



Pharma Contract Services Industry Outlook 2023

Highlights, Trends & Opportunities

Reach the *Right Outcome*



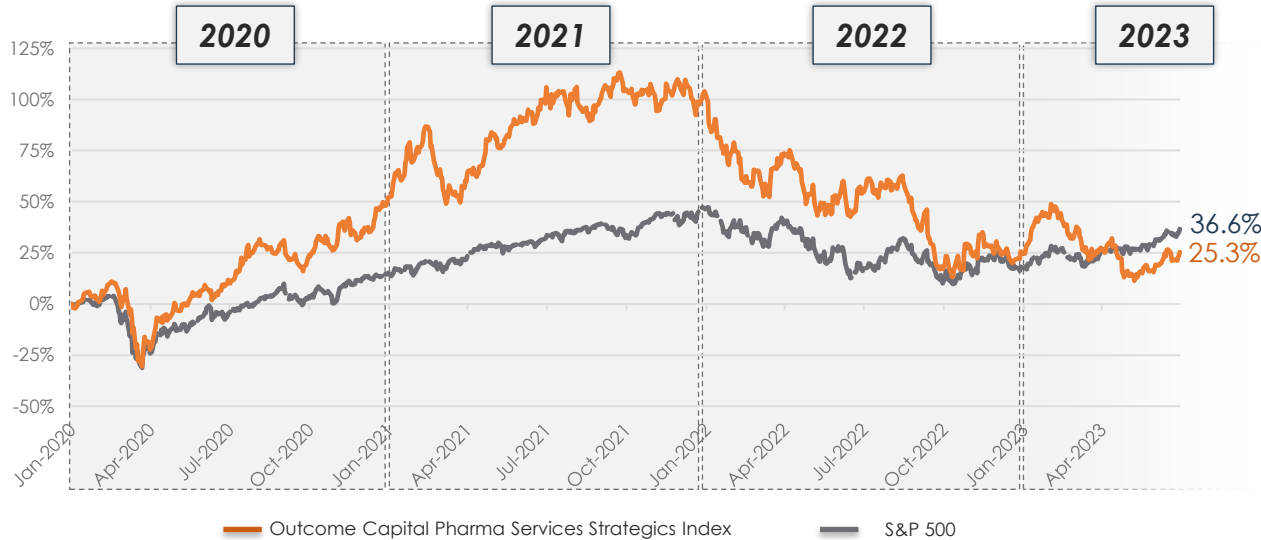


Contract Services Transaction Environment

Recent Pharma Services Market Performance Lulls As Investors Adjust Post-COVID

Contract Services Industry | Highlights, Trends & Opportunities

S&P 500 vs. Outcome Capital Pharma Services Index [2020 – 1H 2023]



Public Market Insight

- Following robust performance in 2020 & 2021, there has been a notable decline in the Pharma Service sector
- Pharma services segment underperforming S&P 500 partially due to pharma pull back on new R&D funding in later 2022 & 2023

Current Market Dynamics

- The rising demand of personalized medicine is pushing companies to develop new technologies and processes to support the development and manufacturing of personalized medicines and cell/gene therapies
- CRO sector driven by a desire to enhance specialized capabilities, with larger firms increasingly opting to acquire smaller companies or startups, particularly in fields such as patient recruitment, patient monitoring, and digital outcome measurement in clinical trials

