	Zinc Ahead	Promotional compliance solutions	\$25.4	\$1.7	\$119.6	4.71x	n/m	
Jul-15	Mercurio	HCP database solutions	\$16.7	n/a	n/a	n/a	n/a	
Jul-15	Selligy	Life sciences CRM software	n/a	n/a	\$0.3	n/a	n/a	
Mar-15	Qforma (Assets)	KOL data solutions	n/a	n/a	\$9.8	n/a	n/a	
Jun-13	AdvantageMS	Healthcare data provider	n/a	n/a	\$12.4	n/a	n/a	

Sources: Capital IQ, Public Filings, Press Releases, PitchBook, proprietary Madison Park Group research based on publicly available information
 Note: All EBITDA Multiples >30x are considered not to be meaningful as valuation of business clearly influenced by factors other than profitability

Precedent Life Science M&A Transactions

Public Companies & Leading Platforms

MADISON PARK GROUP

Advarra	Instem
Anju Software	IntegriChain
ArisGlobal	IQVIA
Bruker	Komodo Health
Certara	Model N
Clario (formerly ERT / Bioclinica)	Oracle
Dassault / Medidata	Saama Analytics
Definitive Healthcare	Sartorius
Envision Pharma	Signant Health
Eversana	Thermo Fisher Scientific
Insightful Science	Veeva Systems

(\$ in Millions)								
Target Overview								
Date	Target	Description	Estimated Revenue	EBITDA	Deal Value	Deal Value / Revenue	Estimated EBITDA	
WCG Clinical					Total Disclosed M&A Deal Value: \$703 Million			
Jun-21	VeraSci	eCOA and trial outcome solutions	n/a	n/a	\$330.0	n/a	n/a	n/a
Jun-21	Intrinsic Imaging	Medical imaging services to clinical trial vendors	n/a	n/a	\$80.0	n/a	n/a	n/a
May-21	The Avoca Group	Life sciences consulting firm	n/a	n/a	\$36.0	n/a	n/a	n/a
Dec-20	Trifecta Clinical	Training, safety, and communications platform	n/a	n/a	n/a	n/a	n/a	n/a
Jan-20	Statistics Collaborative	Biostatistical consulting service	n/a	n/a	n/a	n/a	n/a	n/a
Sep-19	Waife & Associates	Biopharmaceutical clinical consulting service	n/a	n/a	n/a	n/a	n/a	n/a
Aug-19	PharmaSeek	Administrative, consulting and training solutions	n/a	n/a	n/a	n/a	n/a	n/a
Apr-19	Analgesic Solutions	Risk mitigation services for clinical trials	n/a	n/a	n/a	n/a	n/a	n/a
Jan-19	First Clinical Research	Clinical best practice information services	n/a	n/a	n/a	n/a	n/a	n/a
Dec-18	Velos	Clinical research administration software	\$12.0	n/a	n/a	n/a	n/a	n/a
Jul-18	KMR Group	Clinical research benchmarking and analytics	n/a	n/a	n/a	n/a	n/a	n/a
Jul-18	Metrics Champion	Clinical research benchmarking and analytics	n/a	n/a	n/a	n/a	n/a	n/a
Mar-18	ACI Clinical	Clinical trial advisory services	n/a	n/a	n/a	n/a	n/a	n/a
Nov-17	Vigilare International	Pharmacovigilance services	n/a	n/a	n/a	n/a	n/a	n/a
Aug-17	ConsentNow	Informed consent process software	n/a	n/a	n/a	n/a	n/a	n/a
Jul-17	FDAnews	Regulatory, legislative and business news	n/a	n/a	n/a	n/a	n/a	n/a
Mar-17	MedAvante	eCOA solutions	n/a	n/a	\$140.0	3.70x	n/a	n/a
Mar-17	ThreeWire	Patient recruitment services	n/a	n/a	\$87.0	4.50x	14.0x	n/a
Dec-16	ProPhase	eSource and clinical data management	n/a	n/a	\$30.0	2.60x	12.9x	n/a
Jun-16	CenterWatch	Proprietary clinical trial data	n/a	n/a	n/a	n/a	n/a	n/a
Jun-16	karnadata	Clinical database and decision support	n/a	n/a	n/a	n/a	n/a	n/a
Mar-16	Acorn Applications	Analytical research solutions	n/a	n/a	n/a	n/a	n/a	n/a
Mar-16	Clintrax Global	Contract negotiation & grant management	\$7.0	n/a	n/a	n/a	n/a	n/a
Sep-14	ePharmaSolutions	eClinical solutions and tech-enabled services	n/a	n/a	n/a	4.00x	n/a	n/a
Sep-14	New England IRB	Independent institutional review board	n/a	n/a	n/a	n/a	n/a	n/a
Jul-14	Alliance Biosciences	Biosafety and biosecurity consulting	n/a	n/a	n/a	n/a	n/a	n/a
Jun-14	Aspire IRB	Review services	n/a	n/a	n/a	n/a	n/a	n/a
Jun-14	Midlands IRB	Ethical review services for clinical research	n/a	n/a	n/a	n/a	n/a	n/a
Jan-13	Research Dataware	Software for IRBs	n/a	n/a	n/a	n/a	n/a	n/a
May-12	Copernicus Group	IRB services	n/a	n/a	n/a	n/a	n/a	n/a
Average			\$418.2	\$103.2	\$888.0	4.34x	14.5x	
Median			\$45.0	\$4.1	\$90.9	3.70x	14.0x	

WCG Clinical

Precedent Life Science M&A Transactions

Other Life Sciences Software Acquisitions: 2018-Present

MADISON PARK GROUP

(\$ in Millions)

