

Pharma Services

Sector Spotlight

Spring 2024



The Pharma Services Sector Represents a Compelling Investment Opportunity Ripe for Continued Growth and Innovation

Pharma services represents a significant opportunity for investment with strong underlying tailwinds, a variety of actionable targets, and substantial room for further upside through technological advancements.



Large, Growing, Global Market **Opportunity**

Driven by a variety of tailwinds in the pharmaceutical and biotech markets, outsourced pharma services are expected to grow at an 8%+ CAGR over the next seven years

This sector is expected to outpace other healthcare subsectors due to rising drug demand, cost pressures, increasing complexity of drug development, and focus on core competencies

Market Opportunity





Long and Expensive **Development Process**

The drug development timeline is long, expensive, and complex—in order to maintain ROI on a newly developed drug, pharma and biotech firms are incentivized to find cost-effective solutions throughout the drug development process

Outsourced pharma services companies provide high-demand, cost-effective solutions to these firms, driving growth within the segment

10 Years

\$2.0B+

Avg. Development Timeline

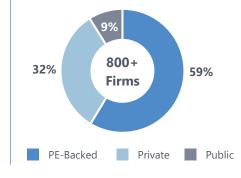
Avg. Development Cost



Highly Fragmented, Diverse Sector

The pharma services sector comprises 800+ diverse, innovative companies vying for market share, with only a few major players currently acting as primary consolidators

The highly fragmented nature of this sector represents a substantial platform opportunity for strategics and sponsors





Strong Macro Healthcare Growth Drivers

Outsourced pharma services are further driven by macro tailwinds within the broader healthcare sector, which are collectively accelerating global healthcare demand and spend

As the healthcare industry continues to grow and evolve, so too will the volume and complexity of new drug development, increasing demand for outsourced service providers who assist in their production

> Aging **Population**

Chronic Diseases

Rising Costs

Comorbidities

Increasing Life Expectancy

Key Factors Driving Adoption of Outsourced Services From Pharma and Biotech Firms









The Overall Pharma Services Market Is Growing Rapidly Relative to Comparable Sectors, Driven by Technological Advances and Substantial Market Tailwinds

All segments of pharma services are benefiting from the industry's expanded focus on the efficiency of the drug development process as well as the increased complexity of the development cycle.

Large, Growing Pharma Services Market Opportunity...

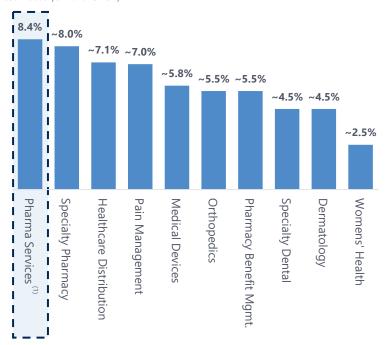


- Growth in the pharma services market is primarily being driven by the acceleration of the CRO segment (growing at ~11% CAGR), further bolstered by the commercialization (~8.0%) and CDMO (~7%) sectors
- Fueled by limited internal capacity, rising development costs, and a strategic shift toward core expertise, the pharma services sector is poised for further expansion throughout 2030P

...Outpacing Growth Within Select Other Healthcare Segments

Forward Organic Growth Rate by HC Subsector

(% estimated forward CAGR)



- The growing complexity, time to market, and costs of the drug development process are driving increased outsourcing penetration for CROs, CDMOs, and commercialization firms, accelerating growth in the pharma services sector relative to other popular healthcare subverticals
- As such, pharma services is expected to see increased investment and M&A activity in the foreseeable future

The Drug Development Process: Long, Expensive, and Complex

Pharma services companies provide essential outsourcing support across the full spectrum of the drug development and commercialization process, increasing overall efficiency and ease of the development process.



Due to the time, cost, and complexity of the drug development process, many pharma and biotech firms are expanding their use of outsourced service providers to help control costs, navigate the complex regulatory landscape, and streamline the efficiency of their operations to bring safe and effective drugs to patients worldwide in a timely and cost-effective manner

Key Pharma Services Segments

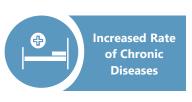


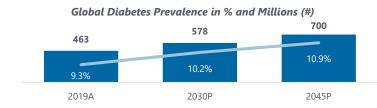
Macro Tailwinds Within the Broader Healthcare Space Will Continue to Support Increased Demand for Pharmaceuticals and Medical Devices

As overall healthcare demand continues to increase, so too will the volume and complexity of new drug development, driving increasing demand for outsourced service providers who assist in their production.