Outcome Capital Pharma Services Index

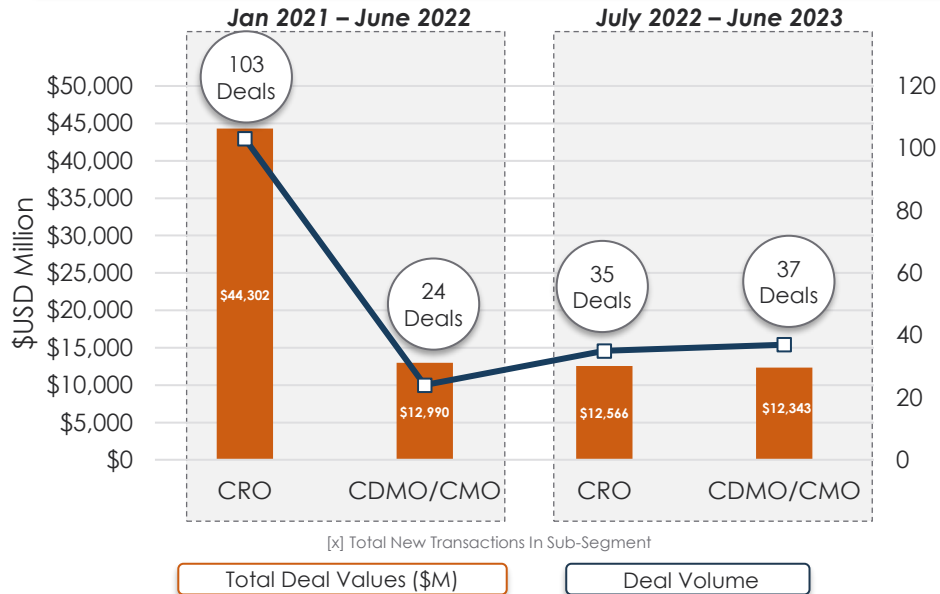
Segment Poised For Increased M&A As Strategics Focused On Increasing Profitability & Differentiating Offerings

Continued M&A Interest Among Large Strategics Despite Volume Decline

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Global Pharma Services Market Dynamics

2H 2022 – 1H 2023 M&A Activity



>\$24B

In Total Acquisition
2H 2022 – 1H 2023

30%

Decline in Contract
Services Deal Volume

50%

Drugs in Development
Utilizing Pharma Services

Mergers & Acquisition Insights

CRO

Average Deal Value

\$1.60B

Median Deal Value

\$188M

CDMO/CMO

Average Deal Value

\$243M

Median Deal Value

\$216M

Notable Transactions



- Take private transactions & strategic divestitures drive high average deal price for pharma services industry
- Private equity seeking high-margin tuck-ins for existing platforms
- Strategics focused on customer concentration & profitability when assessing M&A opportunities

Growing Market And Consolidation Driving Robust M&A Activity, Financings Increased Nealy Two-Fold Over The Previous Year

Global Investment Opportunities Continue In Contract Pharma Services

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Global Pharma Services Financing Overview

\$3 M

Min Raise

\$400 M

Max Raise

\$85 M

Mean Raise

Sample Companies



✓ With a **3x increase in investment volume**, investors seek development partners that can provide solutions to growing biopharma needs

✓ Nearly **\$1.4B in Late-Stage VC and PE funding** to expand global CRO and CDMO development efforts through **29 financing rounds** from 2nd half of last year & 1st half of this year

Select Financings*

	Financing Amount	Select Investors
elevatebio May 2023	\$400M	EcoR1 CAPITAL, F2 Ventures, novo nordisk
ASYMCHEM October 2022	\$357M	GL, 三一创新 TIF
GenScript PROBIO January 2023	\$224M	招商局资本 CHINA MERCHANTS CAPITAL, GenScript
VintaBio April 2023	\$64M	DECHENG CAPITAL
TSINGKE December 2022	\$55M	Capital Link, 達晨財智 FORTUNE CAPITAL
臻格生物 Zencore Biologics August 2022	\$13M	QIMING, 国药中金 SINO PHARMA-CICC

Active Investors



Investors Focus On Late-Stage Companies Seeking New Capabilities & Development Partners

Recent Industry Shifting Acquisitions Spur Continued Pharma Services Transactions

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Target	Acquirer(s)	Value	Strategic insights
		<u>\$7.1B</u> Go-Private September 13, 2023	<ul style="list-style-type: none"> A consortium of private investment firm affiliates composed of Elliott Investment Management, Patient Square Capital, and Veritas Capital has invested in a take-private transaction for Syneos Health. The Company aims to expedite its clinical trial processes and expand its global patient reach through this acquisition.
		<u>\$4.3B</u> Divestiture May 08, 2023	<ul style="list-style-type: none"> The proposed divestiture of BioPharma Solutions (BPS) serves as a strategic move to enhance Baxter's focus and marks a significant milestone in its ongoing business transformation. This action also establishes a versatile, independent CDMO platform, which will contribute to the advancement of global healthcare.
		<u>\$1.6B</u> Spin-Off July 03, 2023	<ul style="list-style-type: none"> Labcorp has spun-off its CRO business into Fortrea. The newly formed Contract Research Organization specializes in delivering comprehensive Phase I-IV clinical trial management, patient access, and advanced technology solutions to pharmaceutical and biotechnology firms worldwide.
		<u>\$800M</u> Growth Capital June 21, 2022	<ul style="list-style-type: none"> The shareholders of the Emmes Group have opted to facilitate its continued expansion by selling 100% of the company's shares to New Mountain Capital. This strategic decision has introduced a financially robust owner, setting the stage for the group's sustained and long-term development.
		<u>\$535M</u> Growth Capital November 26, 2022	<ul style="list-style-type: none"> This partnership entails several strategic objectives, including ongoing support for both new and existing customers, increasing market penetration in the United States, capitalizing on anticipated substantial growth in China, and extending operations into related areas within the BFS sector.

