CROs for the new-age biopharma

Gearing up to be at the forefront cutting edge biopharma research

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Advisors | MEHTA PARTNERS

Executive summary

CROs are rapidly transforming to cater to the evolving needs of new age biopharma pipeline with complex targets and new modalities like cell & gene therapies, ADCs, PROTACs, etc.

- Biopharma companies look for CROs that can provide robust bioanalytical/assay development skill sets and deep therapeutics understanding to propel research

CROs are actively pursuing diverse initiatives to fill any gaps in the offerings for advanced therapies and strengthening therapeutics area focus

- Greater investments in technology and big data will likely play a more meaningful role in near future

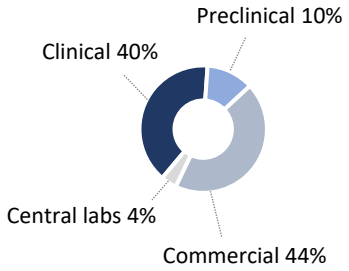
A multi-pronged approach with a well thought-through combination of partnerships, license to advanced technologies and M&A will provide the acumen to gain competitive edge while staying at the forefront of cutting edge research

- MP team, with its 35 years of global biopharma experience and deep understanding of the outsourced services sector, can help catalyze your journey for long term success

CRO industry is rapidly transforming

New drug modalities and increasingly complex targets are driving the growth and transformation of the industry

CRO industry have observed a robust demand in last few years, owing to increased pressure on biopharma to reduce R&D expenditure and increasingly complex requirements of the newer drug modalities.



$76 billion

Global market size in 2023e[1]

10.7%

CAGR expected between 2023-2028

Highly fragmented

Top 5 players only account for **35%** of the market

Focus on complex modalities like cell & gene therapy (CGT), PROTACs, ADCs etc.

Novel modalities are now becoming a critical part of the R&D pipeline. The specialized needs of such modalities make in-house expertise challenging, prompting increased outsourcing of non-core operations.

Rise in complex drug targets and focus on specialty pharma

>60% of new launches in 2022 were first-in-class, with >75% targeting complex subtype of a disease or rare disease[2]. The ability to access differentiating disease area specific knowledge and resources without the need to scale up or down quickly is driving further outsourcing

Concentration of expertise in contract services

Service providers can amass vast knowledge and know-how in niche areas (like bioanalytical assays or manufacturing etc.) by handling multiple projects, offering level of expertise that is difficult to build in-house.

Source: [1] MarketsAndMarkets, Credit Suisse [2] IQVIA institute Global trends 2023; * This report emphasizes on discovery and preclinical sub-segments

CROs are building differentiation in diverse ways to stay relevant

Robust know-how of disease area and advanced bioanalytical skills is crucial to cater to advanced therapies

Differentiation strategy	Select areas	Rationale
Niche offerings	**Bioanalytical/Assay development** **Prop. disease models/cell lines** **Informatics/biomarker prediction**	• As targets become complex, phenotypic assays development capabilities becomes crucial • Robust large molecule handling (e.g.: protein, cell etc.) capabilities require additional expertise in specialized analytical techniques like FACS, multi-label cell imaging, LC-MS, 3D assays etc. • Pre-established collection of patient-derived animal models and stable cell lines offer a head start for testing new drugs • Bioinformatics and Imaging driven biomarker discovery is becoming important with rise of personalized medicine
New technologies	**AI for hit to lead/In-silico models** **Organ on a chip/MPS/3D models** **Data processing technologies**	• AI technologies are now essential to discovery stage of programs, with impact already observed in several case studies • FDA emphasis on reducing animal testing has brought a spotlight onto organ-on-a-chip and 3D bioprinting technologies, that have matured to provide reliable data suitable for predicting efficacy/toxicity • Advanced data and analytics is becoming crucial to leverage existing data in multi-modal data processing target discovery, building disease models and translational discovery
TA specific focus	**Oncology** **Neurology** **Immunology**	• As indications and therapies become more specialized, deep knowledge of TAs becomes a key differentiator in being a vendor or a partner • Specialization in providing discovery services across a specific TA also acts as a key differentiator in selection criteria by small biotechs

Several players are taking active steps to be ‘future-ready’

Last 5 years witnessed a wave of consolidation across several key areas from increasing manufacturing capacity to expand into new areas like CGT manufacturing, to internalizing niche technologies to fill gaps in the offerings for advanced therapies, while strengthening therapeutics area focus

