



EMERGING TECH RESEARCH

Pharmatech Report

VC trends and innovation spotlights



Q3
2024

REPORT PREVIEW

The full report is available through the PitchBook Platform.



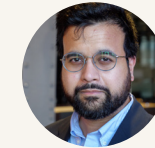


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Institutional Research Group

Analysis



Kazi Helal, Ph.D. Senior Analyst, Biotech
kazi.helal@pitchbook.com
pbinstitutionalresearch@pitchbook.com

Data

Collin Anderson Data Analyst

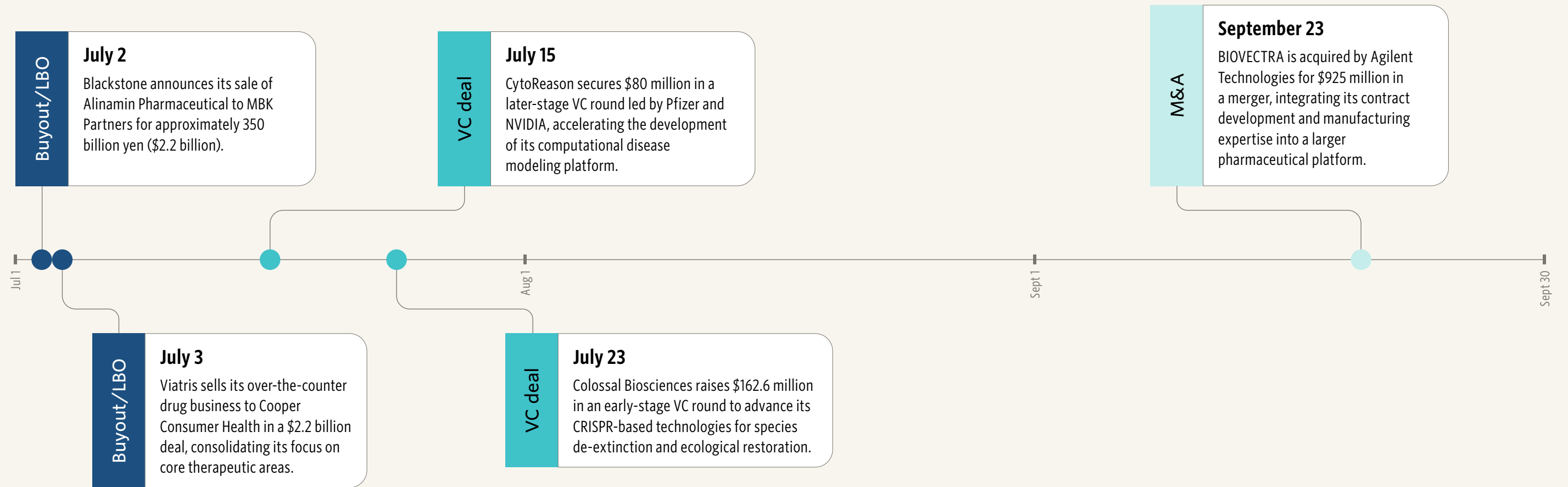
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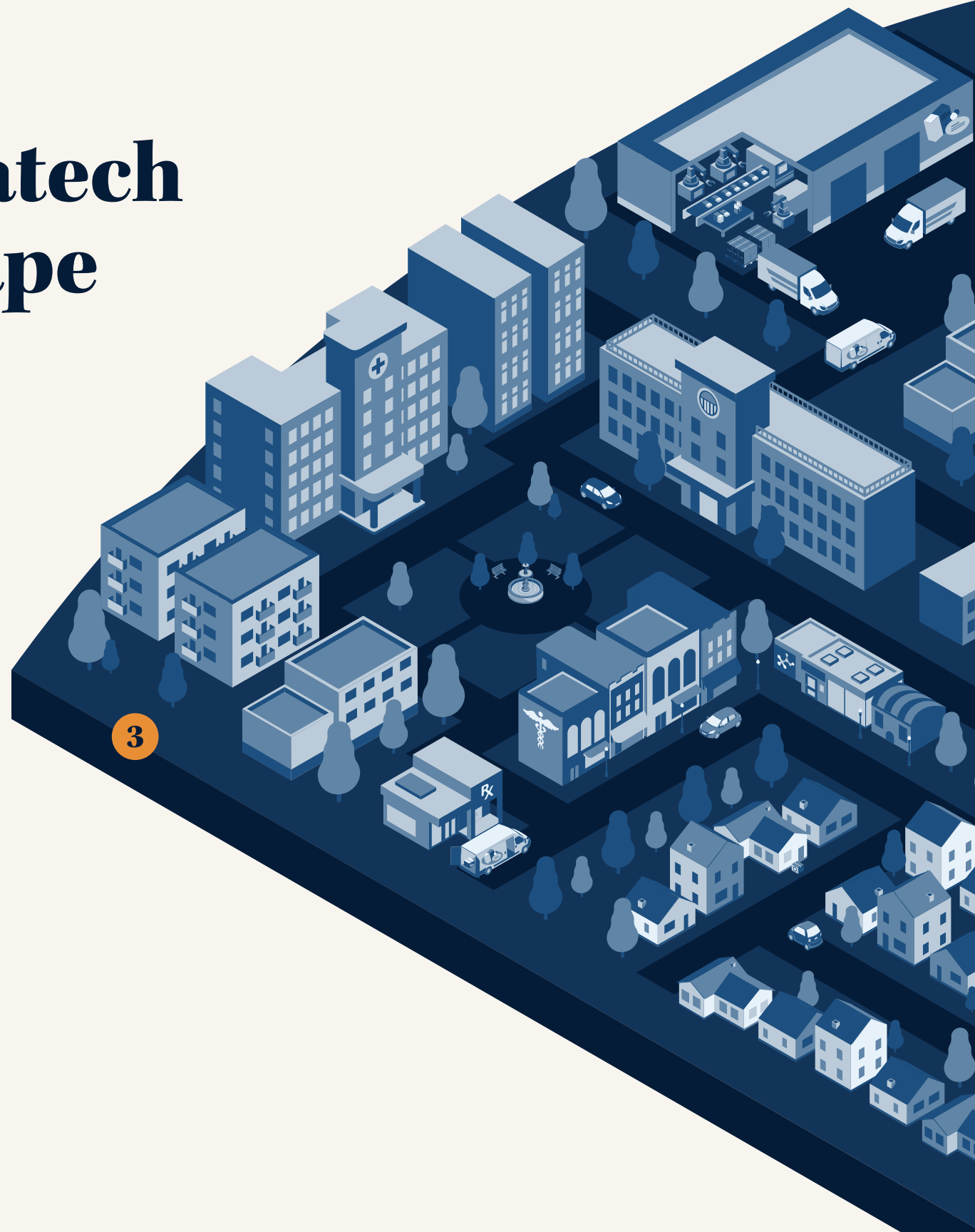
Q3 2024 timeline