Industry Transaction Insights

"We strongly believe in the company's mission to partner with pharmaceutical companies around the world to provide the scientific expertise, sterile solutions, and customized support needed to meet the unique challenges of today's healthcare environment and are eager to carry forward the strong franchise and legacy that Baxter has built at BPS. This investment underscores our commitment to working with companies that support the delivery of innovative life sciences products and services worldwide."



Ruoxi Chen
Managing Director

WARBURG PINCUS

Recent Spin-Offs / Divestitures

Fortrea

For Fortrea, the spin-off gave the company the freedom to pursue its own growth and development goals. The spin-off was also a success for Labcorp's shareholders

BioPharma Solutions

For Baxter, the divestiture allows the company to refocus its objectives and consolidate leadership while slowing BPS to continue as an independent CDMO

Private Equity Investors Heavily Investing In High-Growth Contract Services Market

Inorganic Growth Strategy Fuels M&A Activity

Contract Services Industry | Highlights, Trends & Opportunities

Target	Acquirer(s)	Value	Strategic insights
		<u>\$335M</u> M&A January 03, 2023	<ul style="list-style-type: none"> The merger unites OncoBay's scientific expertise and deep US clinical network with NEUCA Group's technology services and European presence. The partnership provides a global footprint with physical offices in United States, Poland, Germany, Spain, Italy, and India. The new global partnership will work to advance immuno-oncology research for a global portfolio of clients.
		<u>\$300M</u> Growth Capital April 13, 2023	<ul style="list-style-type: none"> Through this acquisition Pyramid, in partnership with Audax, has committed capital to complete a planned expansion of its facilities that will grow vial-filling capacity by more than 30% and syringe filling by more than 50%, which is expected to come online later this year.
		<u>\$132M</u> M&A April 27, 2023	<ul style="list-style-type: none"> The proposed acquisition is expected to give Gland Pharma a presence in the European market and access to leading knowledge and development capabilities in sterile forms including ophthalmic gel, needleless injectors and hormones.
		<u>\$110M</u> M&A May 05, 2023	<ul style="list-style-type: none"> The acquisition expands WACKER's fermentation capacities and adds additional capacities for recovery and purification processes. WACKER will continue and grow existing customer relationships maintained by ADL BioPharma in its capacity as CMO for fermentation-based products for the food, pharmaceutical and consumer goods industries.
		<u>\$40M</u> M&A September 06, 2022	<ul style="list-style-type: none"> This acquisition gives Avance Clinical's biotech clients conducting their early phase studies in Australia and New Zealand a seamless journey into the US to continue their clinical development programs, retaining the same high-quality CRO, reducing time and cost and delivering quality FDA accepted data.

Industry Transaction Insights

"Pyramid has established itself as a best-in-class partner to pharmaceutical companies globally for their development, testing, storage, fill-finish, and analytical testing needs. We have been impressed with the organization and team that Medhat has built over the last 35 years and are excited to partner with Pyramid on this next phase of growth."



Keith Palumbo
Co-President and Senior Managing Director



Select Middle-Market Strategics



Both Strategic & Private Equity Groups Active in Middle-Market Transactions Across The Sector

