



# Life Sciences Funding in View & 2024 Outlook

JANUARY 2024

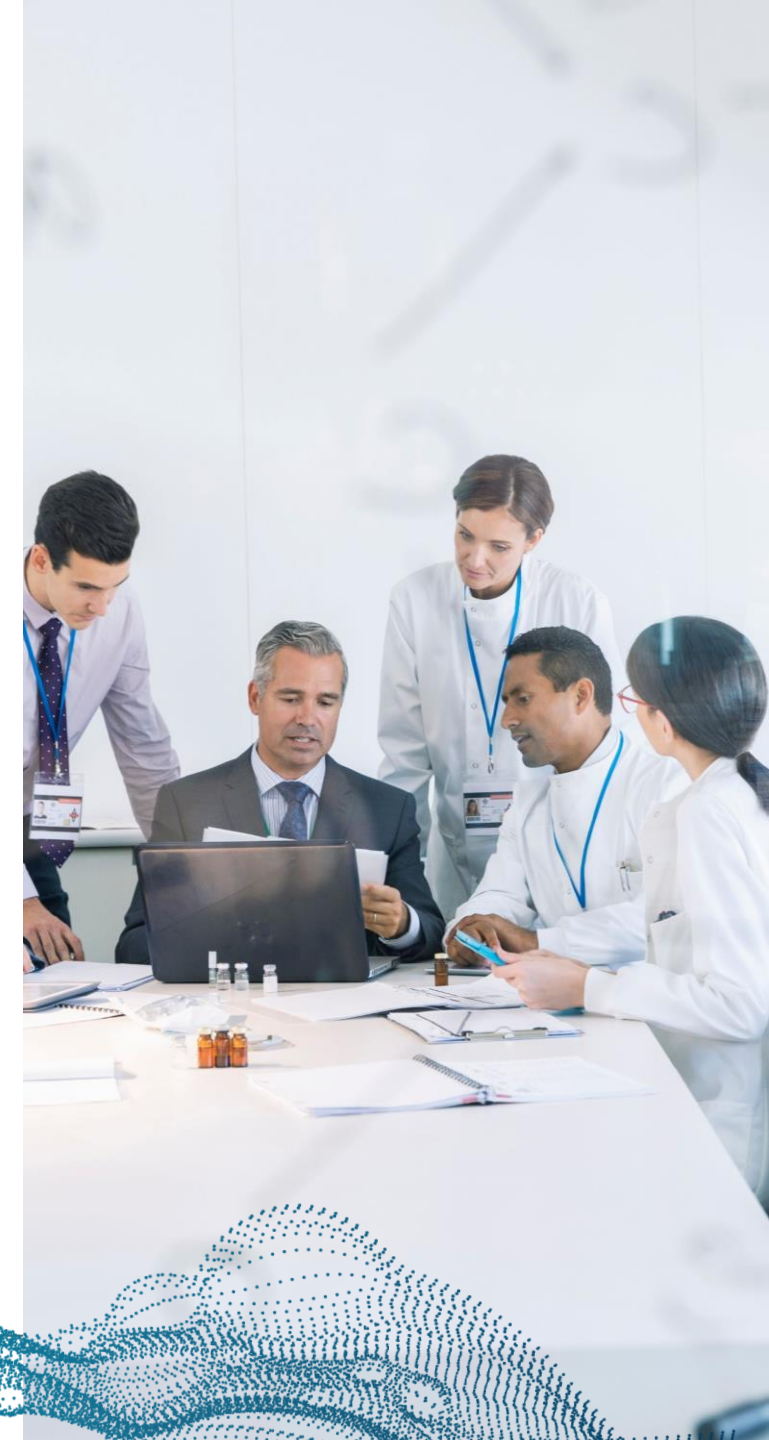


# Life Sciences Funding In View & 2024 Outlook

## Key Findings

Global life sciences venture capital funding has reverted to its pre-pandemic long-term trend. Peak pandemic funding and initial public offering activity in 2020 and 2021 resulted in the creation of many new life sciences companies. Some of these companies faced several hurdles in 2023, including a challenging fundraising environment, higher interest rates and economic uncertainty. Heading into 2024, some of this uncertainty will likely remain, however, companies are now adept at navigating a more challenging landscape. Developing strategies to operate lean in a capital-constrained environment will continue to be an important tool in 2024, as investors remain cautious with their allocations.