Pharmatech landscape

- 1** CRO
- 2** CMO
- 3** CDMO





Pharmatech VC ecosystem market map

This market map is an overview of venture-backed or growth-stage companies that have received venture capital or other notable private investments. [Click to view the full map on the PitchBook Platform.](#)

1 CRO

CRO - chemistry



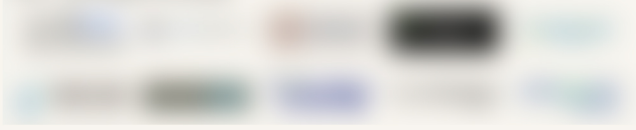
CRO - biologics



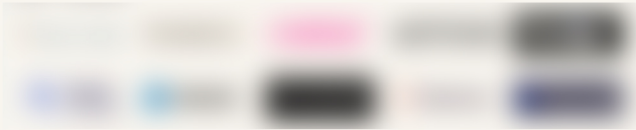
CRO - nucleic acids



CRO - cell & gene therapy



CRO - clinical

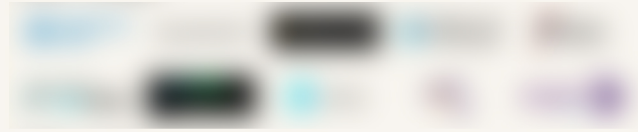


2 CDMO

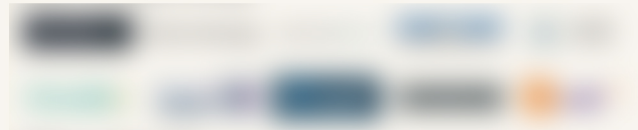
CDMO - chemistry



CDMO - biologics



CDMO - cell & gene therapy



CDMO - nucleic acids



3 CMO

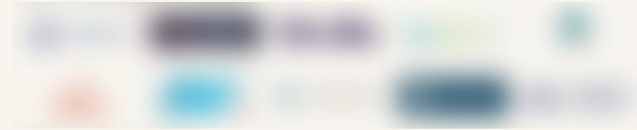
CMO - chemistry



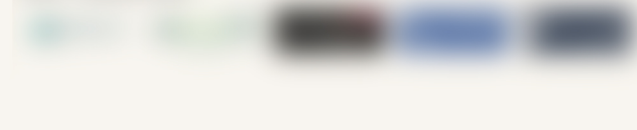
CMO - biologics



CMO - cell & gene therapy



CMO - nucleic acids





Pharmatech PE ecosystem market map

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1 CRO

CRO - chemistry

CRO - biologics

CRO - nucleic acids

CRO - cell & gene therapy

CRO - clinical

2 CDMO

CDMO - chemistry

CDMO - biologics

CDMO - cell & gene therapy

CDMO - nucleic acids

3 CMO

CMO - chemistry

STADA, PHOENIX, COVIS PHARMA, ZENTIVA, aenova

Cooper, Alvogen, SERB Pharmaceuticals, Pharmanovia, sanfer

CMO - biologics

Biocon Biologics, Healthgen Biotechnology, kaléo, BIOCARE MEDICAL

innocoll, BBI Solution, GeminiBio, ADARE PHARMA SOLUTIONS, NAARI Celebrating women

CMO - cell & gene therapy

PBS BIOTECH, BLUEmountain, 3P, Cellipont, COMMAND MEDICAL PRODUCTS

ROCKLAND

CMO - nucleic acids

Yeohabio, mirus bio, Plasmidfactory



VC and PE activity

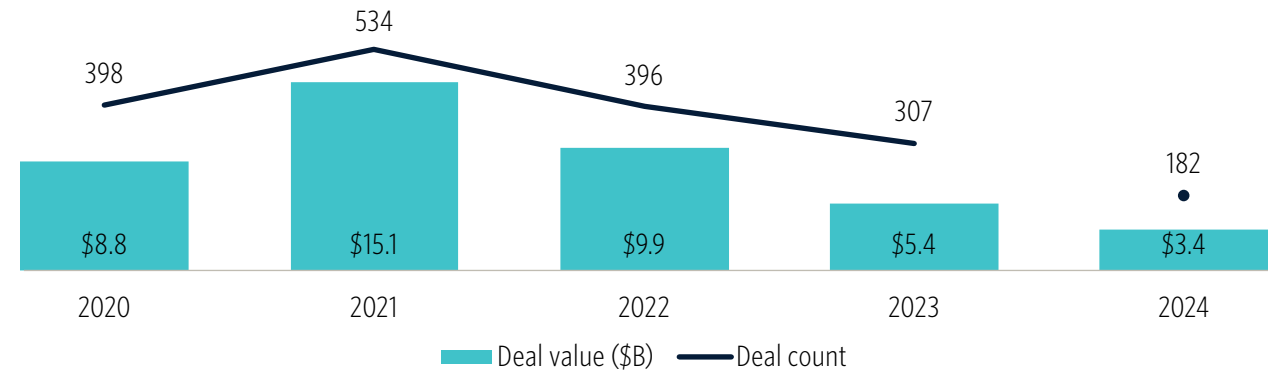
Venture capital funding in pharmatech reached \$1.1 billion across 65 deals in Q3, a slight decrease from \$1.2 billion across 47 deals in Q2. Overall, VC deal activity shows a focus on smaller deals across a larger number of total transactions. The largest deals of the quarter included OneSource Specialty Pharma's announced \$199 million later-stage VC round to establish a CDMO and Colossal Biosciences' \$162.6 million Series B to develop new genomics tools and services. Early-stage investments were also present, with Series B rounds for Cradle Bio, which raised \$73 million for AI protein engineering services, and CytoReason, which secured \$80 million for AI disease modeling.