	CRO	Target	Strategic rationale
Niche offerings	eurofins	Discovery BioMed	*Acquisition, Jun 2022:* Adds expertise in developing human **cell-based assays** across therapeutic areas
	inotiv	Protypia	*Acquisition, Jul 2022:* Adds **mass-spectrometry based bioanalytical offerings** for large molecules
	REACTION BIOLOGY	Bioassay	*Acquisition, Dec 2022:* Adds GMP accredited potency and functional **bioassay** capabilities for large drug molecules
	Symeres	Oncolines	*Acquisition, Jan 2023:* Adds expertise in cancer cell-line profiling **assays + 200 prop. cell lines**
New technologies	charles river	Valo	*Joint GTM/Partnership, Jan 2022:* Launched integrated **AI driven platform (Logica)** + services in partnership
	SYGNATURE DISCOVERY	IKTOS	*Licensing, May 2022: Adds* Iktos **AI platforms** to its offerings for small molecule drug discovery
	CROWN BIOSCIENCE	indivumed	*Acquisition, Jan 2023:* Adds new **immuno-oncology cell lines/models** to Crown’s existing **organoid models**
TA specific focus	inotiv	BolderBioPATH	*Acquisition, Apr 2021:* Adds *in-vivo* models of **Rheumatoid Arthritis, Osteoarthritis, & Inflammatory Bowel Disease**
	IQVIA	nexelis	*Acquisition, Jan 2022:* Adds **Immunology-centric preclinical models** and clinical assay development services
	REACTION BIOLOGY	VIVOPHARM	*Acquisition, Nov 2022:* Adds expertise in **oncology and immuno-oncology**, and a range of animal disease models

CROs should take a multi-pronged approach to stay competitive

A strategic combination of partnerships/joint GTM, technology licensing and M&A is crucial in this dynamic environment

Partnerships/ Joint GTM

Growth Strategy

Technology Licensing

Pursue partnerships for following objectives:

- Joint GTM strategies with complimentary partners as optional services, where they can provide services in upcoming areas outside current skill sets of the CRO. E.g.: AI drug discovery, Tech consulting cos, etc.

Pursue tech licensing for following objectives:

- Get access to innovative technologies from start-ups or academic spin-offs, which are at forefront of research but require commercial entities to realize potential. A few examples: Specialized animal models, Organ-on-a-chip, Cell/Gene editing tech etc.

M&A

Pursue M&A for following objectives:

- ‘One-stop-shop’ CROs: Pursue adjacent offerings to provide end-to-end solutions and simplify customer experience by reducing the need for engaging with multiple CROs
- Specialized areas: Build robust offerings in niche areas for future therapeutics (CGT drug discovery, analytical assays, or TA expertise)

MP Group can help catalyze your growth strategy initiatives

MP team with its 35 years of global biopharma experience and deep understanding of the outsourced services sector can help catalyze your journey for long term success

Strategic assessment to understand core strengths and gaps in services to identify complementary areas of growth

Comprehensive market and technology landscape for early-stage technologies and companies

Leverage MP's global network to identify potential below-the-radar opportunities for partnering, investment, and M&A, unique to the vision of the company

Catalyze and execute inorganic expansion strategies (Partnerships, Licensing or M&A)

Techno-commercial due diligence of companies and technologies

Trusted advisors for over 35 years

MP group is a biopharma-only strategy and financial advisory firm that brings over 35 years of experience and a globally integrated perspective to our role as advisors to many of the top companies and investor groups, both large and small, in the biopharmaceutical and biotech space

M&A | Licensing | Partnerships/Joint GTM | Due diligence | Portfolio strategy | Market entry | Research and competitive landscape

Companies in the network	1000+	100+	No. of Projects/transactions completed
Global clients	150+	$10B+	Total deal value
Retained by 4/10 Top-10 pharma	4	10	Retained by 10/20 Top-20 financial institutions

Select Projects in the outsourced services space

Takeda

Partnership

eurofins | Advinus

Advisors to Advinus

Catalent

Licensing

Bhami's Research

Advisors to Bhami Research Laboratories

excelra

Acquisition

BISC Global

Advisors to Excelra

GVK BIO Accelerating R&D

Acquisition

aragen

Advisors to GVK Bio

THANK YOU.

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