Date	Acquiror	Target	Target Overview			Transaction Summary		
			Description	Estimated Revenue	Estimated EBITDA	Deal Value	Deal Value / Estimated Revenue	Estimated EBITDA
Jan-22	Novo Holdings	Medical Knowledge Group	Network mapping & patient-finding analytics	n/a	\$58.5	\$1,200.0	n/a	20.5x
Dec-21	Flatiron	Protocol First	Purpose-built clinical trial execution software	n/a	n/a	n/a	n/a	n/a
Dec-21	Kohlberg	Trinity Life Sciences	Life science consultancy	n/a	\$63.6	\$1,400.0	n/a	22.0x
Dec-21	Gener8	The RND Group	Medical device software development	n/a	n/a	n/a	n/a	n/a
Dec-21	PharmaLex	Pharmasol	Drug safety software and services	n/a	n/a	n/a	n/a	n/a
Nov-21	Nordic Capital	Inovalon	Cloud-based analytics platform for healthcare	\$749.6	\$219.6	\$7,300.0	9.74x	n/m
Nov-21	Clinical Link	Digital Artefacts	3D modeling and time visualization software	n/a	n/a	n/a	n/a	n/a
Nov-21	Thread Research	Modus Outcomes	Research consultancy supporting eCOA	n/a	n/a	n/a	n/a	n/a
Oct-21	Carlyle Group	Saama Analytics	Clinical analytics cloud software	n/a	n/a	\$430.0	n/a	n/a
Oct-21	Ares Management	Lockwood	Scientific medical communications	n/a	\$17.1	\$360.0	n/a	21.0x
Oct-21	GHO Capital	ClearView Healthcare Partners	Life science global strategy advisor	n/a	\$42.9	\$730.0	n/a	17.0x
Sep-21	Honeywell	Performix	Life sciences manufacturing execution software	n/a	n/a	n/a	n/a	n/a
Sep-21	Verily (Alphabet)	SignalPath	Clinical trial management system	n/a	n/a	n/a	n/a	n/a
Aug-21	H1	Carevoyance	Medical device sales enablement	n/a	n/a	n/a	n/a	n/a
Aug-21	Nanox	Zebra Medical Vision	Medical imaging analytics	n/a	n/a	\$200.0	n/a	n/a
Jul-21	Icon	PRA Health Sciences	Drug development and clinical trial services	\$3183.4	\$433.8	\$11,274.3	3.54x	26.0x
Jul-21	Bain Capital Private Equity	PartsSource	B2B marketplace for medtech services	\$200.0	n/a	\$1,250.0	6.25x	n/a
Jul-21	EQT	Parexel International	Technological biopharmaceutical services	n/a	\$450.0	\$8,500.0	n/a	18.9x
Jun-21	Goldman Sachs Group	4G Clinical	Randomization and trial supply management	n/a	n/a	\$280.0	n/a	n/a
Jun-21	Banyan Software	HealthRx Corporation	Occupational health management software	n/a	n/a	n/a	n/a	n/a
Jun-21	Within3	Voxx Analytics	Analytics research and influence mapping	n/a	n/a	n/a	n/a	n/a
May-21	Tencent Investment	ForceClouds	Clinical trial management software	n/a	n/a	n/a	n/a	n/a
May-21	Alten	Cmed	CRO services and clinical data suite	\$20.0	n/a	n/a	n/a	n/a
Apr-21	Within3	rMark Bio	Business intelligence software for life sciences	n/a	n/a	n/a	n/a	n/a
Feb-21	Nordic Capital Astorg	Cytel	Statistical medical data management software	\$200.0	\$40.0	\$1,000.0	5.00x	25.0x
Feb-21	Honeywell	Sparta Systems	Enterprise quality management software	\$155.0	n/a	\$1,303.0	8.41x	n/a
Feb-21	LGC	Technopath Clinical	Total quality control products for clinical labs	n/a	n/a	n/a	n/a	n/a
Jan-21	EvidentIQ (formerly Xclincial)	Carenity	Social healthcare platform for patients and caregivers	n/a	n/a	n/a	n/a	n/a
Jan-21	EvidentIQ (formerly Xclincial)	Fortress Medical Systems	Integrated clinical trial software	n/a	n/a	n/a	n/a	n/a
Dec-20	Charles River	Distributed Bio	Antibody discovery tools	\$15.1	n/a	\$104.0	6.90x	n/a
Dec-20	Trinity Life Sciences	BluePrint Research Group	Global life sciences commercial strategy consultancy	Confid.	Confid.	Confid.	Confid.	Confid.
Dec-20	ZEISS International	arivis	Biomedical big image data and compliance software	n/a	n/a	n/a	n/a	n/a
Sep-20	Carlyle Group	TriNetx	Research network and clinical optimization platform	n/a	n/a	n/a	n/a	n/a
Aug-20	GI Partners	Clinical Ink	eSource technology	n/a	n/a	n/a	n/a	n/a

Source: Public Filings, Press Releases, PitchBook

Note: All EBITDA Multiples >30x are considered not to be meaningful as valuation of business clearly influenced by factors other than profitability.

