



EMERGING TECH RESEARCH

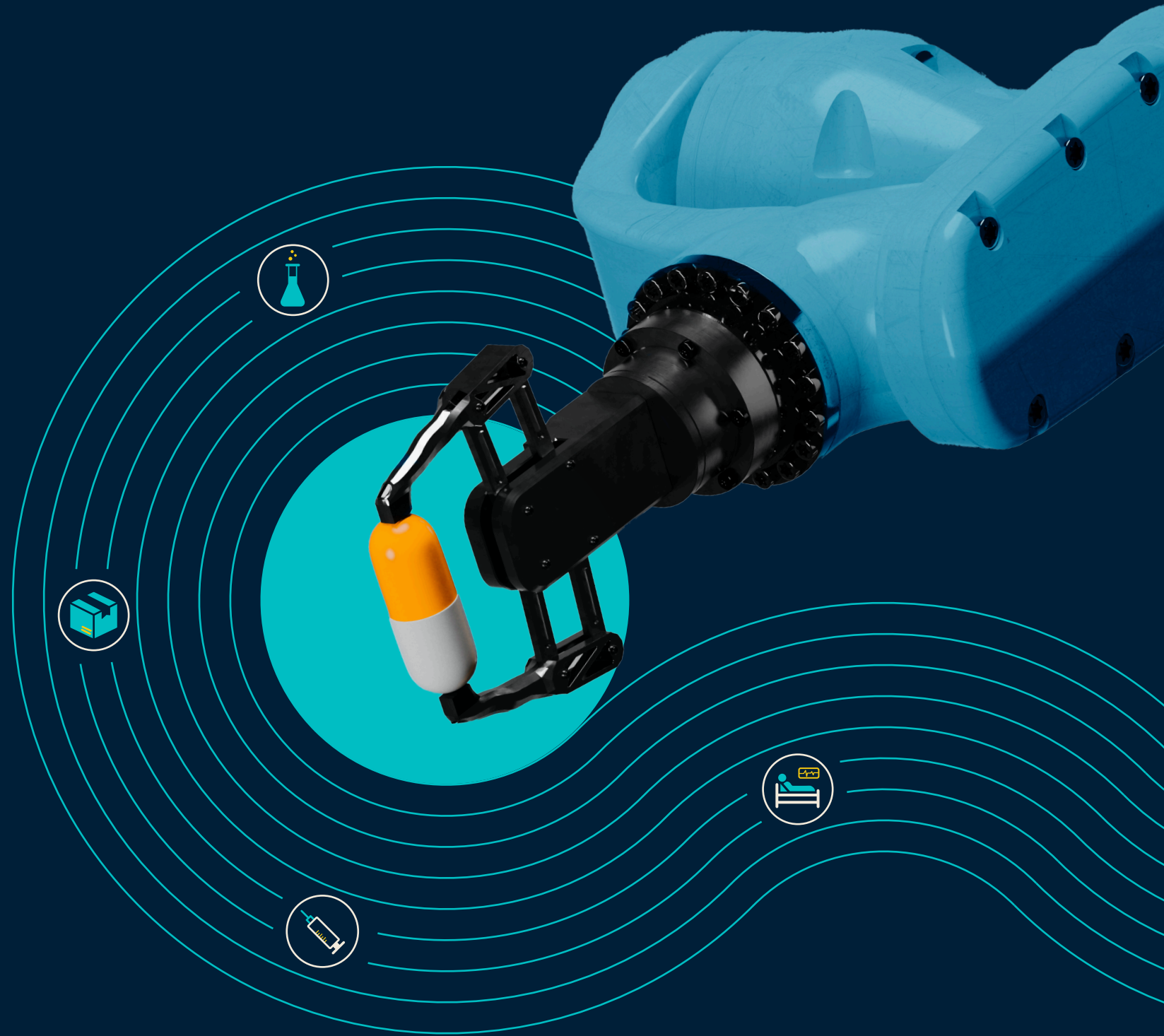
Launch Report: Pharmatech

VC and PE trends and industry overview

Q1
2024

REPORT PREVIEW

The full report is available through
the PitchBook Platform.