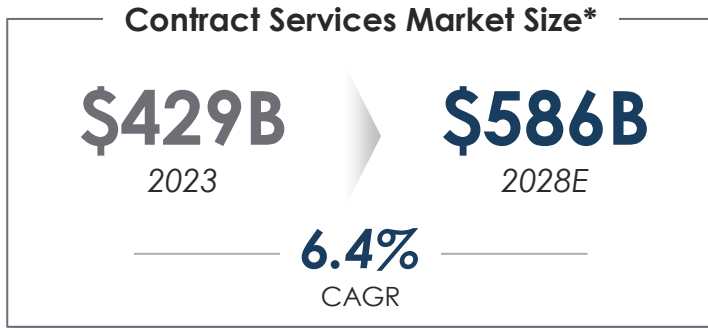


Contract Services Market Dynamics

Long-Term Growth Remains Strong Across Entire Pharma Services Sector

Contract Services Industry | Highlights, Trends & Opportunities

Global Pharma Contract Services Market



*CRO, CDMO, and CMO Markets

Select Market Strategics



Pharma Contract Services Market Dynamics

Market Outlook

- Overall, the healthcare sector has rebounded while the US economy has struggled to gain traction to pre-pandemic levels
- Emerging drug molecules are entering various phases of the clinical drug development cycle resulting in continuous growth in the number of clinical studies conducted
- Ongoing consolidation within the CRO sector has created large, comprehensive global firms that provide a wide array of services, with 'one-stop shop' solutions
- Technological advancements enable new methods for drug discovery, manufacturing, and drug development resulting in increased reliance on contract services
- Industry reorganizations/divestments have resulted in shift to outsourced partners

Market Drivers

✓
Advanced Modalities
seeking specialized service providers and increased investment in these modalities

✓
Growing Research & Development
costs and number of indications and clinical trials globally

✓
Novel Technologies
include decentralized clinical trials (DCTs), advanced data analytics and artificial intelligence (AI)

Global Contract Research Market Will Continue To Grow Over The Next Five To Ten Years

The Rise Of AI/ML Transforming Pharma Services Industry

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Pharma Services AI Market Trends

Research Trends



ANALYTICS TO DE-RISK DISCOVERY

AI & ML are expected to persistently play pivotal roles in the identification of promising drug targets and the optimization of clinical trial processes for enhanced efficiency



TRIAL DESIGN ENHANCEMENT

AI & ML are poised to experience increased utilization in shaping the design of clinical trials, encompassing activities such as the optimization of patient enrollment and randomization strategies



NON-TRADITIONAL AND DECENTRALIZED TRIALS

Biopharma enterprises will persist in their pursuit of unconventional trial methodologies, including the integration of phase 0 trials and DCTs, as part of their ongoing efforts to expedite the drug development process



SITE OPTIMIZATION & SITE FLEXIBILITY

Biopharmaceutical companies are set to intensify their emphasis on solutions aimed at enhancing the operational efficiency of clinical sites, ultimately reducing timelines and lessening the burden on these sites



INCREASED PATIENT ENGAGEMENT

Organizations are enhancing their efforts to foster patient engagement across the entire clinical trial continuum, with the goal of bolstering patient enrollment and retention rates

Strategic Rationale

- Advancements in AI capabilities & increased ease of integration drive strategic interest from biotech leaders seeking to improve proprietary drug discovery platforms
- Solutions that help optimize clinical trial sites are particularly attractive, as they can offer a trifecta of supporting biopharma, improving the patient experience and driving returns
- Strategics adopting a "buy" approach for AI rather than building platforms in-house; maintaining core competencies while leveraging already-developed programs



Increased use of AI for therapeutic development & preclinical cost reduction



Strong clinical data readouts for AI discoveries support >45% CAGR (2022-2027)



20-40% potential reduction in development costs with implementation of AI

Streamlining Development Timelines & Cost Reduction Implications, Drive AI Adoption Across Pharma Services

CRO Market Poised For Substantial Growth With Increased R&D Spend

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Global CRO Market Overview*



*Discovery, Pre-Clinical, Clinical

Market Drivers

Increasing Number of Clinical Trials

conducted globally driven by increased chronic disease and new therapies

Increasing R&D Investment

fuels further R&D to propel new drugs and therapies into the market

New Technologies

utilizing AI/ML for drug discovery, electronic data capture, and clinical trial management streamlines clinical development

Insights

- Pharmaceutical giants are projected to increase their annual R&D expenditure by a steady 4%, while the biotech sector is anticipated to increase annual R&D expenditure by 8%
- CRO revenues are poised for substantial growth, powered by the growing product pipelines within the biotechnology sector, and their desire further develop their assets to retain additional value

CRO Market Players

Unique Value Proposition

CROs provide a distinctive value proposition characterized by their rapid growth and resourcefulness, serving as indispensable partners to biotechnology enterprises. Leveraging best-in-class capabilities, they facilitate the development and research of these companies' pipeline