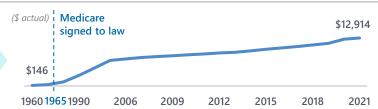
- Globally increasing life expectancy in addition to lower overall population growth is expected to result in global median age increasing from 30 years today to 42 years by 2050
- Increased average age is a leading driver of increased healthcare spend





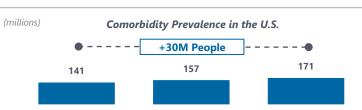
- In the United States, 60% of adults have a chronic disease, and these diseases account for 90% of total healthcare spending
- Increased prevalence of chronic diseases is also driving investment in the development of relevant, effective medications





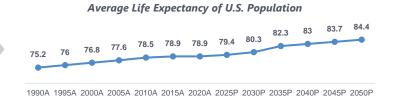
- The overall cost of individual healthcare has substantially increased since Medicare was signed into law
- This expansion is driven both by expanded access to healthcare as well as the increased price of pharmaceutical products





- 73% of adults aged 65+ have two+ chronic conditions in the United States
- Surging comorbidity treatment costs fuel the rise in healthcare spending, leading to expanded demand for value-based care models





- Rapid developments in diagnosis time and treatment efficacy have increased the life expectancy of the average American
- Lengthening lifespans fuel a surge in healthcare spending as individuals consume more services over longer periods



The Increasing Complexity and Cost of the Drug Development Process Will Continue to Drive Growth in Pharma Services Outsourcing

The pharma services outsourcing segment will continue to grow in importance as increasingly complex drugs become more prevalent, especially for small to mid-cap biotech firms who face a greater strain in resources.

The Drug Development Landscape Has Become Increasingly Costly and Complex

- The drug development landscape continues to grow in complexity as new generation molecules are becoming more prevalent in the development pipeline to tackle rising levels of chronic and difficult-to-treat diseases
 - Specialty drugs such as biologics, orphan drugs, mRNA therapeutics, and cell and gene therapies are forecasted to continue to expand rapidly in the coming years with double-digit growth expectations
 - With greater complexity embedded throughout the development timeline, these processes are ripe for further outsourcing
- A greater proportion of therapies, including large and small molecule drugs and other advanced treatments, are following expedited approval processes that require more efficient solutions and greater expertise
 - Expedited approval processes can be more complex to navigate and benefit from outsourcing expertise
- Returns on research and development are declining, driving the need for solutions that offer greater speed, efficiency, and effectiveness in the drug development process
 - CROs, CDMOs, and commercialization organizations allow firms to outsource non-core functions, allowing them to allocate resources for other functions

SMID-Cap Effect



- > While companies of all sizes utilize pharma outsourcing services, small- to mid-cap biotechs (SMIDs) typically are in greater need of the outsourcing expertise
- > More established pharma companies have the flexibility and scale to build best-in-class-capabilities in-house and outsource selectively; however, SMID-cap biotech companies often don't have the same luxury
- > Given their growth profile, lack of robust profitability, and less mature development infrastructure, these smaller biotech firms must rely on external resources to provide the full offering of clinical services before building out their own development organizations, which will continue to be a positive tailwind for the pharma services industry

Pharma Services Outlook: Compelling, Durable Tailwinds Will Continue to Drive Long-Term Demand Throughout the Sector



R&D Spending: The increase of total R&D spend in the pharmaceutical and biotechnology industry will further drive the underlying demand for all outsourced pharma services providers



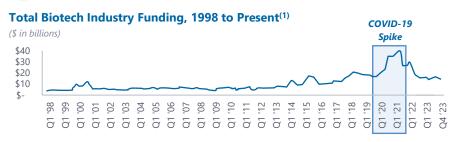
Drug Development Pipeline: The continued increase of novel substance launches and increased complexity of the drug development process are driving increased demand for outsourced pharma solutions

Drug Approvals: As the total volume of novel drug and biosimilar approvals increase to pre-COVID-19 levels, the demand for CDMOs and supply chain providers will increase to address excess capacity in the market