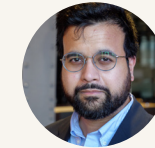


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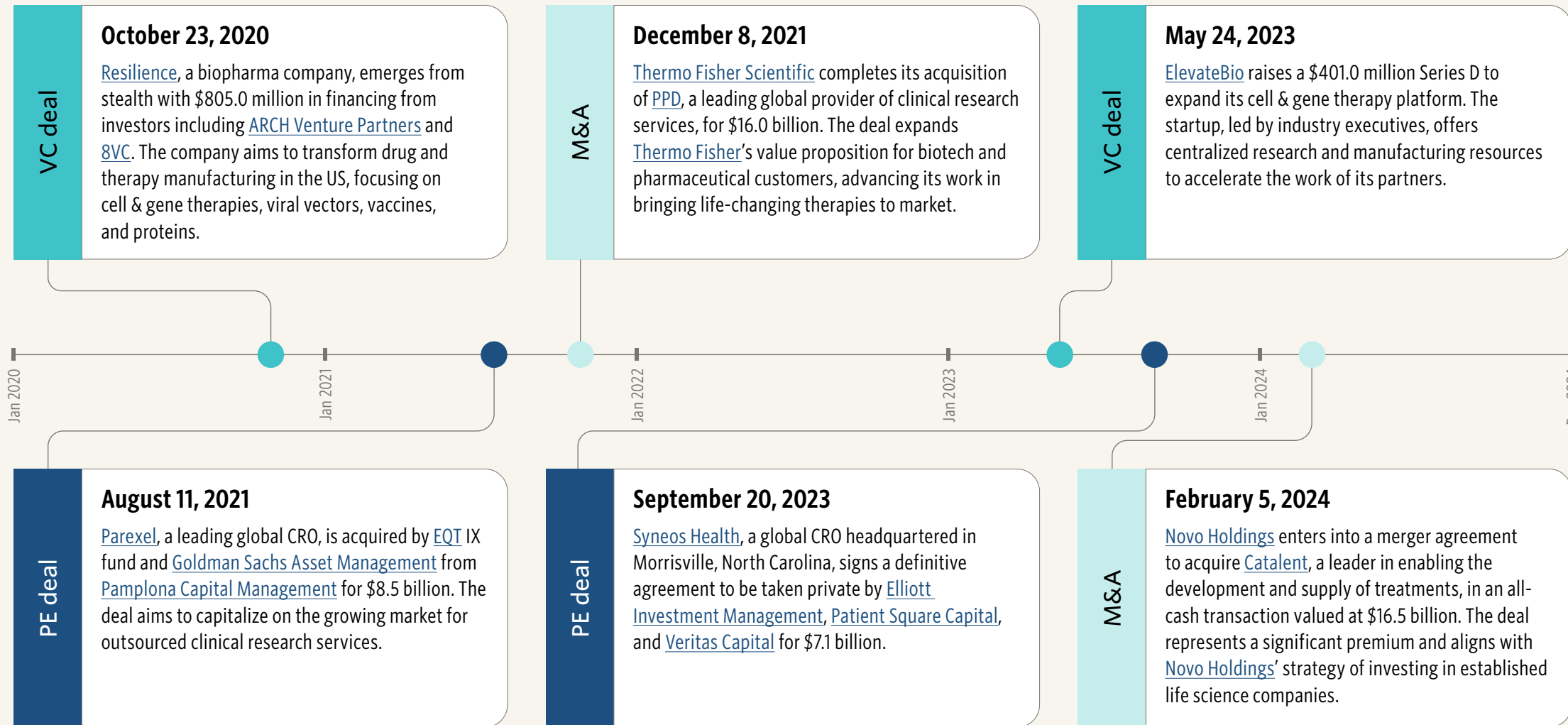
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Q1 2020-Q1 2024 timeline



Q1 2024 VC deal count summary



Q1 2024 VC deal value summary





Pharmatech VC ecosystem market map

This market map is an overview of venture-backed and growth-stage companies. [Click to view the full map on the PitchBook Platform.](#)

1 CROs

CRO - chemistry

CRO - biologics

CRO - nucleic acids

CRO - cell & gene therapy

CRO - clinical

2 CDMOs

CDMO - chemistry

CDMO - biologics

CDMO - cell & gene therapy

CDMO - nucleic acids

3 CMOs

CMO - chemistry

CMO - biologics

CMO - cell & gene therapy

CMO - nucleic acids



Pharmatech PE ecosystem market map

This market map is an overview of PE-backed companies in each segment that are currently active in PE portfolios. [Click to view the full map on the PitchBook Platform.](#)