- Established relationships with stakeholders situated globally, combined with extensive interactions with clinical trial sites, investigators, patients, and regulatory bodies, afford CROs distinct advantage in optimizing clinical trial sites and providing comprehensive support to biopharmas
- Research is also poised to benefit from innovation and technology such as artificial intelligence and machine learning to a de-risk of drug discovery efforts

Sample Market Leaders

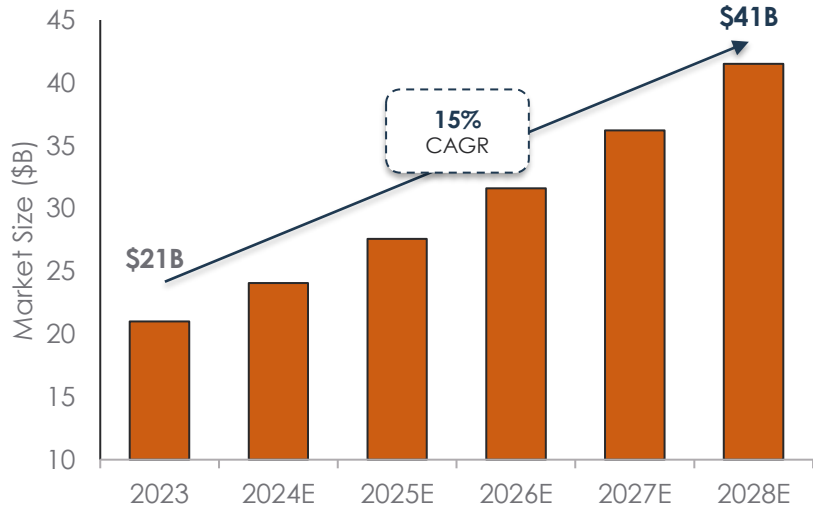


CROs Continue To Provide Significant Value As Global Pipelines Expand & Diversify

Discovery Stage Services Heavily Impacted By Advancement In AI

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Global Discovery Services Market



Sample Market Leaders



Insights & Market Dynamics

- Only 2.5 – 5% of screened compounds are advanced towards preclinical testing and it takes ~10 years on average to obtain approval for a new drug
- Fast growth can be attributed to the complexity and high cost of biologic drug discovery and development as well as the manufacturing challenges
- Further growth is propelled by a vast application of chemistry services in multiple early drug development phases
- Drug development cost estimates are a hard pill to swallow and this increased burden is leading companies to partner with discovery services organizations

AI-Based Early-Stage Development Services

- Growing number of CROs and strategics are focused on target identification and validation utilizing artificial intelligence & machine learning
- Companies want to leverage the AI-powered decision-making systems to improve its drug discovery and manufacturing processes and aim to address the challenges they currently face
- As the market has matured, financial terms of collaboration deals have evolved. Deals often involved fixed financial structures, with the AI company receiving set fee at regular intervals

Select Discovery AI Market Leaders



Biopharma R&D Spending Drives Market Adoption Of Early-Stage Development Services

Pre-Clinical Development Services Progress Biopharma Pipelines

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Global Pre-Clinical Development Services Market



Value & Growth in Pre-Clinical Development

Speed



Patients gain rapid access to innovative medicines while pharma companies gain revenue flows with longer periods of exclusivity if preclinical development achieves best-in-class timelines

Simplicity



Value creation is improved by reducing inefficiencies, cutting costs and allocating proper resources. Companies can opt to utilize CDMOs and CROs and other providers to engage in projects to streamline selection, contracting, and due-diligence

Quality



Greater quality can be achieved through cross-functional improvements of pre-clinical sciences, process development, analytics, research science, and regulatory & clinical sciences

Innovation



Successful companies are increasingly turning to digitization and automation to accelerate innovation, adopting AI/ML to enable in silico discovery and automating repetitive tasks such as pipetting

Notable Transactions

Target	Acquirer/ Investor	Amount
CRI	NAMSA	Undisclosed
Protypia	inotiv <small>analyze. answer. advance.</small>	\$10.8M M&A
LENTOBIO	ICHOR	\$680K Seed