Precedent Life Science M&A Transactions

Other Life Sciences Software Acquisitions: 2018-Present

MADISON PARK GROUP

(\$ in Millions)

Date	Acquiror	Target	Description	Target Overview		Transaction Summary		
				Estimated Revenue	EBITDA	Deal Value	Deal Value / Estimated Revenue	EBITDA
Jul-20	Recursion Pharmaceuticals	Vium	Digital biomarkers for preclinical research	n/a	n/a	n/a	n/a	n/a
Jul-20	Excelya	Koehler eClinical	CRO services and proprietary EDC / CTMS software	n/a	n/a	n/a	n/a	n/a
Apr-20	Simulations Plus	Lixoft	Modeling and simulation platform	\$3.4	\$1.7	\$16.5	4.85x	9.7x
Mar-20	Pivotal	Akcelis	Patient engagement and retention software	n/a	n/a	n/a	n/a	n/a
Feb-20	Parexel	Model Answers	Clinical pharmacology modeling and simulation	n/a	n/a	n/a	n/a	n/a
Feb-20	Brooks Life Sciences	RURO	Lab informatics software	\$5.0	n/a	\$15.0	3.00x	n/a
Jan-20	Clarivate Analytics	DRG	Healthcare data, analytics and insights	\$207.0	\$47.0	\$950.0	4.59x	20.2x
Jan-20	Brainlab	VisionTree	Cloud-based ePRO	n/a	n/a	n/a	n/a	n/a
Jan-20	Summit Partners	eClinical Solutions	Cloud-based SaaS for clinical data services	n/a	n/a	n/a	n/a	n/a
Jan-20	Phlexglobal	Cunesoft	Regulatory information management	n/a	n/a	n/a	n/a	n/a
Dec-19	VirTrial	SnapMD	Virtual care management platform	n/a	n/a	n/a	n/a	n/a
Nov-19	Leonard Green	WCG	Clinical trial services and software	n/a	\$175.0	\$3,100.0	n/a	17.7x
Nov-19	Monterro	PCG Solutions	Clinical trial software	n/a	n/a	n/a	n/a	n/a
Nov-19	Cytel	MTEK Sciences	Biopharma consulting analytics software	n/a	n/a	n/a	n/a	n/a
Nov-19	Monterro	Viedoc	Electronic data capture system for clinical trials	n/a	n/a	n/a	n/a	n/a
Oct-19	TrialScope	Clinical Trial Connect	Trial matching and patient management	n/a	n/a	n/a	n/a	n/a
Oct-19	Astorg	ERT	Clinical safety, endpoint collection & analysis	n/a	\$210.0	\$3,800.0	n/a	18.0x
Sep-19	Bid Equity	XClinical	SaaS-based eClinical solutions	n/a	n/a	n/a	n/a	n/a
Sep-19	OptimizeRx	RMDY Health	Trial matching and patient management	\$3.0	n/a	\$16.0	5.33x	n/a
Sep-19	PPD	Bioclinica (Assets)	Global Site business unit	n/a	n/a	n/a	n/a	n/a
Aug-19	SARORAS Private Capital	InCrowd	Mobile first, market research platform	\$15.0	n/a	n/a	n/a	n/a
Aug-19	Merck (MilliporeSigma)	BSSN Software	Data management and integration software	n/a	n/a	n/a	n/a	n/a
Jul-19	Genstar Capital	Advarra	Compliance solutions to the R&D process	n/a	\$72.0	\$1,300.0	n/a	18.0x
Jun-19	dMed	Target Health	CRO services and eClinical software	n/a	n/a	n/a	n/a	n/a
Jun-19	Nordic Capital	ArisGlobal	Clinical and medical affairs software solutions	\$100.0	n/a	\$700.0	7.00x	n/a
Jun-19	Danaher / Beckman Coulter	Cytobank	Single cell data analysis software	n/a	n/a	n/a	n/a	n/a
May-19	Evidera	Medimix International	Provider of real-world evidence (RWE) insights	n/a	n/a	n/a	n/a	n/a
May-19	RLDatix	iContracts	Contract management	n/a	n/a	\$200.0	n/a	n/a
Apr-19	Emerson	Bioproduction Group	Simulation, modeling and scheduling software	n/a	n/a	n/a	n/a	n/a
Mar-19	Abry Partners	Anju	Life sciences software and data	Confid.	Confid.	Confid.	Confid.	Confid.
Feb-19	Cayuse	NTM Consulting Services	Research management	n/a	n/a	n/a	n/a	n/a
Oct-18	Varian Medical	Noona	Oncology platform for mobile devices	n/a	n/a	n/a	n/a	n/a
Oct-18	NNIT	Valiance Partners	Data migration software	\$13.2	n/a	\$35.7	2.70x	n/a
Aug-18	Deloitte	Qspace	Validation lifecycle management	n/a	n/a	n/a	n/a	n/a
Jun-18	Genpact	Commonwealth Informatics	Cloud-based pharmacovigilance analytics	n/a	n/a	n/a	n/a	n/a

Source: Public Filings, Press Releases, PitchBook

Note: All EBITDA Multiples >30x are considered not to be meaningful as valuation of business clearly influenced by factors other than profitability.

Precedent Life Science M&A Transactions

Other Life Sciences Software Acquisitions: 2018-Present

MADISON PARK GROUP

(\$ in Millions)

Date	Acquiror	Target Overview				Transaction Summary			
		Target	Description	Estimated Revenue	Estimated EBITDA	Deal Value	Deal Value / Estimated Revenue	Deal Value / Estimated EBITDA	
May-18	Agilent	Genohm	Laboratory information management	n/a	n/a	n/a	n/a	n/a	
May-18	Elligo Health Research	ePatientFinder	Clinical trial solutions and practice network	n/a	n/a	n/a	n/a	n/a	
May-18	Q ² Solutions	BioFortis	Trial sample, consent tracking and biobanking	n/a	n/a	n/a	n/a	n/a	
May-18	NovaQuest	Clinical Ink	eSource technology	n/a	n/a	n/a	n/a	n/a	
Apr-18	Roche	Flatiron	Oncology-focused electronic health records (EHR)	\$47.5	n/a	\$1,900.0	n/m	n/a	
Jan-18	Wilmington	Interactive Media	Life sciences sales & marketing solutions	n/a	n/a	\$5.3	n/a	n/a	
Jan-18	Inspirata	AIM	AI and NLP for clinical documents	n/a	n/a	n/a	n/a	n/a	
Average								5.61x	19.5x
Median								5.17x	19.6x

