MASSBIO

2024 Massachusetts Biopharma Funding and Pipeline Report

massbio.org/industry-reports/funding-report



Table of Contents

- **3** Executive Summary
- 4 Venture Capital Investment: Massachusetts- Headquartered Companies
- **5** Top VC Financing Rounds for Massachusetts-Headquartered Companies
- 6 Location of VC-Backed Companies
- 7 Massachusetts-Headquartered Biopharma IPOs (Initial Public Offerings)
- 8 Top Biopharma Mergers and Acquisitions
- **10** Massachusetts-Headquartered Pipeline
- **12** FDA Approvals

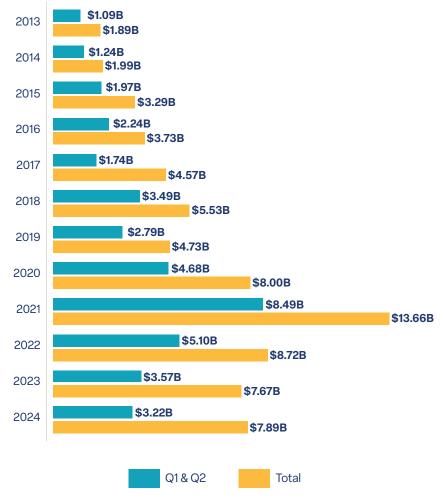
Executive Summary

- There were signs of a rebound for the biopharma industry in Massachusetts with 2024 venture capital (VC) funding surpassing 2023 in total dollars raised, with the majority of VC deals closing in the second half of the year. Likewise, the public market experienced a continued thawing with initial public offerings tripling year-over-year. Pharma came out of the gate hot in 2024 with acquisitions, though merger and acquisition (M&A) activity did taper off as the year progressed. Time will tell if another M&A rebound is on the horizon for Q1 2025.
- Biopharma companies headquartered in Massachusetts received \$7.89 billion in VC funding in 2024, beating the previous year's total by more than \$220 million. This is the first year-over-year increase in VC funding since the 2020-2021 pandemic years. Massachusetts-based companies received 28.3% of national VC investments, second only to California (41.6%) and slightly below last year's percentage total (31%).
- Massachusetts funding was spread across 215 companies and 222 rounds of investment, down from 221 and 242, respectively, in 2023. The average round was \$35.5 million for Massachusetts companies versus a national average of \$25.2 million. Notably, while the average Series A round increased for Massachusetts biopharma companies, the average local seed round continued a multi-year decline. For the first time ever, Boston surpassed Cambridge as the home to the most VC funding raised, a sign that while Cambridge continues to attract both early-stage startups and well-established large companies, mid-stage companies are gravitating to Boston and communities like Waltham and Watertown. In total, 72% of VC funding went to cities and towns outside Cambridge (up from 58% in 2023).
- The year started out with a burst of 15 deals to acquire Massachusetts companies in Q1 alone. However, M&A activity cooled off as the year went on, with only two major sales happening after the summer. In a sign that pharmaceutical companies are looking for 'sure bets,' the overall number of M&A deals dropped by six, year-over-year, while the total dollars spent surged to \$42.6 billion—an increase of more than \$29 billion over 2023. For IPOs, six biotechs went public from Massachusetts, tripling 2023's total, though the majority were trading down at year's end.
- Local companies maintain robust drug pipelines, with 1,817 drug candidates in development, accounting for 15.1% of the U.S. pipeline and 6.4% globally. It is essential that the industry continues to tell the stories of how its research and development efforts are not only changing lives but saving them through curative medicines. A notable wild card in 2025 is what impact the change in Administration will have on the FDA, NIH, M&A, and other areas.
- Massachusetts is well positioned to capitalize on industry momentum with the renewal of the Massachusetts Life Sciences Initiative (LSI) for another decade and the potential for significant early-stage investments, the top priority identified in MassBio's Vision 2030 strategic plan. The signing of the LSI also sent a signal to investors and companies of all sizes that the Commonwealth remains committed to innovation and patient-driven science.