Sample Market Leaders

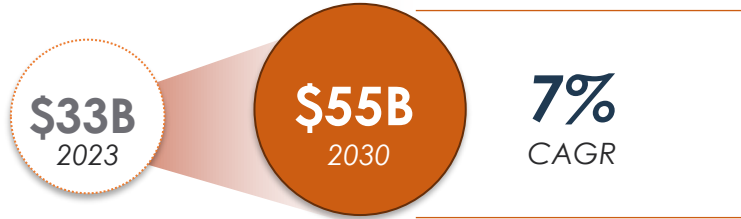


Pre-Clinical Service Propel Innovation, Reduce Inefficiencies, And Advance Technologies

Clinical Stage Development Services Offer A Wide Array Of Technology Solutions

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Global Clinical Stage CRO Market



Insights

- Global increasing expenditure on R&D and the expanding volume of clinical trials are driving a surge in the outsourcing of clinical development
- The growing availability of clinical-stage services offered by CROs, spanning Phase I through Phase IV, is facilitating enhanced trial efficiency and cost reduction.
- The success of CROs during the COVID-19 pandemic and the existing backlog of clinical trials have reinforced the demand for clinical services

Select Players



AI & Digital Support Of Clinical Trials

Digital Clinical Trial Solutions

- AI-driven innovation has the potential to streamline clinical trial design and operations
- Accelerates recruitment of diverse and eligible patient populations through various mediums such as social media, online consent, ethics approvals, and increased communication
- Enables real-time monitoring of patient dosing & behavior and collection of health data digitally, wearables & mobile sensing technology, and patient-reported outcomes
- Predictive modeling of patient responses to treatment & placebo and understand drop out rates and factors, while enhancing trials planning and execution, and lowering costs

Sample Clinical Stage AI Market Leaders

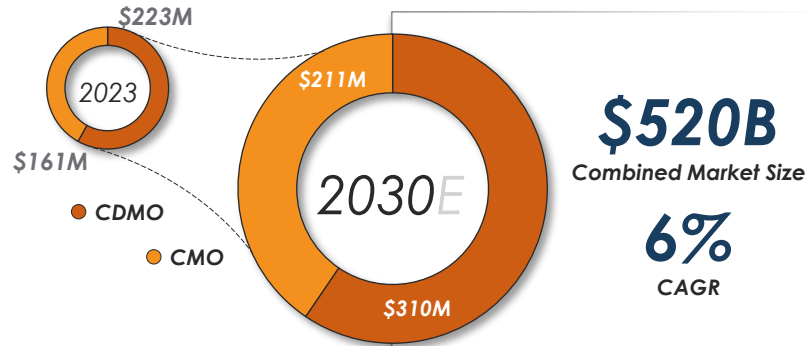


Digital Advances Enabling Greater Efficiency & Project Strong Growth Of Clinical Stage Services

CDMO/CMO Services Are Sought by Pharma, MedTech & Diagnostic Industries

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Global CDMO/CMO Market Overview



Sample Market Leaders



Market Drivers

- Increasing Prevalence** of chronic disease and demand for clinical trials in emerging markets
- Increasing Spending** in both R&D and demand for outsourcing some of all clinical trials to contract manufacturing or development companies
- Rising Complexity** of clinical trials and the need to recruit a diverse group of patients
- Increased Regulatory Compliance** of global regulatory authorities adds burden of development
- Rise of Personalized Medicine** to improve treatment and involves tailoring treatment for patients
- The COVID-19 Pandemic** led to a surge of contract development services due to the need for vaccines and therapies

Insights

- Industry-wide demand to compress development timelines to meet urgent medical needs, market competition, and patient demand for faster access to treatments
- Growth of large molecule market share adds complexity to manufacturing with an increasing emphasis on biologics and large molecule therapies
- Increasing demand for medical device design services including concept, prototyping, and regulatory compliance
- Rising demand for small & large molecule therapeutics via hefty investments in R&D to address a wide range of diseases
- Growing need for advanced process & production technologies through automation, AI, data analytics, continuous manufacturing
- Increased competition & decreased profit margins drive outsourcing of manufacturing for cost reduction, access to advanced facilities, and focus on core R&D