Precedent Fundraising Transactions

Life Sciences Software: 2018-Present

MADISON PARK GROUP

(\$ in Millions)

Company Overview				Fundraise Summary					
Date	Company	Employees 01/3/22	Description	Lead Investor	Type	Amount Raised	Pre-Money Valuation	Last Post-Money	Raised To-Date
Nov-21	Benchling	635	Lab collaboration platform for life science research	Altimeter Capital	Venture	\$100.0	\$6,000.0	\$4,000.0	\$411.8
Nov-21	H1 Insights	336	Healthcare data analytics software	Altimeter Capital	Venture	\$100.0	\$750.0	\$258.0	\$179.9
Nov-21	Shanhu Health	5	Computerized systems designed for clinical research	Sherpa Healthcare Partners	Venture	n/a	n/a	n/a	n/a
Nov-21	Zageno	77	Life science marketplace	General Catalyst	Venture	\$60.0	\$240.0	\$65.0	\$87.9
Nov-21	Synthace	77	Laboratory automation platform	Sofinnova Partners	Venture	\$35.0	\$86.5	n/a	\$89.6
Oct-21	Medable	481	End-to-end cloud-based clinical research platform	Blackstone Group	Venture	\$304.0	\$1,800.0	\$728.0	\$499.7
Sep-21	Elligo Health	192	Clinical research infrastructure services & technology	Ally Bridge Group	Venture	\$135.5	\$260.0	\$160.0	\$213.4
Sep-21	Overwatch Research	12	Workflow software for medical research	Frontline Ventures	Venture	\$3.5	\$11.0	n/a	\$4.2
Sep-21	Seqera Labs	16	Open source workflow orchestration software	Talis Capital	Seed	\$5.5	n/a	n/a	\$5.5
Aug-21	Reify Health	298	Clinical optimization	Coatue Management	Venture	\$220.0	\$1,980.0	\$160.0	\$259.8
Jul-21	SimBioSys	23	Computational oncology	Genoa Ventures	Venture	\$15.0	\$24.0	n/a	\$15.9
Jul-21	Castor	149	EDC, eConsent, ePRO and study management	Eight Roads	Venture	\$45.0	n/a	n/a	\$63.3
Jul-21	Inova Software	114	SaaS-based partnering platform	The Carlyle Group	Growth / Recap	\$72.2	n/a	n/a	\$80.3
Jul-21	ObvioHealth	70	Digital recruitment and siteless / hybrid trials	Dedalus	Venture	\$31.0	n/a	n/a	\$51.9
Jun-21	Tendo Systems	64	Enterprise cloud software solutions for life sciences	Lux Capital Management	Venture	\$49.4	\$500.7	\$56.0	\$67.4
Jun-21	AlayaCare	412	Cloud-based home care agency	Generation Investment	Venture	\$184.9	n/a	n/a	\$294.1
Jun-21	DrChrono	162	Electronic health record platform	ORIX Growth Capital	Venture	\$12.0	n/a	n/a	\$59.6
Jun-21	Antidote	62	Patient recruitment services and software	LBO France	Growth / Recap	\$23.2	n/a	n/a	\$56.6
Jun-21	Insilico Medicine	123	Innovative AI solutions for drug discovery and aging research	Warburg Pincus	Growth / Recap	\$255.0	n/a	n/a	\$316.3
May-21	MediSpend	61	HCP engagement compliance software	Susquehanna	Growth / Recap	n/a	n/a	n/a	n/a
May-21	Esco Lifesciences	575	Academic research and scientific discoveries technology	Vivo Capital	Venture	\$200.0	n/a	n/a	\$200.0
May-21	Qualio	191	Quality management platform for life-saving products	Tiger Global	Venture	\$50.0	\$250.0	\$44.0	\$63.7
May-21	Greenlight Guru	158	Quality management software for medical devices	JMI Equity	Growth / Recap	n/a	n/a	n/a	n/a
May-21	Artificial	37	Automation software platform	M12	Venture	\$21.5	\$55.0	n/a	\$21.5
May-21	ArisGlobal	1,795	Drug development platform	Nordic Capital	Growth / Recap	n/a	n/a	n/a	\$1.3
May-21	Axtria	2,039	Cloud software and data analytics for life sciences industry	Bain Capital	Growth / Recap	\$150.0	n/a	n/a	\$363.6
May-21	Labforward	47	Electronic lab notebook and IoT platform	Tecan Group	Venture	\$10.4	\$48.4	\$3.0	\$12.7
Apr-21	Florence Healthcare	133	Clinical trial document management	Insight Partners	Venture	\$80.0	n/a	\$22.1	\$92.8
Apr-21	Datacubed Health	54	eCOA and other patient engagement solutions	Sterling Partners	Venture	\$8.8	n/a	n/a	\$30.0
Apr-21	Medable	357	Decentralized trial platform	Sapphire Ventures	Venture	\$78.0	\$650.0	\$286.0	\$217.0
Apr-21	Benchling	536	Cloud-based informatics platform	Sequoia Capital	Venture	\$200.0	\$3,800.0	\$900.0	\$311.8
Mar-21	DNAexus	188	Genome informatics and data management	Perceptive Advisors	Venture	\$132.0	n/a	\$182.0	\$295.7
Dec-20	Elligo Health	192	Clinical research infrastructure services & technology	Cerner	Venture	\$36.9	\$115.0	\$59.0	\$77.9

Sources: Capital IQ, Public Filings, Press Releases, PitchBook, proprietary Madison Park Group research based on publicly available information