Outsourcing Penetration: Penetration rates for pharma services outsources are rapidly expanding across the primary segments, driven by various key demand factors that will likely continue in the long-term

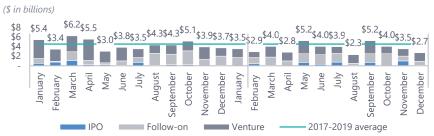
Pharma Services Outlook: R&D Funding Drives Increased Demand for Clinical Trials and Manufacturing Services, Priming Growth Avenues for Pharma Service Providers

1 Biotech Funding



- The influx of biotech firms since 2018 (now representing 70% of funding) has driven increased demand for outsourced pharma services to handle non-core functions, while the small biotech firms focus on their core competencies
- After the 2021 spike, biotech funding is set to return to pre-COVID-19 growth levels
- Optimism is growing for a 2024 IPO market rebound with pent-up demand, improved market conditions, and potential rate cuts

Biotech Industry Monthly Funding, 2022 to Present⁽¹⁾



- Biotech funding has remained consistent throughout 2022 and 2023, with analysts predicting a return to 2017–2019 growth rates in 2024
- 71% of public biotechs have more than one year of cash on hand
- Recent biotech funding has prioritized machine learning, cell therapies, and gene therapies, creating a surge in demand for specialized outsourcing providers who offer exposure to these trends

Soaring R&D budgets fuel a steady demand for CROs, amplified by the expanding reach of outsourcing into early-stage drug discovery

2 R&D Spending



- R&D spend is anticipated to continue to grow as the drug development process continues to grow in complexity with the evolution of new, moreeffective treatments
- The growing prevalence of outsourcing within the R&D process should continue to boost demand for CRO and CDMO providers

Total R&D Spend as % of Rx Revenue



- Surging demand, patent cliffs, and biotech booms have led to increased R&D spending relative to Rx revenue, increasing the need for cost-effective outsourcing solutions across the drug development continuum
- Pharma and biotech firms can increase the speed and efficiency of discovery efforts by utilizing the specialized expertise of CROs

Propelled by increased drug development complexity, rising R&D investment is fueling demand for specialized expertise offered by outsourced research organizations

Pharma Services Outlook: As the Drug Landscape Continues to Grow in Volume and Complexity, Pharma Services Providers Will Become Even More Essential

3 Drug Development Pipeline

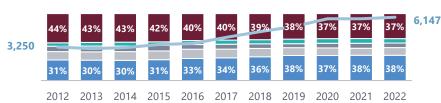


 New drug launches and a surging pipeline fuel pharma outsourcing as companies strive to monetize discoveries

Drug Pipeline Allocation by Indication

(# of drugs in global pipeline in thousands; % of total pipeline)





- Emerging biopharma (EBP) drugs have increased from 29% to 59% of the pipeline since 2011, necessitating sizeable investments in outsourcing solutions
- Oncology, neurology, and immunology have surged to 49% of new drug launches since 2018, driving the need for specialized contract manufacturing and research providers

Driven by a surge in new drug launches and pre-pandemic levels of drug development, pharma and biotech companies are increasingly turning to outsourcing solutions

4 Drug Approvals

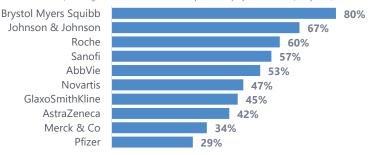
FDA Approvals for Novel Therapeutics



 Steady drug approvals for both small molecules and biologics fuel demand for contract manufacturing and supply chain providers

Patent Cliffs

(Relative share of 2021 global sales at risk due to patent expiry in the next five years)



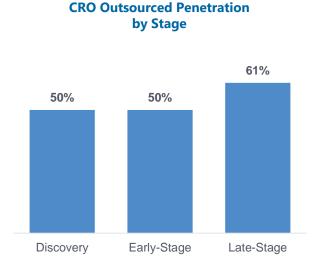
- A wave of major patent expirations are ahead, larger than the 2–3x historical drop, which will drive demand for manufacturing and outsourcing of generics
- Large and specialty pharma firms will seek to acquire R&D assets to fill pipelines due to innovation funding constraints

2023's patent cliff paves the way for biosimilar players to conquer previously exclusive markets, with more blockbuster drug patents anticipated to expire in the next five years