VC exit activity remained low, with seven exits in Q3 compared with four exits in the previous quarter. This slowdown in M&A activity may be linked to cash constraints or a strategic shift toward investors developing startups rather than seeking exits. However, the trend might also be attributable to investors focusing on more mature companies that have revenue streams where PE-backed deals appear more attractive.

Private equity activity in pharmatech included 56 buyout deals so far in 2024, totaling \$5.6 billion, and 22 growth equity deals valued at \$1.9 billion. Notable transactions include an announced \$2.2 billion LBO by MBK Partners to acquire Alinamin Pharmaceutical, which was previously owned by Takeda Pharmaceutical Company, as well as an LBO of a Viatris subsidiary by Cooper Consumer Health for \$2.2 billion.

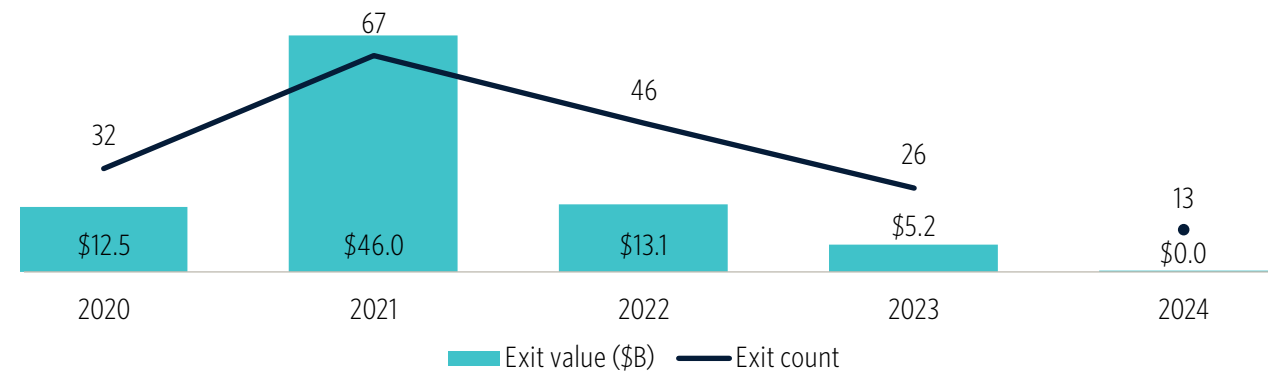
PE exit activity in Q3 2024 showed some positive signs with several significant exits. The largest was the acquisition of BIOVECTRA by Agilent Technologies for \$925 million, which enhances Agilent's manufacturing capabilities for next-generation treatments and therapeutics. Despite the overall trend of declining PE activity, the presence of these substantial deals and exits suggests that PE investors remain interested in the pharmatech sector, with a focus on manufacturing, software as a service, and specialized pharma. The recent US election, which saw a victory by Donald Trump and a Republican sweep of Congress, is assumed to portend significantly more favorable conditions for PE investors.

Pharmatech VC deal activity



Source: PitchBook • Geography: Global • As of September 30, 2024

Pharmatech VC exit activity



Source: PitchBook • Geography: Global • As of September 30, 2024



VC AND PE ACTIVITY

Key pharmatech early-stage VC deals in Q3 2024

Company	Close date	Category	Deal value (\$M)	Post-money valuation (\$M)	Deal type	Lead investor(s)
Colossal Laboratories & Biosciences	July 23	CRO - nucleic acids	\$162.6	\$1,562.6	Series B	N/A
N-Power Medicine	July 1	CRO - clinical	\$72.0	N/A	Series B	Merck Global Health Innovation Fund
Constructive Bio	September 4	CMO - cell & gene therapy	\$58.0	N/A	Series A	Ahren Innovation Capital, OMX Ventures, Paladin Capital Group
Paradigm	August 29	CRO - clinical	\$50.0	N/A	N/A	N/A
Mirai Bio	September 27	CRO - nucleic acids	\$50.0	\$209.0	Series A2	N/A
Adela	July 27	CRO - biologics	\$48.5	N/A	Series A1	F-Prime Capital, OrbiMed
Brenig Therapeutics	July 16	CRO - chemistry	\$30.0	N/A	Series A	New Enterprise Associates
Shuimu Molecular Biotechnology	August 14	CRO - chemistry	\$13.9	N/A	N/A	Huashan Capital
Xellar Biosystems	July 17	CRO - biologics	\$13.8	N/A	N/A	Tripod Preclinical Research
Enzymit	September 25	CMO - biologics	\$10.0	N/A	Series A	Grove Ventures, Khosla Ventures