Note: All EBITDA Multiples >30x are considered not to be meaningful as valuation of business clearly influenced by factors other than profitability

Precedent Fundraising Transactions

Life Sciences Software: 2018-Present

MADISON PARK GROUP

(\$ in Millions)

Company Overview				Fundraise Summary					
Date	Company	Employees 01/3/22	Description	Lead Investor	Type	Amount Raised	Pre-Money Valuation	Last Post-Money	Raised To-Date
Dec-20	doDoc	26	Content authoring	Cactus Sky Communications	Seed	\$1.5	\$5.5	n/a	\$3.5
Dec-20	Clinical Ink	242	Purpose-built data capture platform	McKesson Ventures	Venture	n/a	n/a	n/a	n/a
Dec-20	Kayentis	150	eCOA technology accelerating clinical trials	Extens	Growth / Recap	\$8.3	\$32.1	\$12.5	\$25.8
Nov-20	ScienceMedia	33	Learning content for clinical and medical affairs	Decathlon Capital	Venture	n/a	n/a	n/a	\$2.2
Nov-20	COTA	82	Healthcare informatics and precision analytics	Baptist Health	Growth / Recap	\$34.0	n/a	n/a	\$115.7
Oct-20	Aktana	341	Decision support for commercial teams	Norwest Venture	Venture	\$30.0	\$120.0	\$154.6	\$113.8
Oct-20	Ovation Life Sciences	74	Cloud-based laboratory information management	Madrona Venture	Venture	\$21.3	\$50.0	\$28.1	\$35.0
Sep-20	Blue Mountain	77	Life sciences focused enterprise asset management	Accel-KKR	Growth / Recap	n/a	n/a	n/a	n/a
Sep-20	Datacubed Health	54	eCOA and other patient engagement solutions	Sterling Partners	Venture	\$5.2	n/a	n/a	\$30.0
Sep-20	CluePoints	106	Risk-based quality management software	Summit Partners	Growth / Recap	\$22.6	n/a	n/a	\$26.8
Aug-20	Castor	149	EDC, eConsent, ePRO and study management	Two Sigma Ventures	Venture	\$12.0	n/a	n/a	\$18.3
Jun-20	Qualio	131	Quality management platform	Storm Ventures	Venture	\$11.0	\$33.0	\$7.6	\$13.7
Jun-20	Antidote	62	Patient recruitment services and software	Octopus Ventures	Venture	n/a	n/a	n/a	\$56.6
May-20	Benchling	536	Cloud-based informatics platform	Alkeon Capital	Venture	\$50.0	\$850.0	\$415.0	\$111.8
May-20	ObvioHealth	70	Digital recruitment and siteless / hybrid trials	IQVIA	Venture	\$16.8	n/a	n/a	\$20.9
May-20	Medable	357	Decentralized trial platform	GSR Ventures	Venture	\$25.0	\$75.0	\$78.5	\$117.7
Apr-20	TrialBee	50	Patient recruitment and retention solutions	MTIP	Venture	\$12.0	n/a	n/a	\$29.7
Feb-20	Verana Health	152	De-identified clinical data sets	Google Ventures	Venture	\$100.0	\$150.0	\$45.0	\$138.8
Jan-20	HelpAround	20	Patient concierge platform	IQVIA	Venture	\$6.0	\$13.5	n/a	\$6.8
Jan-20	eClinical Solutions	259	Cloud-based clinical data services	Summit Partners	Growth / Recap	\$19.3	n/a	n/a	\$19.3
Dec-19	BC Platforms	77	Genome data management	IQVIA	Venture	\$15.0	n/a	\$25.6	\$24.7
Dec-19	Suvoda	558	Randomization and trial supply management	LLR Partners	Growth / Recap	\$40.0	n/a	n/a	\$40.0
Nov-19	4G Clinical	209	Randomization and trial supply management	Schooner Capital	Venture	\$14.6	n/a	n/a	\$30.2
Nov-19	Deep 6 AI	51	AI-enabled patient trial matching platform	Point72 Ventures	Venture	\$17.0	\$51.0	\$18.0	\$22.0
Oct-19	Sensely	19	Remote assessment/virtual clinical assistant hub	Aflac Ventures	Venture	\$15.0	\$35.0	\$30.0	\$27.7
Oct-19	Trials.ai	6	Protocol technology platform	Teal Ventures	Seed	\$1.3	n/a	n/a	\$1.4
Sep-19	Longboat Clinical	76	Clinical trial conduct management	Enterprise Ireland	Venture	n/a	n/a	n/a	n/a
Sep-19	Ovation Life Sciences	74	Cloud-based laboratory information management	Madrona Venture	Venture	\$3.1	\$25.0	\$16.0	\$13.8
Sep-19	ComplianceQuest	144	Clinical, quality, health and safety management solutions	Insight Partners	Growth / Recap	\$36.0	n/a	n/a	\$36.0
Sep-19	Florence Healthcare	133	Clinical trial document management	Fulcrum Equity	Venture	\$7.1	\$15.0	\$6.6	\$8.8
Jul-19	Benchling	536	Cloud-based informatics platform	Menlo Ventures	Venture	\$34.5	\$380.5	\$74.5	\$61.8
Jul-19	Qualio	131	Quality management platform	MHS Capital	Seed	\$2.6	n/a	n/a	\$5.6
Jul-19	Monocl	74	Medical and scientific expert data	GP Bullhound	Venture	\$3.4	n/a	n/a	\$5.1

Sources: Capital IQ, Public Filings, Press Releases, PitchBook, proprietary Madison Park Group research based on publicly available information
 Note: All EBITDA Multiples >30x are considered not to be meaningful as valuation of business clearly influenced by factors other than profitability