Venture Capital Investment: Massachusetts-Headquartered Companies

- Biopharma companies headquartered in Massachusetts received \$7.89 billion in VC funding in 2024, beating the previous year's total by more than \$220 million. This is the first year-over-year increase in VC funding since the 2020-2021 pandemic years.
- Massachusetts-headquartered biopharma companies received 28.3% of US funding—down from 31% last year second only to California, 41.6%. New York was third at 6.6%, North Carolina was fourth at 2.6%, and Texas was fifth at 2.2%.
- Fifty-six percent of funding was announced in the second half of the year.
- R&D programs of companies receiving VC funding were focused on oncology at 35%, central nervous system (CNS) at 17%, and anti-infectives at 11%.





Top VC Financing Rounds for Massachusetts-Headquartered Companies

- The \$7.89 billion in VC funding in 2024 was awarded to 215 companies across 222 rounds of investment, down from 221 companies and 242 rounds of investment in 2023. The average round was \$35.5 million for Massachusetts companies, up from \$31.7 million in 2023 and well above the national average (\$25.2 million).
- The average seed round for Massachusetts companies was \$8.85 million, down from \$10.1 million in 2023 and \$11.1 million in 2022.
- The average Series A round was \$65.3 million, up from \$56 million in 2023.
- Post-Series A rounds averaged \$99.2 million, down from \$108.6 million in 2023.

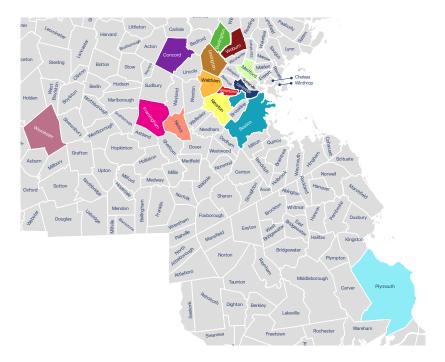
Organization	City	Date	Series	Funding Amount (in millions)
Treeline Biosciences	Watertown	8/19/24	Series A	\$422
Kailera Therapeutics	Waltham	10/1/24	Series A	\$400
Cardurion	Burlington	7/10/24	Series B	\$260
Seaport Therapeutics	Boston	10/31/24	Series B	\$226
Zenas BioPharma (NAS: ZBIO)	Waltham	5/7/24	Series C	\$200
Upstream Bio (NAS: UPB)	Waltham	4/5/24	Series B	\$200
Egenesis	Cambridge	9/4/24	Series D	\$191
Sionna	Waltham	3/5/24	Series C	\$182
Alpha-9 Oncology	Boston	10/23/24	Series C	\$175
Aktis Oncology	Boston	9/20/24	Series B	\$175
Cerevance	Boston	3/13/24	Series B	\$163
Obsidian Therapeutics	Cambridge	3/27/24	Series C	\$161
Scorpion Therapeutics	Boston	7/16/24	Series C	\$150
FogPharma	Cambridge	2/29/24	Series E	\$145
City Therapeutics	Cambridge	10/8/24	Series A	\$135
Diagonal Therapeutics	Watertown	4/3/24	Series A	\$128
NextPoint	Cambridge	2/14/24	Series B	\$122
Superluminal Medicines	Boston	9/4/24	Series A	\$120
IDRx	Plymouth	8/5/24	Series B	\$120
Vedanta Biosciences	Cambridge	8/5/24	Series D	\$119



Location of VC-Backed Companies

- Seventy-two percent of VC funding in 2024 went to companies outside of Cambridge.
- Boston surpassed Cambridge in total venture capital funding for the first time.
- Fourteen municipalities had at least 1%, up from 9 in 2023.

MA VC Investment by Municipality



Municipality	Total \$ Invested (in millions)	% of MA Total
Boston	\$2,280	29%
Cambridge	\$2,180	28%
Watertown	\$1,137	14%
Waltham	\$1,076	14%
Burlington	\$260	3%
Lexington	\$149	2%
Framingham	\$136	2%
Plymouth	\$120	1%
Concord	\$90	1%
Newton	\$80	1%
Natick	\$57	1%
Worcester	\$56	1%
Woburn	\$41	1%
Medford	\$40	1%
Other	\$40	1%
Grand Total	\$ 7,893	100%



Massachusetts-Headquartered Biopharma IPOs (Initial Public Offerings)

- Massachusetts had six IPOs in 2024, up from the two Massachusetts companies that went public in 2023.
- Massachusetts companies made up 18% of all biotech IPOs in 2024.
- Of the six IPOs, only one is trading above its initial offer price.