Source: PitchBook • Geography: Global • As of September 30, 2024



VC AND PE ACTIVITY

Key pharmatech late-stage VC deals in Q3 2024

Company	Close date	Category	Deal value (\$M)	Post-money valuation (\$M)	Deal type	Lead investor(s)
CytoReason	July 15	CRO - chemistry	\$80.0	N/A	Series B	M&G, NVIDIA, Pfizer
Ncardia	September 19	CRO - biologics	\$51.9	\$174.0	N/A	N/A
Abolis	September 12	CDMO - biologics	\$38.8	N/A	Series A	Business Opportunities for L'Oréal Development (BOLD), DeepTech & Climate Fonds, Evonik Venture Capital
Arzeda	July 25	CMO - biologics	\$38.0	\$73.4	Series B3	Sofinnova Partners
Viome Life Sciences	August 27	CRO - nucleic acids	\$25.4	\$415.4	Series D	N/A
NovAliX	August 1	CRO - chemistry	\$21.7	\$114.0	N/A	N/A
ObvioHealth	July 25	CRO - clinical	\$18.4	N/A	Series B	N/A
Primrose Bio	July 16	CMO - biologics	\$15.0	N/A	Series B	1315 Capital
Whittilong Pharmaceutical	September 29	CDMO - chemistry	\$14.1	N/A	Series B	N/A
Bona Biotechnology	July 25	CMO - biologics	\$13.8	N/A	Series A	Lucion Venture Capital

Source: PitchBook • Geography: Global • As of September 30, 2024



SELECT COMPANY HIGHLIGHTS: NUCLERA

nuclera

Overview

[Nuclera](#) is a biotechnology company focused on developing an automated protein expression platform to accelerate drug-discovery workflows. The company’s technology leverages integrated cell-free protein synthesis and digital microfluidics on smart cartridges, enabling researchers and healthcare professionals to efficiently screen and synthesize proteins. This combination allows for faster and more effective protein production, making it a valuable tool in both drug discovery and biological research. The company is led by CEO and co-founder Michael Chen, Ph.D., alongside co-founders Jiahao Huang, Ph.D. (CFO), and Gordon Herling-McInroy, Ph.D. (COO), who formed the startup while at the University of Cambridge.

In October 2024, Nuclera raised \$75.4 million in Series C funding led by Elevage Medical Technologies. Additional investors included G. K. Goh Holdings, Cambridge Innovation Capital, Verve Ventures, and others. The funds from this round will support the continued commercialization of the company’s eProtein Discovery System, focusing on expanding its market reach in the US and Europe.

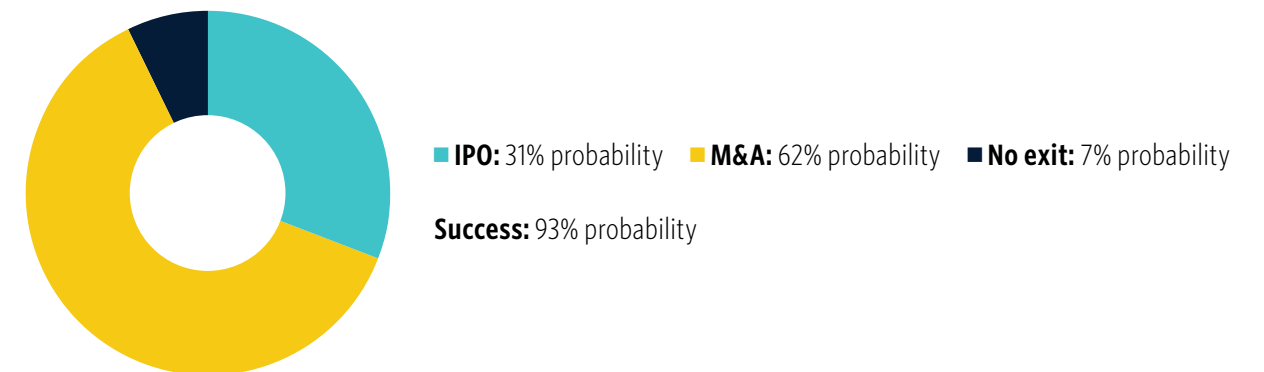
Outlook

Nuclera is positioning itself as a leader in next-generation protein synthesis and drug-discovery tools by transforming what has traditionally been a service into a lab-in-a-box technology. This approach allows for seamless, on-demand protein production within research environments. Despite the challenges of securing funding in the life sciences tools & services sector, Nuclera’s