- Global life sciences venture capital (VC) and initial public offering (IPO) volume fell in 2023. The outlook for 2024 is flat for VC funding, as investors tighten their underwriting guidelines. IPO activity is expected to increase since many companies waited out the uncertainty of 2023.
- Successful clinical trials will continue to be an important barometer for both VC and IPO investment.
- 2023 was a banner year for mergers and acquisitions (M&A), and 2024 is expected to be more of the same as companies look for innovative strategies to bring their products to market faster and more efficiently.
- 2024 will be a pivotal year for the U.S. life sciences commercial real estate (CRE) sector. Softening fundamentals coupled with historic levels of new inventory will provide a tenant-friendly market in the near term.



# Venture Capital

## Global

The global VC market had another down year in 2023, which impacted funding to the life sciences sector. In 2023, global life sciences VC funding totaled \$45 billion, -24% year-over-year (YOY), a pullback led by regional declines in APAC at \$8 billion (-43% YOY), North America at \$29 billion (-20% YOY) and Europe at \$7 billion (-7% YOY)<sup>1</sup>. Life sciences VC funding performed better than overall VC funding, which fell 38% YOY globally. On a regional basis, the overall VC funding fall was steeper than life sciences in North America (-32% YOY) and Europe (-44% YOY), but performance was better in APAC (-41% YOY).

Most countries with a major life sciences sector experienced decreased VC activity. In the U.S., the largest life sciences market, VC funding fell to \$26 billion (-28% YOY). Other major global markets also experienced a decline: China's VC volume fell to \$7 billion (-40% YOY); UK volume dropped to \$2 billion, (-11% YOY); and France's deal volume slowed slightly to \$1 billion, (-3% YOY).

Some countries saw increased life sciences VC activity in 2023. Canada's \$3 billion VC funding volume was nearly five times higher YOY, buoyed by the Aspect Biosystems \$2.7 billion raised in a later stage round 6 funding from Novo Nordisk. The Netherlands' full-year volume of \$499 million was 20% higher YOY, driven by a strong fourth quarter of \$223 million, which was four times higher than the fourth quarter of 2022. Spain saw volume increase to \$261 million, up 9% YOY, with a 59% YOY increase in the fourth quarter (\$132 million).

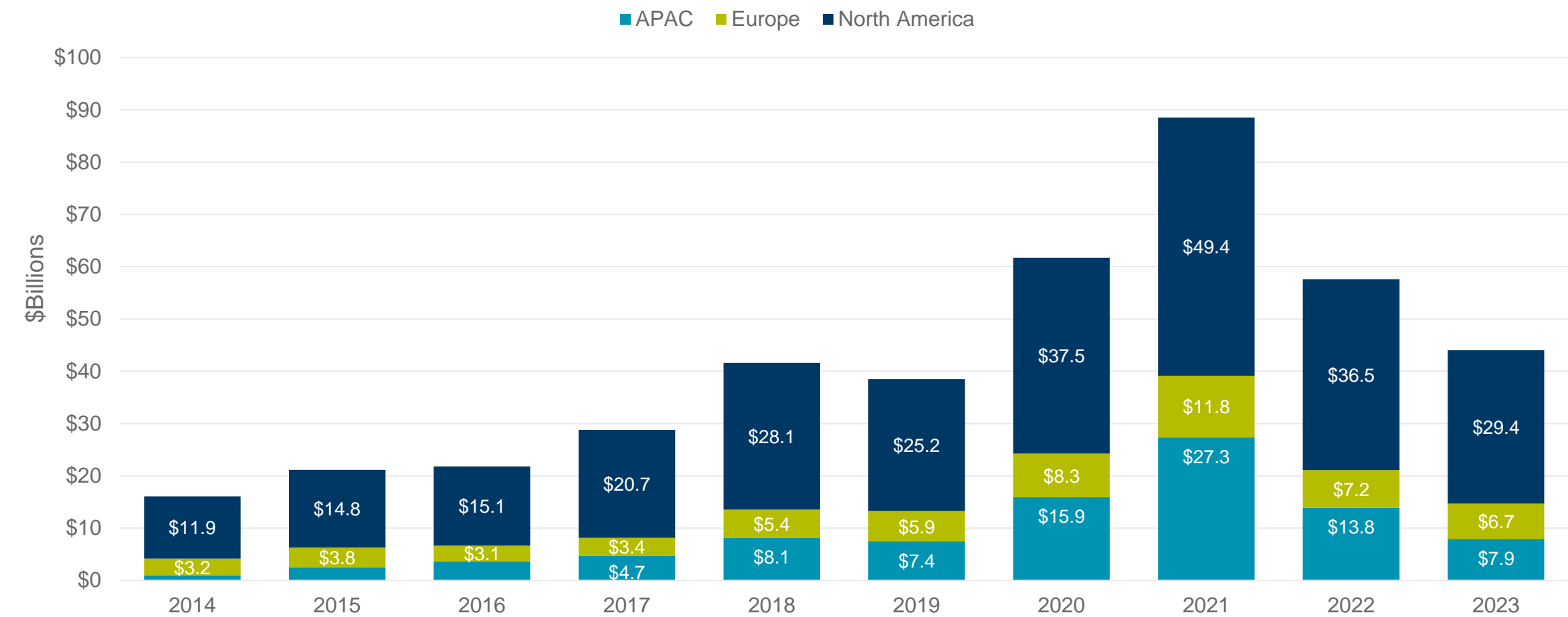
The list of the top 10 global deals in 2023 is dominated by U.S. companies headquartered in Northern California and the Boston market. However, the top spot belongs to Vancouver-based Aspect Biosystems's \$2.7 billion deal. The second spot belongs to Shanghai-based Ailomics Therapeutics, a startup that raised an impressive \$859 million in its first round of funding.