5	FI he	RAC ealth	TYL					
Loca	ation	Date	Deal Size	Initial Price Per Share	Price Per Share at Close on 12/31/24:	%	NASDAQ	_
Burli	ngton	2/2/24	\$110M	\$15	\$2.06	-86%	GUTS	

		bort				
Location	Date	Deal Size	Initial Price Per Share	Price Per Share at Close on 12/31/24:	%	NASDAQ
Boston	6/7/24	\$136M	\$17	\$17.74	4%	RAPP

Location	Date	Deal Size	Initial Price Per Share	Price Per Share at Close on 12/31/24:	%	NASDAQ		
Boston	9/13/24	\$362M	\$18	\$17.42	-3%	BCAX		

	ZEN	A				
	THERAPE	JTICS				
Location	Date	Deal Size	Initial Price Per Share	Price Per Share at Close on 12/31/24:	%	NASDAQ
Waltham	9/13/24	\$259M	\$17	\$8.19	-52%	ZBIO

CA	ME	<u>ک</u> ر				
	/ / / /	-		Price Per Share		
Location	Date	Deal Size	Initial Price Per Share	at Close on 12/31/24:	%	NASDAQ
Cambridge	10/11/24	\$75M	\$11	\$5.52	-50%	CAMP

Upst	rean					
Location	Date	Deal Size	Initial Price Per Share	Price Per Share at Close on 12/31/24:	%	NASDAQ
Waltham	10/11/24	\$255M	\$17	\$16.44	-3%	UPB



Top Massachusetts Biopharma Mergers and Acquisitions

• 32 companies from Massachusetts were acquired for a total of \$42.61 billion, up significantly from the \$13.04 billion in 2023 and \$5.89 billion in 2022.

Massachusetts-Headquartered Companies Acquired in 2024

Date	Acquiring Company	Target Company	Amount
3/18/24	الله Bristol Myers Squibb		\$13.8B
2/12/24	abbvie	immun•gen	\$9.8B
8/1/24	abbvie	Cerevel	\$8.7B
8/16/24	Lilly		\$3.2B
6/11/24	0110 ONO PHARMA	decīphera	\$2.4B
12/11/24	abbvie		\$1.4B
2/14/24	GSK		\$1.13B
3/13/24	U NOVARTIS	IFMDUE 🧠	\$835M
10/8/24	Otsuka		\$800M
6/27/24	abb∨ie	celsius	\$250M



Top Massachusetts Biopharma Mergers and Acquisitions

 25 companies from Massachusetts made acquisitions totaling \$10.62 billion in 2024, up from \$8.92 billion in 2023 and \$2.27 billion in 2022.

Massachusetts-Headquartered Companies Making Acquisitions in 2024





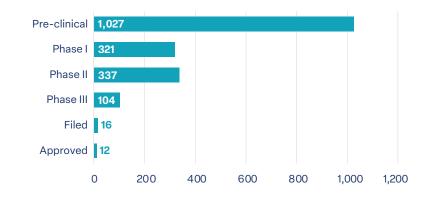
Massachusetts-Headquartered Pipeline

- The drug pipelines of Massachusetts-headquartered companies comprise 15.1% of the US pipeline, up from 14.9% in last year's report, and 6.4% of the global pipeline, on par with the previous report.
- The most common therapeutic areas of the MA pipeline are oncology (31%), CNS (14%), and anti-infectives (12%).

Total Pipeline

Therapeutic Category	% of Massachusetts-Headquartered Drug Pipeline
Oncology	31%
Central Nervous System	14%
Systemic Anti-Infectives	12%
Various	9%
Immunomodulators	6%
Gastro-Intenstinal	5%
Musculoskeletal	5%
Respiratory	5%
Blood	3%
Cardiovascular	3%
Sensory Organs	3%
Endocrine	2%
Dermatology	1%
Gastro-Urinary	1%
Grand Total	100%