Precedent Fundraising Transactions

Life Sciences Software: 2018-Present

MADISON PARK GROUP

(\$ in Millions)

Company Overview				Fundraise Summary					
Date	Company	Employees 01/3/22	Description	Lead Investor	Type	Amount Raised	Pre-Money Valuation	Last Post-Money	Raised To-Date
Jul-19	Datica	22	Cloud-based clinical data exchange platform	LRVHealth	Venture	n/a	n/a	n/a	\$12.5
Jul-19	Clinithink	41	Clinical data solutions	TripleTree Capital Partners	Venture	\$2.6	\$15.5	\$16.5	\$25.5
May-19	ScienceMedia	33	Learning content for clinical and medical affairs	Undisclosed	Venture	\$1.6	\$6.0	\$4.3	\$2.2
May-19	Riffyn	47	Scientific development environment platform	M Ventures	Venture	\$15.1	\$37.5	\$25.0	\$27.5
May-19	Axiom Metrics	177	eClinical software suite	Great Point Partners	Growth / Recap	n/a	n/a	n/a	n/a
May-19	Elligo Health Research	192	Clinical research infrastructure services & technology	Piper Sandler	Venture	\$20.0	\$39.0	\$31.0	\$41.0
May-19	Zageno	144	Life science marketplace	General Catalyst	Venture	\$20.0	n/a	n/a	\$27.9
Mar-19	Ovation Life Sciences	74	Cloud-based laboratory information management	Madrona Venture	Venture	\$5.0	\$11.0	\$6.9	\$10.7
Mar-19	Comprehend Systems	10	Cloud-based clinical intelligence platform	Undisclosed	Venture	\$5.0	\$28.0	\$71.8	\$67.0
Feb-19	TriNetx	166	Research network and clinical optimization platform	Merck Innovation Fund	Venture	\$40.0	\$120.0	\$97.2	\$102.0
Feb-19	4G Clinical	209	Randomization and trial supply management	Migration Capital	Venture	\$7.2	n/a	\$25.0	\$15.6
Feb-19	Complion	39	eRegulatory for research sites	Beringea	Venture	\$7.0	\$15.0	\$7.4	\$13.3
Feb-19	DNAexus	188	Genome informatics and data management	Google Ventures	Venture	\$68.0	\$165.0	\$110.0	\$195.7
Jan-19	Clinithink	41	Clinical data solutions	Merck Innovation Fund	Venture	\$15.6	\$30.6	\$15.5	\$41.1
Jan-19	Trials.ai	6	Protocol technology platform	Sway Ventures	Seed	n/a	n/a	n/a	n/a
Jan-19	Invio	29	Clinical trial document management	Elevate Capital	Seed	\$0.1	\$6.4	n/a	\$0.5
Jan-19	Teckro	140	Clinical trials processing platform	Northpond Ventures	Venture	\$25.0	n/a	n/a	\$42.8
Oct-18	Comprehend Systems	10	Cloud-based clinical intelligence platform	Eminence Capital	Venture	\$29.7	\$45.7	\$92.5	\$62.0
Oct-18	Triumph Research (TRI)	33	Risk-based quality management software	Octopus	Growth / Recap	n/a	n/a	n/a	n/a
Oct-18	Aktana	341	Decision support for commercial teams	Leerink Transformation	Growth / Recap	\$21.1	\$93.6	\$47.4	\$69.2
Sep-18	Inova Software	114	SaaS-based partnering platform	NextStage AM	Growth / Recap	\$8.1	n/a	n/a	\$8.1
Sep-18	TrialScope	35	Clinical disclosure and patient engagement software	Undisclosed	Venture	\$4.0	\$20.0	\$16.6	\$20.3
Jul-18	Verana Health	152	De-identified clinical data sets	Google Ventures	Venture	\$30.0	\$15.0	\$15.8	\$38.8
Jul-18	Castor	149	EDC, eConsent, ePRO and study management	INKEF Capital	Seed	\$6.3	n/a	n/a	\$6.3
Jun-18	Vium	11	Digital biomarkers for preclinical research	Lux Capital Management	Venture	\$24.0	n/a	\$139.8	\$53.9
Jun-18	Benchling	536	Cloud-based informatics platform	Benchmark	Venture	\$14.5	\$60.0	\$40.4	\$27.3
Jun-18	nPhase / RedCap	27	Clinical data management	Undisclosed	Seed	\$1.5	n/a	n/a	\$4.7
May-18	TrialBee	50	Patient recruitment and retention solutions	Industrifonden	Venture	\$8.5	n/a	n/a	\$17.8
Apr-18	Benchling	635	Lab collaboration platform for life science research	Benchmark	Venture	\$14.5	\$60.5	\$37.0	\$27.3
Mar-18	ClinCapture / Clinovo	23	EDC software and clinical services	Rock Health	Seed	\$1.9	\$9.1	\$7.5	\$3.4
Mar-18	ObvioHealth	70	Digital recruitment and siteless / hybrid trials	SPRIM Ventures	Venture	\$3.0	n/a	n/a	\$4.1
Mar-18	Elligo Health Research	192	Clinical research infrastructure services & technology	Nor-Moseley Partners	Venture	\$16.0	\$15.0	\$11.0	\$21.0
Feb-18	PatientWing	11	Patient engagement	Ben Franklin Technology	Seed	\$0.6	n/a	n/a	\$0.7

Sources: Capital IQ, Public Filings, Press Releases, PitchBook, proprietary Madison Park Group research based on publicly available information

Note: All EBITDA Multiples >30x are considered not to be meaningful as valuation of business clearly influenced by factors other than profitability

Precedent Fundraising Transactions

Life Sciences Software: 2018-Present

MADISON PARK GROUP

(\$ in Millions)