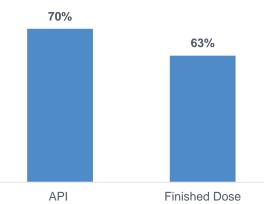
Pharma Services Outlook: Outsourcing Penetration Has Rapidly Expanded Across Primary Segments, Driven by Long-Term, Sustainable Demand Drivers

BioPharma Companies Are Actively Engaging With Pharma Services Providers to Simplify the Drug Development Process



The increase in discovery outsourcing is largely driven by an uptick in outsourcing among small biopharma firms; across the segment, firms still see substantial room for additional outsourcing growth in the next 10 years

CDMO Outsourced Penetration by Format



Small and mid-sized firms tend to outsource both API and finished dose production of their drugs more than larger competitors, but large pharma outsourcing has also increased

Commercialization Outsourced Penetration Rate and Opportunity



As commercialization firms continue to gain expertise across the industry, more clients will seek outsourced services, driving further penetration in the commercialization segment

What Are Key Drivers of Increased Outsourcing Penetration?

Focus on Core Business

Larger pharmaceutical companies are focusing increasingly on core competencies and therefore are looking to outsource functions outside of these roles

Increased Approvals

Innovative biotech firms continue to drive increases in drug approvals but lack the infrastructure to do the manufacturing work themselves. driving demand for outsourcing

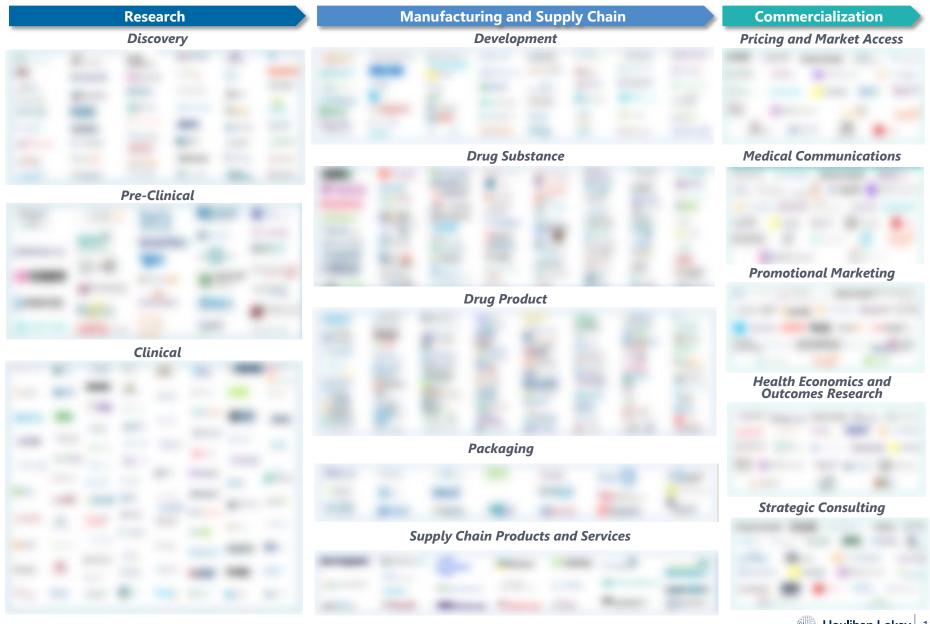
Risk of Investment

Firms developing new drugs are facing higher investment risk due to tighter funding and greater competition, and look to outsourcing to hedge costs

Complexity of Process

The overall complexity of the drug development process and the time to market are all key drivers leading firms to outsource components of these processes

The Pharma Services Landscape Is Broad, Diverse, and Growing

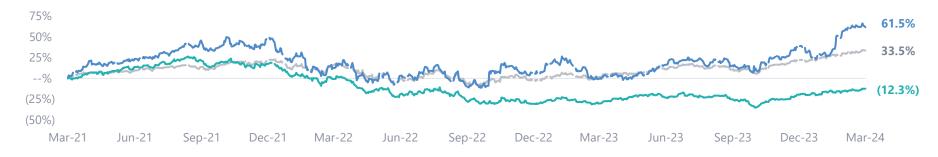


Relevant Public Company Performance

Following a peak in 2021, CRO and CDMOs have maintained valuations above pre-COVID-19 levels.