MA-Headquartered Company Pipeline by Phase



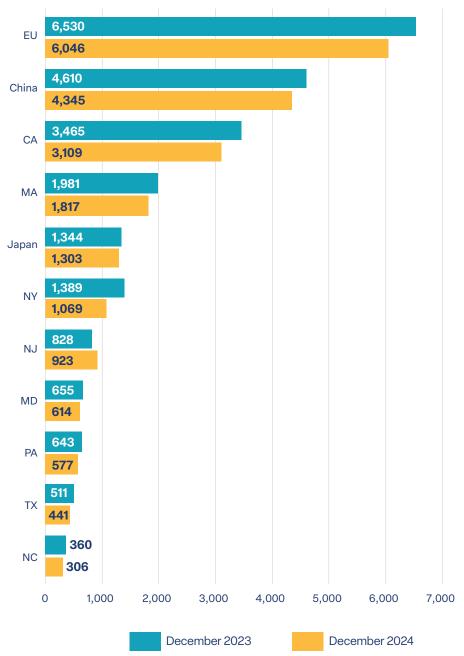
Source: Evaluate, December 2024



Massachusetts-Headquartered Pipeline

- The drug pipelines of Massachusetts-headquartered companies comprise 15.1% of the US pipeline, up from 14.9% in last year's report, and 6.4% of the global pipeline, on par with the previous report.
- The most common therapeutic areas of the MA pipeline are oncology (31%), CNS (14%), and anti-infectives (12%).

Year to Year Pipeline Comparison





FDA Approvals

We are highlighting both companies that are headquartered in Massachusetts and those with a presence here to better represent the scale of drug development happening locally. This should not be construed as indicating that a specific drug was developed here for companies not headquartered here.

2024 Novel Drug Approvals

Company	Drug Name	Modality	Disease Area	MA Presence
Merck	Winrevair	Protein/Peptide	Pulmonary Hypertension	R&D
Akebia Therapeutics	Vafseo	Small Molecule	Kidney Disease	HQ
AstraZeneca	Voydeya	Small Molecule	Paroxysmal Nocturnal Hemoglobinuria	R&D
Lumicell	Lumisight	Small Molecule	Oncology	HQ
X4 Pharmaceuticals	Xolremdi	Small Molecule	WHIM Syndrome	HQ
Amgen	Imdelltra	Monoclonal Antibody	Lung Cancer	R&D
Ipsen	Iqirvo	Small Molecule	Biliary Cholangitis	R&D
Eli Lilly	Kisunla	Monoclonal Antibody	Alzheimer's	R&D
Concert Pharmaceuticals	Leqselvi	Small Molecule	Alopecia	HQ
Servier Pharmaceuticals	Voranigo	Small Molecule	Astrocytoma	R&D
Johnson & Johnson	Lazcluze	Small Molecule	Non-Small Cell Lung Cancer	R&D
Eli Lilly	Ebglyss	Monoclonal Antibody	Atopic Dermatitis	R&D
Bristol Myers Squibb	Cobenfy	Small Molecule	Schizophrenia	R&D, Manufacturing
Pfizer	Hympavzi	Monoclonal Antibody	Hemophilia	R&D, Manufacturing
Astellas Pharma	Vyloy	Monoclonal Antibody	Gastroesophageal Junction Adenocarcinoma	R&D
Syndax	Revuforj	Small Molecule	Leukemia	HQ
Checkpoint Therapeutics	Unloxcyt	Monoclonal Antibody	Advanced Cutaneous Squamous Cell Carcinoma	HQ
Vertex Therapeutics	Alyftrek	Small Molecule	Cystic Fibrosis	HQ
Novo Nordisk	Alhemo	Recombinant Antibody	Hemophilia A and B	R&D

2024 Biologics License Application Approvals

Company	Drug Name	Modality	Disease Area	MAPresence
Orchard Therapeutics	Lenmeldy	Gene-Modified Cell Therapy	Metachromatic Leukodystrophy (MLD)	Administrative
Pfizer	Beqvez	Gene Therapy	Hemophilia	R&D, Manufacturing
Moderna	mRESVIA	mRNA Vaccine	RSV	HQ, R&D, Manufacturing
Merck	Capvaxive	Systemic Anti-Infective	Pneumococcal Infections	R&D

Source: FDA.gov, January 2025

About MassBio

MassBio is the driving force behind Massachusetts' life sciences ecosystem, supporting innovation and industry growth by offering best-in-class resources to over 1,700 member organizations at all stages of the biopharma lifecycle. Founded in 1985, MassBio aspires to extend Massachusetts' impact as the global center of excellence in biomedical breakthroughs.

Learn more at massbio.org

For more information, contact **Ben Bradford**, Head of External Affairs, Ben.Bradford@massbio.org

with support from Evaluate

PitchBook.