Company Overview				Fundraise Summary					
Date	Company	Employees 01/3/22	Description	Lead Investor	Type	Amount Raised	Pre-Money Valuation	Last Post-Money	Raised To-Date
Feb-18	COTA	82	Healthcare informatics and precision analytics	IQVIA	Growth / Recap	\$40.0	n/a	n/a	\$61.7
Jan-18	Ovation Life Sciences	74	Cloud-based laboratory information management	Longfellow Venture	Venture	\$1.9	\$5.0	\$4.5	\$5.7
Jan-18	DNAexus	188	Genome informatics and data management	Foresite Capital	Venture	\$58.0	\$52.0	\$90.0	\$127.7
Jan-18	doDoc	26	Content authoring	Right Side Capital	Seed	\$1.4	n/a	n/a	\$2.0
Seed Median		26				\$1.5	\$6.4	\$7.5	\$3.4
Venture Median		77				\$20.0	\$51.5	\$42.2	\$36.9
Growth / Recap Median		123				\$34.0	\$62.9	\$29.9	\$48.3
Overall Median		82				\$18.1	\$50.0	\$40.4	\$30.0

Public Comparables

Life Sciences Software Vendors

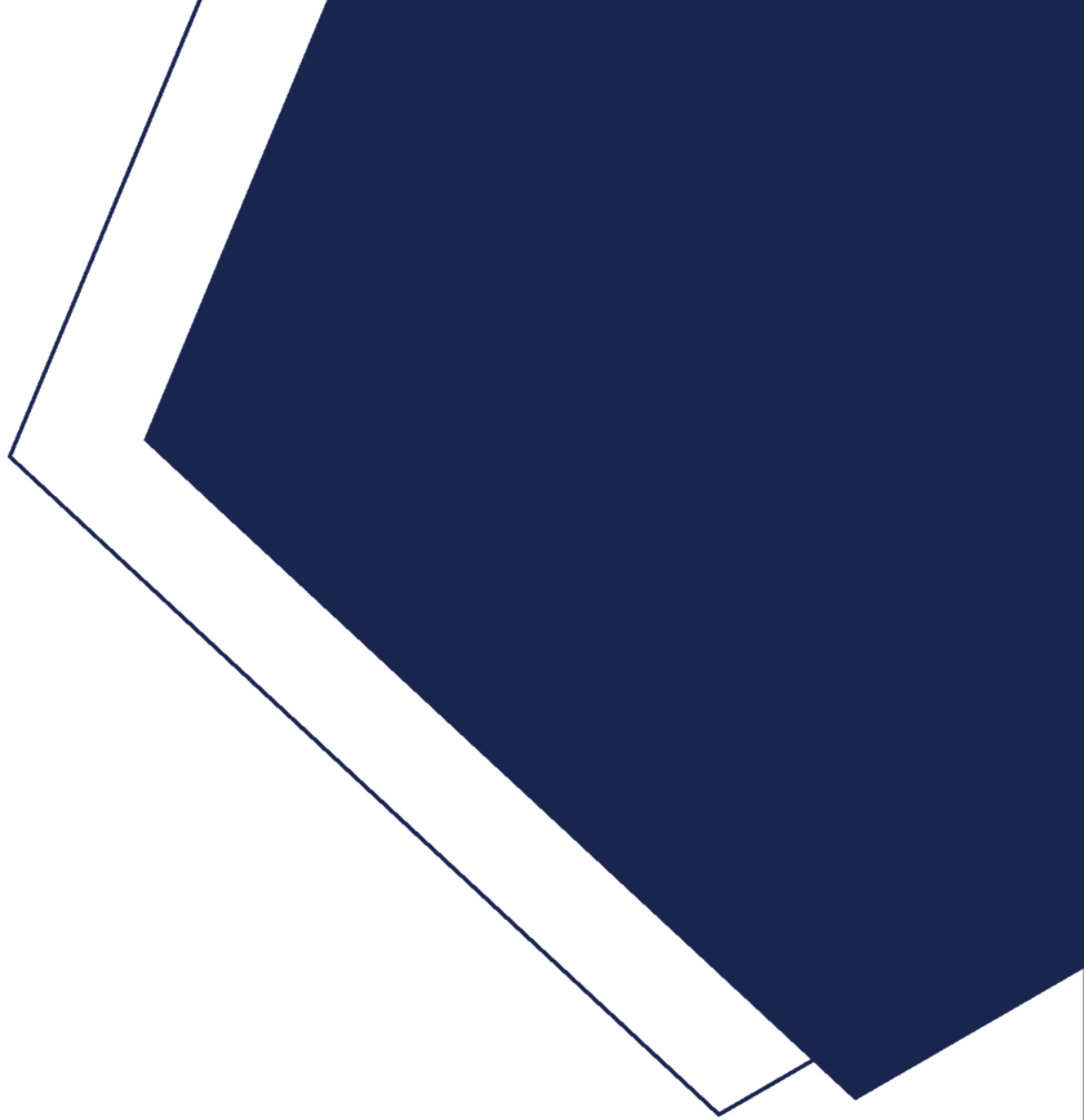
(\$ in Millions)