1 CROs

CRO - chemistry

CRO - biologics

CRO - nucleic acids

CRO - cell & gene therapy

CRO - clinical

2 CDMOs

CDMO - chemistry

CDMO - biologics

CDMO - cell & gene therapy

CDMO - nucleic acids

3 CMOs

CMO - chemistry

CMO - biologics

CMO - cell & gene therapy

CMO - nucleic acids





VC and PE activity

VC activity in the pharmatech sector in Q1 2024 mirrored trends observed in the broader [biopharma industry](#), with funding levels decreasing after the pandemic's peak. Private equity buyout deal counts have decreased since 2021, following the trend in the broader market. Compared to the high VC investment levels from 2020 to 2022, 2024's funding has moderated, indicating a market recalibration. In 2020, there was \$5.0 billion in funding across 217 deals. In 2021, the investment surged to \$9.4 billion across 295 deals. 2022 saw a slight decrease to \$5.9 billion with 223 deals, and in 2023, the numbers dropped to \$3.7 billion and 185 deals. Q1 2024 saw a further decrease to \$749 million in funding across 39 deals. This significant reduction reflects a shift in the sector, possibly due to a combination of market saturation, economic adjustments, or shifts in investment strategies toward more targeted and potentially higher-yield biopharma ventures. In particular, VCs are staying away from the pharmatech space as funding is down and they have a preference for biopharma bets with assets. However, much of the movement in the space is dominated by concentrated bets by a few VCs.

Investments in the pharma & biotech industry from 2020 to 2023 focused primarily on next-generation cell & gene therapy, decentralized trials, and biologics. Funding trends during this period show a sharp peak in 2021, followed by a steep decline. In 2020, the investment amount was \$6.3 billion across 14 deals, which surged to \$33.9 billion with 37 deals in 2021, reflecting the peak of pandemic-driven funding. However, this was followed by a significant drop in 2022 to \$3.4 billion across 25 deals, with a slight decrease in 2023 to \$3.3 billion across 14 deals. This pattern indicates a recalibration of market dynamics post-pandemic peak, with the industry refocusing on sustainable investment avenues and possibly more stringent selection criteria for funding.

PE deal activity in pharmatech fluctuated similarly during the pandemic, with deal count peaking in 2021 at 177. In recent years, the industry has seen varying levels of buyout and growth equity

transactions, reflecting its dynamic nature. Since 2020's 69 deals, buyout deal count significantly increased, peaking in 2021 at 115 deals. This trend, however, began to recede with 96 deals in 2022, 91 in 2023, and a sharp drop to 11 deals projected for 2024. Similarly, growth equity transactions had 52 deals in 2020 and rose to 62 in 2021, indicating an active market phase. The subsequent years showed a gradual decline, with 58 deals in 2022, 40 in 2023, and a further reduction to six deals anticipated in 2024. The downward trend is primarily a result of broader market forces, but PE investors remain keenly interested in pharmatech, and activity should accelerate throughout the year.

Exit activity in pharmatech has fluctuated, with the significant VC bets during the pandemic initially boosting the sector. However, exit values have decreased since their peak in 2021. PE activity exit trends appear to be influenced by extreme events such as the [PPD](#) exit to [Thermo Fisher](#), which skewed the overall exit values in 2021. Investment strategies have shifted toward fewer, more substantial deals. Economic factors including changes in healthcare policies and regulations have influenced investment decisions. Strategic patience is essential for realizing the potential of investments made during the pandemic period. PE bets initially seemed opportunistic in picking out the areas underserved by Big Pharma or contract services in-house developments and VC investors, but the focus has now shifted toward consolidation and optimizing existing capabilities.

China has seen significant pharmatech investments, with several IPOs exceeding \$500 million since 2020, including [Hongyuan Pharmaceutical](#), [OBiO Tech](#), [OPM Biosciences](#), and [Sinotherapeutics](#). In the US, investors remain focused on cell & gene therapies. The success of fundraising in the sector has increased investor confidence, and market exits have led to cautious optimism.



CDMOs

Overview

The CDMO segment plays a crucial role in the pharma & biotech industry by providing outsourced development and manufacturing services for a wide range of drug modalities. CDMOs offer expertise and advanced technologies to support the production of small molecules, biologics, cell & gene therapies, and nucleic-acid-based therapeutics.

Key legacy incumbents in the CDMO space include [Lonza](#), [Catalent](#), [Thermo Fisher](#) (including [Patheon](#)), and [WuXi AppTec](#) (including [WuXi Biologics](#)). These players have established track records and offer a range of services across drug modalities. However, several startups are emerging as potential disruptors in the CDMO segment, focusing on niches and leveraging innovative technologies.

Notable startups experiencing significant growth in the CDMO segment include [Resilience](#), a tech-focused CDMO that specializes in the development and manufacturing of complex medicines, including cell & gene therapies, viral vectors, and nucleic-acid-based therapies. Startup [Cellares](#), which is developing an automated cell therapy manufacturing platform, aims to reduce the cost and complexity of cell therapy production. Additionally, startup [Cellino Biotech](#) uses AI and laser-based techniques to automate and scale stem cell production for regenerative medicine applications.