Robust Demand Predicts Sustained Growth Of The CDMO & CMO Sub-Sectors



Contract Services Consolidation Dynamics

Contract Services Focus On Above-Market Growth Multiples

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Market Cap	\$9.8B	\$3.4B	\$17.0B	\$35.5B	\$10.8B	\$5.5B	\$12.9B
FY22 Revenue	\$4.0B	\$684.3M	\$7.7B	\$14.4B	\$7.1B	\$1.5B	\$4.3B
Gross Margin	36.8%	20.6%	28.7%	34.9%	22.7%	63.4%	32.3%
EBITDA Margin	24.2%	7.9%	18.5%	17.8%	20.2%	20.6%	23.2%
TEV/Revenue	3.0x	3.7x	3.0x	3.3x	1.9x	4.6x	2.9x
TEV/EBITDA	12.3x	25.6x	15.1x	17.5x	9.7x	20.2x	25.1x

Average Public Co. Margins & Trading Multiples

Gross Margin	34.2%	TEV/Revenue	3.2x
EBITDA Margin	18.9%	TEV/EBITDA	17.9x*

Insight

The contract services sector has demonstrated remarkable resilience in the face of prevailing macroeconomic conditions. This resilience can be attributed to a focus on operational excellence and the pursuit of high-quality standards, and growing demand for advanced therapeutic modalities. CROs and CDMOs have consistently outperformed the broader biopharma market

Leveraging Industry-Leading Margin Profile To Deliver Value & Generate Market Interest

Acquisition Appetite Continues Over The Last 3 Years

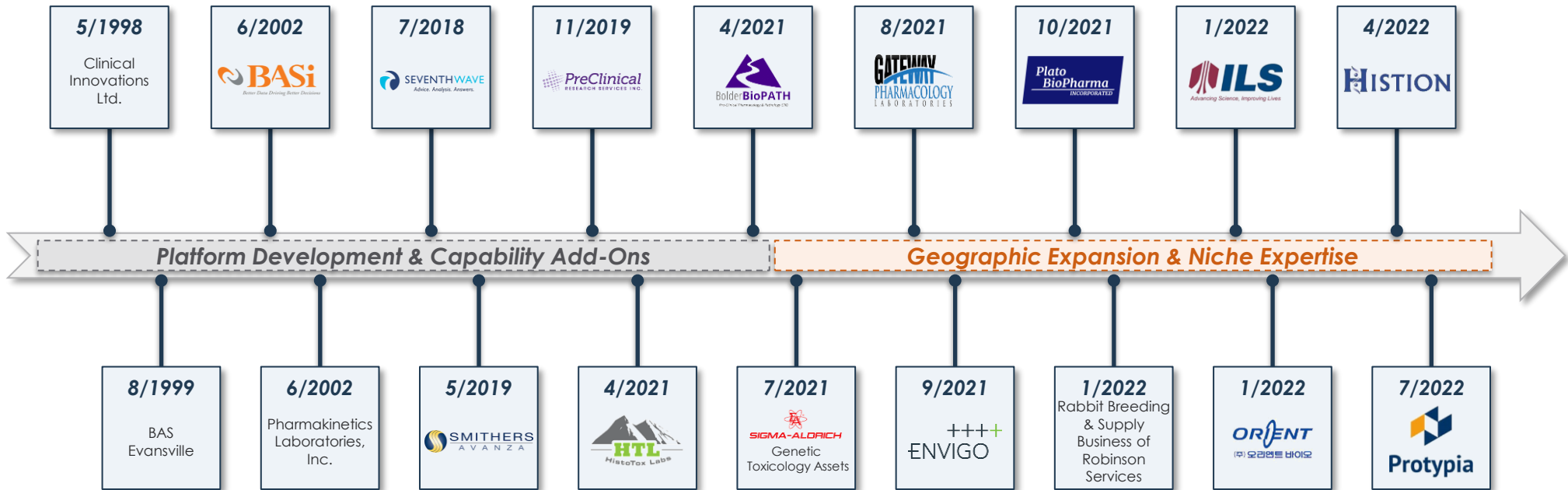
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Acquirer	M&A Targets*	Number of M&A	Total Invested*
BioAgilytix		2	N/A
charles river		9	\$2.2B
Catalent		8	\$1.8B
evotec		3	\$25M
ICON		3	\$12B
inotiv		10	\$870M
IQVIA		17	\$930M
eurofins		41	\$222M
PRECISION for medicine		5	N/A

The Consolidation Of Contract Pharma Services Creates More Robust Outsourcing Partners For Biopharma