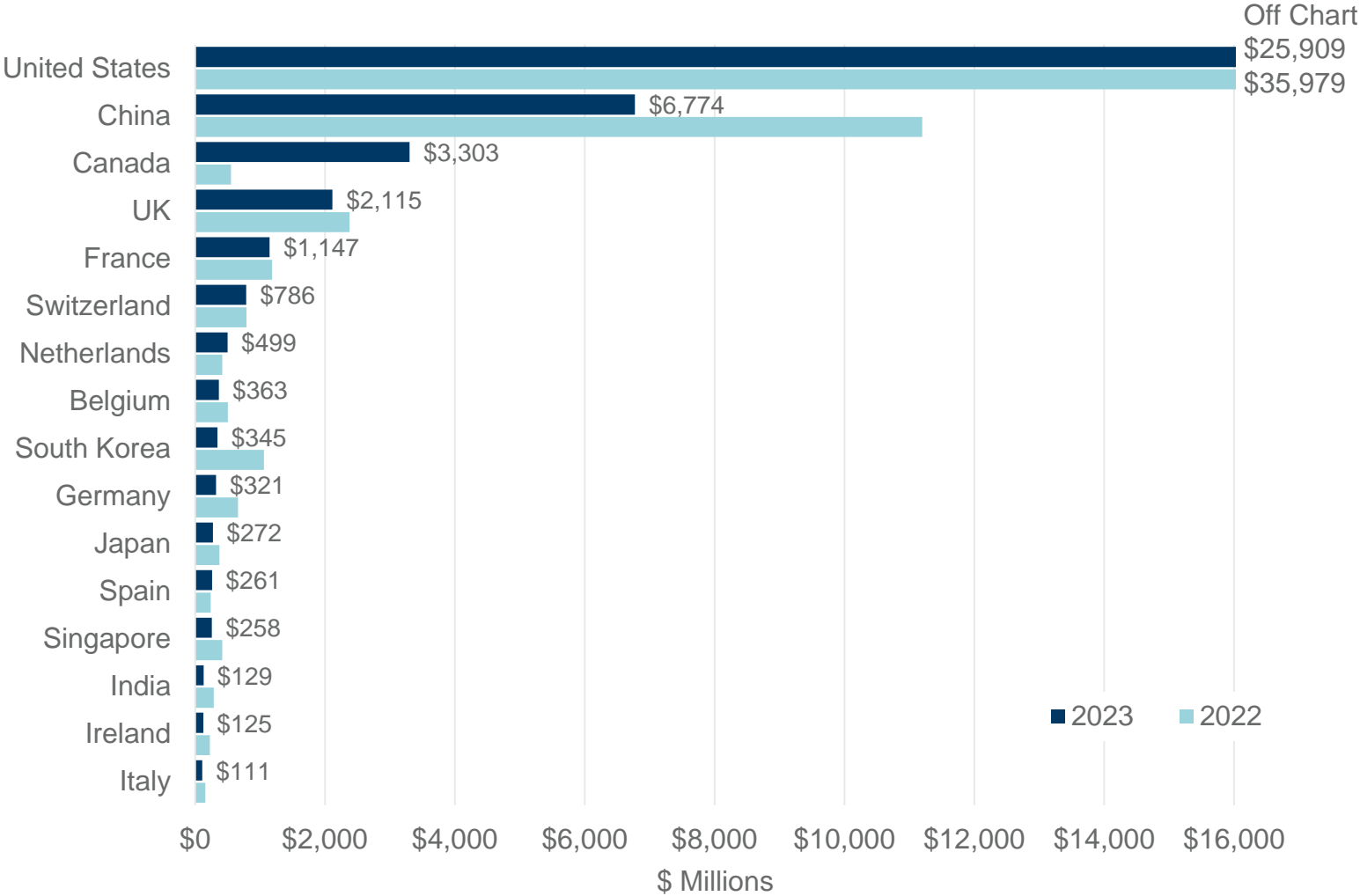
# 2023 Global VC Funding

## Funding by Region



Source: PitchBook Data, Inc.; \*Data has not been reviewed by PitchBook analysts