Key company information

Founded 2013	Last financing valuation N/A	Lead investors Elevage Medical Technologies, E Ink, Future Planet Bio
Employees 131	Last financing Raised \$75.4M in a Series C	
Total raised \$154.5M	First institutional round \$0.8M seed round	

Exit Predictor



Note: Probability data is based on [PitchBook VC Exit Predictor methodology](#).



SELECT COMPANY HIGHLIGHTS: NUCLERA

successful Series B is a testament to both the strength of its technology and the market demand for efficient protein synthesis solutions. The vision of enabling cell-free protein production throughout drug development is critical for advancing both small molecules and biologics, highlighting the importance of Nuclera’s platform. Moreover, the potential for scaling the technology to meet manufacturing needs for specific protein drugs, such as antibodies, presents a significant opportunity for future growth.

Nuclera’s potential exit pathways include both IPO and M&A opportunities. The company has expressed interest in pursuing an IPO, focusing on global expansion and striving for unicorn status. While life science tools have faced challenges in the IPO market recently, with only a few major successes like 10x Genomics standing out, Nuclera’s unique platform has the potential to carve out

a niche monopoly in protein production. Its partnership with CRO Domainex further strengthens its offering as both a tool and a service. Additionally, industry consolidation trends—where established biotech companies acquire innovative technologies—could position Nuclera for an acquisition by a major player seeking to expand its capabilities in protein synthesis and drug discovery.

Nuclera faces competition from other startups in protein synthesis and bioprinting, such as Tierra Biosciences and LenioBio. While these companies share similar goals of advancing biological research through more efficient synthesis technologies, Nuclera’s hardware-driven approach and ability to scale in-house give it a distinct advantage. This differentiation aligns well with the growing demand for faster turnaround times, particularly as generative AI continues to gain traction in protein engineering and discovery.

Financing history

Seed round	Series A	Series B	Series C
May 1, 2014	October 1, 2019	July 6, 2022	October 15, 2024
Total raised \$0.8M	Total raised \$11.2M	Total raised \$67.1M	Total raised \$75.4M
Pre-money valuation N/A	Pre-money valuation \$12.0M	Pre-money valuation \$87.4M	Pre-money valuation N/A
Lead investor(s) N/A	Lead investor Future Planet Bio	Lead investor E Ink	Lead investor Elevage Medical Technologies

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PitchBook Data, Inc.

Nizar Tarhuni Executive Vice President of Research and Market Intelligence

Paul Condra Head of Emerging Technology Research

Additional research

Eric Bellomo
eric.bellomo@pitchbook.com
Gaming
E-Commerce

Brendan Burke
brendan.burke@pitchbook.com
Data Analytics
Information Security
Artificial Intelligence & Machine Learning

Jim Corridore
jim.corridore@pitchbook.com
Aerospace & Defense
Airlines
Construction & Engineering

Aaron DeGagne
aaron.degagne@pitchbook.com
Medtech
Digital Health

Alex Frederick
alex.frederick@pitchbook.com
Agtech
Foodtech

Jonathan Geurkink
jonathan.geurkink@pitchbook.com
Supply Chain Tech
Mobility Tech

Kazi Helal
kazi.helal@pitchbook.com
Biopharma
Pharma Services
Pharmatech

Derek Hernandez
derek.hernandez@pitchbook.com
Enterprise SaaS
Infrastructure SaaS

Ali Javaheri
ali.javaheri@pitchbook.com
Emerging Spaces

Robert Le
robert.le@pitchbook.com
Insurtech
Crypto

John MacDonagh
john.macdonagh@pitchbook.com
Carbon & Emissions Tech
Clean Energy Tech

Rudy Yang
rudy.yang@pitchbook.com
Enterprise Fintech
Retail Fintech