Subsegments within CDMO include:

- **CDMO - chemistry:** Providing development and manufacturing services for small-molecule drug candidates, including process development, scale-up, and commercial manufacturing.
- **CDMO - biologics:** Offering specialized services for the development and manufacturing of biological therapies, including proteins, peptides, antibodies, antibody conjugates, and vaccines.
- **CDMO - CGTs:** Supporting the development and manufacturing of cell and gene therapies, including AAV-gene therapy, CRISPR-gene editing, CAR-T cell therapy, iPSCs, and other advanced therapies.
- **CDMO - nucleic acids:** Assisting in the development and manufacturing of nucleic-acid-based therapeutics, including mRNA, RNAi, and siRNA.
- **CDMO - other:** Providing development and manufacturing services for emerging or nontraditional therapeutic areas, drug delivery technologies, or consumer health products.



CDMOS

Key CDMO VC deals by deal value since 2020*

Company	Close date	Category	Deal value (\$M)	Post-money valuation (\$M)	Stage	Lead investor(s)
Resilience	October 23, 2020	CDMO - CGT	\$755.0	\$1,605.0	Early-stage VC	8VC, ARCH Venture Partners
ElevateBio	March 15, 2021	CDMO - CGT	\$525.0	N/A	Late-stage VC	Matrix Capital Management
Asymchem Bio	October 13, 2022	CDMO - biologics	\$357.2	N/A	Late-stage VC	N/A
Thousand Oaks Biopharmaceuticals	December 28, 2021	CDMO - biologics	\$235.2	\$1,365.9	Late-stage VC	CDH Investments, Gold Stone Investment
Probio Technology	April 21, 2023	CDMO - CGT	\$224.0	N/A	Late-stage VC	Legend Capital
ABclonal China	December 8, 2021	CDMO - chemistry	\$187.8	N/A	Late-stage VC	CMB International Capital, HongShan, Lucion Venture Capital
EirGenix	October 16, 2021	CDMO - biologics	\$180.6	\$992.1	Late-stage VC	N/A
Stelis	March 19, 2021	CDMO - biologics	\$159.6	\$632.1	Late-stage VC	TPG
Probio Technology	September 10, 2021	CDMO - CGT	\$150.0	N/A	Late-stage VC	N/A
Touchlight	September 15, 2021	CDMO - nucleic acids	\$126.7	\$704.4	Late-stage VC	Bridford Group, Novator Partners

Source: PitchBook • Geography: Global • *As of March 31, 2024



CDMOS

Key CDMO VC exits by exit value since 2020*

Company	Close date	Category	Exit value (\$M)	Post-money valuation (\$M)	Exit type	Acquirer(s)
OBiO Technology	March 22, 2022	CDMO - CGT	\$820.6	\$1,029.3	Public listing	Haitong Innovation Capital Management, Shanghai Guoxin Investment, Zhangjiang Hi-Tech Investment
OPM Biosciences	September 2, 2022	CDMO - biologics	\$724.0	\$965.3	Public listing	N/A
Vigene Biosciences	June 28, 2021	CDMO - CGT	\$350.0	\$350.0	Acquisition	Charles River Laboratories International
Piedmont Animal Health	July 20, 2022	CDMO - chemistry	\$210.0	\$210.0	Acquisition	Dechra Pharmaceuticals
Cuorips	June 7, 2023	CDMO - CGT	\$66.1	\$85.3	Public listing	N/A
Lucy Scientific Discovery	February 9, 2023	CDMO - chemistry	\$57.6	\$65.1	Public listing	N/A
Xpress Biologics	October 5, 2021	CDMO - biologics	N/A	N/A	Buyout	ARCHIMED, Noshaq
Inventage Lab	November 22, 2022	CDMO - CGT	N/A	N/A	Public listing	N/A
Velesco Pharmaceutical Services	October 11, 2021	CDMO - chemistry	N/A	N/A	Buyout	Aurora Capital Partners, Pace Analytical Services, The Cambria Group
Chromocenter	January 1, 2023	CDMO - biologics	N/A	N/A	Acquisition	Sumika Chemical Analysis Service

Source: PitchBook • Geography: Global • *As of March 31, 2024

About PitchBook Industry and Technology Research

Independent, objective, and timely market intel

As the private markets continue to grow in complexity and competition, it's essential for investors to understand the industries, sectors, and companies driving the asset class.

Our Industry and Technology Research provides detailed analysis of nascent tech sectors so you can better navigate the changing markets you operate in—and pursue new opportunities with confidence.

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