CROs Continue to Outperform the Broader Market

	3Y	2Y	YTD	L6M
CRO ⁽¹⁾	61.5%	45.8%	16.4%	37.7%
CDMO ⁽²⁾	(12.3%)	(12.1%)	9.3%	17.3%
S&P 500	33.5%	14.9%	10.0%	20.3%



EV/LTM EBITDA Multiples



Average EV/LTM EBITDA ⁽³⁾				
Period	CRO	CDMO		
2019	18.2x	9.0x		
2020	19.3x	12.0x		
2021	24.9x	15.7x		
2022	19.0x	11.5x		
2023	16.5x	11.1x		
2024	18.0x	12.4x		

Source: S&P Capital IQ data as of 03/25/2024.

⁽¹⁾ CRO peer group includes Charles River Laboratories, Fortrea, ICON, IQVIA, and Medpace.

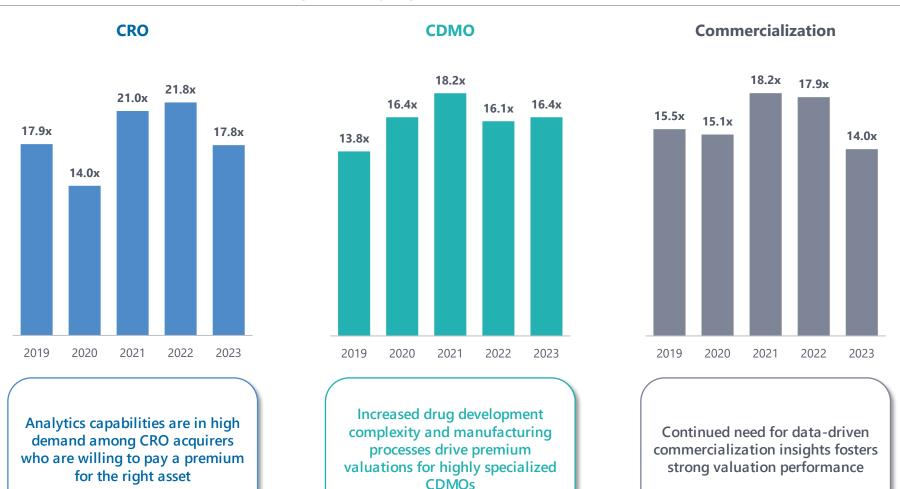
⁽²⁾ CDMO peer group includes Evonik, Fujifilm, Lonza, Piramal, and Siegfried.

⁽³⁾ Multiples represent the average of each calendar year.

Favorable Investor Sentiment Toward Pharma Outsourcing

Investors are bullish on quality outsourcing platforms, as evidenced by the premium valuations in both public and private markets.

Median Transaction Multiples Remain Strong Across Key Segments Within Pharma Services



Selected Precedent M&A – Pharma Services

Target	Acquirer	Year	Subsector EBITDA	Multiple
SOCIETAL	COPE PX. Designer at Got Can	Pending	CDMO	
Catalent.	novo holdings	Pending	CDMO	
ERGCMED	PERMIRA	2023	CRO	
Syneos. Health	ELLIOTT' PATIENT VERITAS	2023	CRO	
> PHARMALEX	cencora	2022	Commercialization	
Corium	Webster Equity Partners	2022	СОМО	
metrici contract services	Catalent.	2022	СОМО	
OPEN HEALTH	astorg.	2022	Commercialization	
‡ Emmes	N M C NEW MOUNTAIN CLEPTAL	2022	CRO	
RITEDOSE	novo holdings	2022	СОМО	
PEPROTECH. OUR SUPPORT, YOUR DISCOVERY	Thermo Fisher SCIENTIFIC	2022	СОМО	
medicalknowledgegroup.	novo holdings	2022	Commercialization	
BioAgilytix 🎇	Cinven	2021	CRO	
Lockwood Houlihan Lokey	ØARES	2021	Commercialization	
: LSNE	PICE I PRABBA SERVICES	2021	СОМО	
novasep passion & smart processes	* PharmaZell	2021	СОМО	
NUVISAN		2021	CRO	
**** VECTURA	PHILLIP MORRIS INTERNATIONAL	2021	СОМО	
parexel.	EQT	2021	CRO	
SYGNATURE	Five Arrows	2021	CRO	
Symeres Values Application and Table	KEENSIGHT	2021	CRO	
Houlihan Lokey UDG Healthcare plc	CRATION OWNLIER & RICI	2021	Commercialization	
PPD	Thermo Fisher SCIENTIFIC	2021	CRO	
Cognate	charles river	2021	CDMO	
SCA pharma	VISTRIA. Excellere Partners*	2021	СОМО	



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Our firm is the trusted advisor to more top decision-makers than any other independent global investment bank.