Case Study: Inorganic Strategy Accelerates Inotiv's Growth To Leading CRO

Contract Services Industry | Highlights, Trends & Opportunities



Tuck-In Acquisitions Drove 6x Revenue Expansion From 2021 To 2022

Wide Investor Landscape Presents Ample Opportunities For Expansion

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Active Strategic Investors



Strategic Insights

- Strategic investors are becoming more of an integrator of point solutions to drive speed, quality and stakeholder experience acting as a reliable integrator of services
- Strategics expand upon their current offerings by becoming end-to-end strategic partners from asset strategy to launch through the entirety of the biopharma ecosystem

Active Growth Equity Investors



Strategic Insights

- The sustained robust demand for pharmaceutical services, coupled with consistently strong valuations of CROs and CDMOs, can be attributed to several key factors. These include the substantial available PE dry powder and constrained supply of pharma services assets. This combination has prompted private equity investors to focus on optimizing profitability

Clear Motivations Exist For Both Strategic & Financial Transactions In The Pharma Services Sector

M&A Provides Viable Exit Strategies For Pharma Services

Contract Services Industry | Highlights, Trends & Opportunities



Growing Demand for Contract Services from Biotech & MedTech

Expanding Pipelines And Complexities Of Therapeutic Modalities

- From 2017 to 2022, the global biopharmaceutical pipeline experienced significant expansion, with the number of assets increasing from approximately 13,500 to 19,000, reflecting a Compound Annual Growth Rate (CAGR) of 6%
- This growth was primarily driven by increased investments in biologics and a rising interest in Advanced Therapeutic Modalities (ATMs) such as cell therapy, gene therapy, and nucleic acid therapy
- The escalating complexity of therapeutic modalities within the biopharmaceutical sector necessitates the development of equally sophisticated capabilities to effectively support the processes of discovery, development, manufacturing, and commercialization of these innovative therapies

Strategics & Growth Investors Continue to Drive M&A

Industry Funding Is Normalizing Despite Continued M&A

- Following the peak in biotech investments in 2020, which persisted into 2021, funding levels have since reverted to pre-pandemic norms by 2023
- As the global recovery from the COVID-19 pandemic unfolded and the possibility of a recessionary economic climate loomed, pharma and biotech decreased R&D spending, while investors continued to demand pipeline progress and expansion
- These implications propelled biopharma to seek smaller to mid-size CRO/CDMOs to address their discovery & development needs

Acceleration In Strategic Acquisitions Of Pharma Services Providers

Expanding Capabilities Grow Markets & Increase Valuations

- Continued expansion of research capabilities or geographic reach is needed to grow & compete
- Clinical stage CRO need to enhance value through diversified recruitment tools, decentralized trial capabilities & hybrid trial offerings to participate in larger biopharma projects
- Further consolidation of the CRO/CDMO market may continue with both strategics and growth equity players looking to bolster their portfolios to bring servicing capabilities in-house
- This consolidation may shift CRO/CDMO activity to respond to the demand of offering value-based care negotiations (e.g., RWE, HEOR)
- Continued global approval of clinical trials coupled with Advanced Therapeutic Modalities will drive CRO/CDMO activity

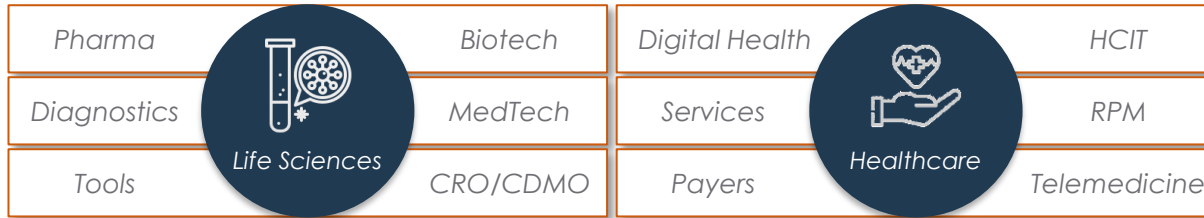
Pharma Services M&A Environment Remains Active & Further Facilitates The Creation of Additional Value

Outcome Capital Overview

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Outcome Capital is a **highly-specialized life sciences & healthcare-dedicated** investment banking & strategic advisory firm adopting a unique **market-driven, strategy-led** approach to value enhancement. Our team consists of industry veterans with broad **entrepreneurial, strategic & operational expertise with deep scientific, clinical & financial expertise.**

Industry Expertise



Strategically Focused Transactions



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