Company	Market Data		Operating Metrics								Valuation Metrics				
	Price \$	Enterprise Value	CY Revenue		Revenue Growth		Last Fiscal Year			CY EBITDA Margin		EV / CY Revenue		EV / CY EBITDA	
	1/6/2022	Value	2021A	2022E	'20-'21	'21-'22	Rec. %	GM (\$)	GM %	2021E	2022E	2021E	2022E	2021E	2022E
Certara	\$25.81	\$4,001	\$293	\$363	20.5%	23.7%	38.5%	\$158	57.4%	36.4%	36.6%	13.64x	11.03x	n/m	n/m
Dassault Systemes	\$55.02	\$74,715	\$5,513	\$6,094	1.2%	10.5%	90.1%	\$4,571	83.7%	38.0%	36.2%	13.55x	12.26x	n/m	n/m
Definitive Healthcare	\$25.48	\$3,202	\$165	\$208	39.1%	26.5%	38.5%	\$136	88.9%	33.1%	31.1%	19.46x	15.39x	n/m	n/m
Instem	\$12.05	\$261	\$63	\$83	63.5%	32.3%	59.9%	\$19	41.2%	17.3%	19.9%	4.14x	3.13x	23.9x	15.7x
IQVIA Holdings	\$262.51	\$61,990	\$13,830	\$14,936	21.8%	8.0%	38.5%	\$4,495	33.2%	21.6%	22.3%	4.48x	4.15x	20.7x	18.6x
Model N	\$28.62	\$1,013	\$199	\$219	17.4%	10.2%	74.0%	\$107	55.2%	11.9%	11.9%	5.09x	4.62x	n/m	n/m
Veeva Systems	\$241.67	\$38,141	\$1,813	\$2,142	27.7%	18.2%	80.5%	\$1,280	72.7%	42.0%	39.4%	21.04x	17.81x	n/m	n/m
Median					21.8%	18.2%	59.9%		57.4%	33.1%	31.1%	13.55x	11.03x	22.3x	17.2x

IV.



About Us



Growth Stage

FOCUSED ON TRANSACTIONS WITH \$100-500 MILLION ENTERPRISE VALUE

200+

COMPLETED TRANSACTIONS

\$30+

BILLION IN DEAL VALUE

~30%

CROSS-BORDER DEALS ⁽¹⁾

40%+

SPONSOR-BACKED CLIENTS

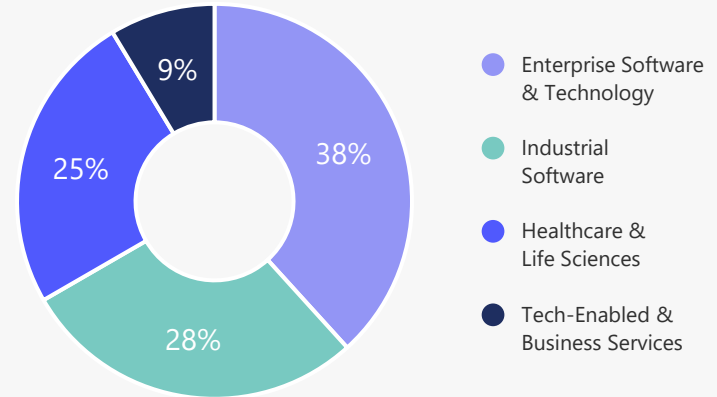
30%+

REPEAT CLIENTS ⁽¹⁾

20

DEDICATED ADVISORS

Our Deep Sector Expertise Drives Better Outcomes ⁽²⁾



(1) Calculated as total clients divided by clients completing more than one transaction with MPG over client relationship, inclusive of investor relationships
 (2) Select deals completed in the last ten years



FOCUS

We partner with global technology clients across North America and Europe



EXPERTISE

We specialize in impacting growth strategies to optimize shareholder value creation



STRATEGY

We marry thoughtful corporate strategy planning with stalwart transactional execution



RESOURCES

Domain experts with active relationships across +1,500 investors

Select Recent Transactions

Right People, Right Narrative, Right Time

Exceptional outcomes in our core technology markets

Enterprise Software & Technology

Healthcare & Life Sciences


Industrial Software

Vertical Solutions

Infrastructure Solutions

Tech-Enabled & Business Services

<p>Founding Team</p> <p>AgileAssets</p> <p>Strategic Sale</p> <p>Trimble</p>	<p>VC-Backed</p> <p>nextcaller</p> <p>Strategic Sale</p> <p>pindrop</p>	<p>Founding Team</p> <p>Isi</p> <p>Merge With</p> <p>invenio</p>	<p>Founding Team</p> <p>RedSky</p> <p>Strategic Sale</p> <p>everbridge</p>	<p>Founding Team</p> <p>BLUEPRINT Research Group</p> <p>Strategic Sale</p> <p>TRINITY</p>
<p>PE-Backed</p> <p>Romax TECHNOLOGY</p> <p>Strategic Sale</p> <p>HEXAGON</p>	<p>Founding Team</p> <p>TECHSOFT3D Dependable. Dynamic. Durable.</p> <p>Financial Sale</p> <p>Battery</p>	<p>Founding Team</p> <p>Green Mountain Technology</p> <p>Minority Investment</p> <p>THOMPSON STREET CAPITAL PARTNERS</p>	<p>PE-Backed</p> <p>Cityworks Empowering GIS[®]</p> <p>Strategic Sale</p> <p>Trimble</p>	<p>Founding Team</p> <p>ISOMETRIX</p> <p>Financial Sale</p> <p>THE CARLYLE GROUP</p>
<p>PE-Backed</p> <p>anju LIFE SCIENCES SOFTWARE</p> <p>Financial Sale</p> <p>ABRY PARTNERS</p>	<p>VC-Backed</p> <p>assemble</p> <p>Strategic Sale</p> <p>AUTODESK</p>	<p>Founding Team</p> <p>chemADVISOR, Inc.</p> <p>Strategic Sale</p> <p>UL</p>	<p>Founding Team</p> <p>CLEAREDGE3D</p> <p>Strategic Sale</p> <p>TOPCON</p>	<p>Founding Team</p> <p>Polaris</p> <p>Strategic Sale</p> <p>QuintilesIMS</p>

 Denotes \$100M+ EV Transaction

See our Full List of Transactions Here! → **MPG**