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Corporate Finance

Financial Restructuring

Financial and Valuation Advisory

Our Industry Coverage

Key Facts and Figures



36 Locations worldwide ~2,000
Total financial

professionals

312 Managing Directors⁽¹⁾ 2,000+ Clients served annually \$8.8B Market Capitalization⁽²⁾ \$1.8B Revenue⁽³⁾

Our Ranking by Service

Corporate Finance

2023 M&A Advisory Rankings All Global Transactions

Advisor	Deals
Houlihan Lokey	352
Rothschild & Co	349
Goldman Sachs & Co	300
JP Morgan	300
Morgan Stanley	253
	Houlihan Lokey Rothschild & Co Goldman Sachs & Co JP Morgan

Source: LSEG (formerly Refinitiv). Excludes accounting firms and brokers

No. 1 Global M&A Advisor

Leading Capital Markets Advisor

Financial Restructuring

2023 Global Distressed Debt & Bankruptcy Restructuring Rankings

	1,119		
	Advisor	Deals	
1	Houlihan Lokey	73	
2	PJT Partners Inc	64	
3	Rothschild & Co	51	
4	Lazard	37	
5	Evercore Partners	27	

Source: LSEG (formerly Refinitiv

No. 1 Global Restructuring Advisor

1,700+ Transactions Completed Valued at More Than \$3.5 Trillion Collectively

Financial and Valuation Advisory

1999–2023 Global M&A Fairness Advisory Rankings

	Advisor	Deals
1	Houlihan Lokey	1,247
2	JP Morgan	1,035
3	Duff & Phelps, A Kroll Business	977
4	UBS	884
5	Morgan Stanley	716

Source: LSEG (formerly Refinitiv).

Announced or completed transactions

No. 1 Global M&A Fairness Opinion Advisor Over the Past 25 Years

2,000+ Annual Valuation Engagements

Fully Integrated Financial Sponsor Coverage

29

Senior officers dedicated to the sponsor community in the Americas and Europe

1,100+

Sponsors covered, providing market insights and knowledge of buyer behavior

730+

Companies sold to financial sponsors over the past five years

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We provide in-depth knowledge, proven transaction experience, and an exceptional level of service to our clients.

2023 M&A Advisory Rankings All Global Healthcare Transactions Deals **Houlihan Lokey** 34 Jefferies LLC 31 Rothschild & Co 31 Centerview Partners LLC 30 Goldman Sachs & Co 30 Source: LSEG (formerly Refinitiv). Excludes accounting firms and brokers.

LEARN MORE ABOUT



Key Facts and Figures

No. 1

M&A Advisor for All Global **Healthcare Transactions**

120 +

Dedicated Healthcare Financial Professionals 200 +

Transactions Closed Since 2016, the Most by Any Firm

Industry Sector Coverage

We cover a broad array of sectors, with financial professionals dedicated to each of our primary coverage areas

















Behavioral

Distribution

Global Healthcare Technology

Global

Pharmaceuticals Hospitals

Health Systems and

Hospital/Outpatient Clinical and **Outsourced Services**

Managed Care/ **Payors**

Outpatient Services



















Oral Health

Payor and Employer Services

Pharmacv

Pharmaceutical Services

Physician Practice Management

Post-Acute/Senior Housing

Retail Healthcare

Global Medical Technology Products and

Services

Selected Healthcare Industry Transactions



































Houlihan Lokey's Leading Pharma Services Team

Houlihan Lokey Has a Strong Global Presence

North America

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- Commercialization Services
- Contract Research Organizations
- Safety and Regulatory Affairs





 Contract Development and Manufacturing Organizations

Selected Sector Transactions

CRO























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CONTACT US

Please reach out to us to schedule a call to discuss insights on the sector or to explore how we can serve your business needs.

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