# 2023 VC Funding by Country

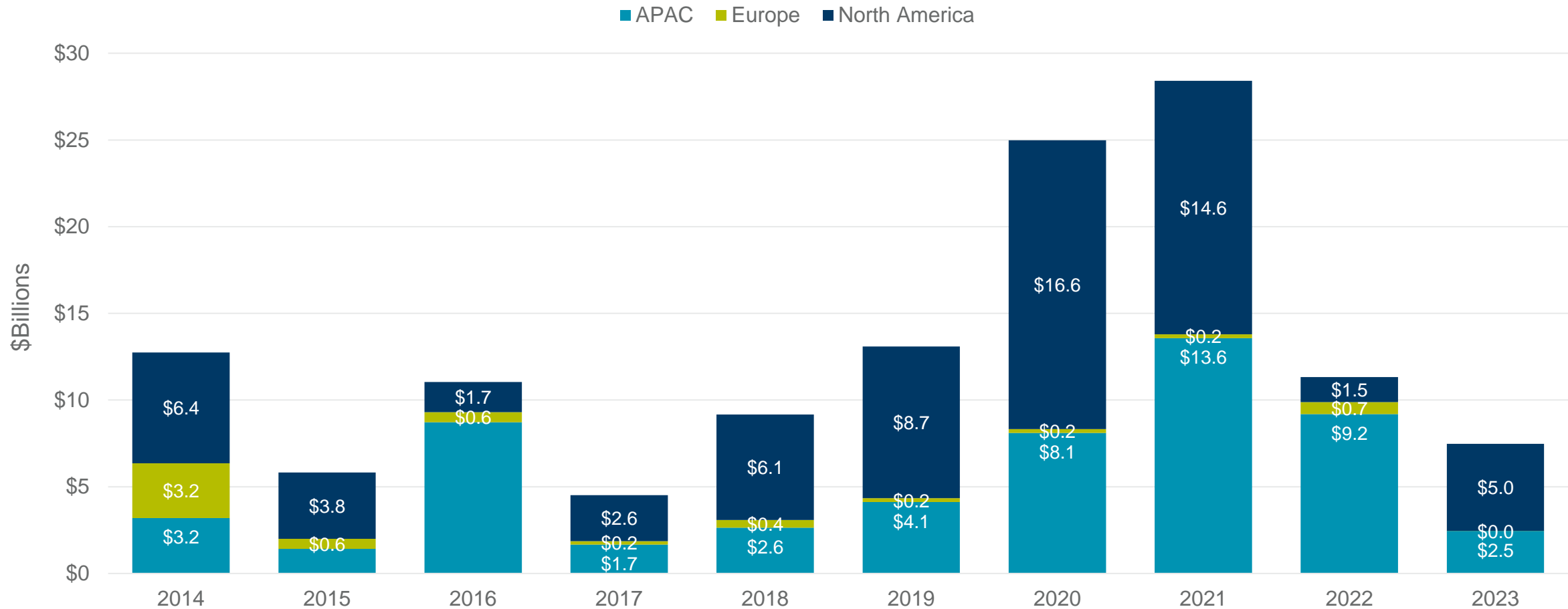


Source: PitchBook Data, Inc.; \*Data has not been reviewed by PitchBook analysts



# 2023 Global IPO Activity

## IPO Activity by Region



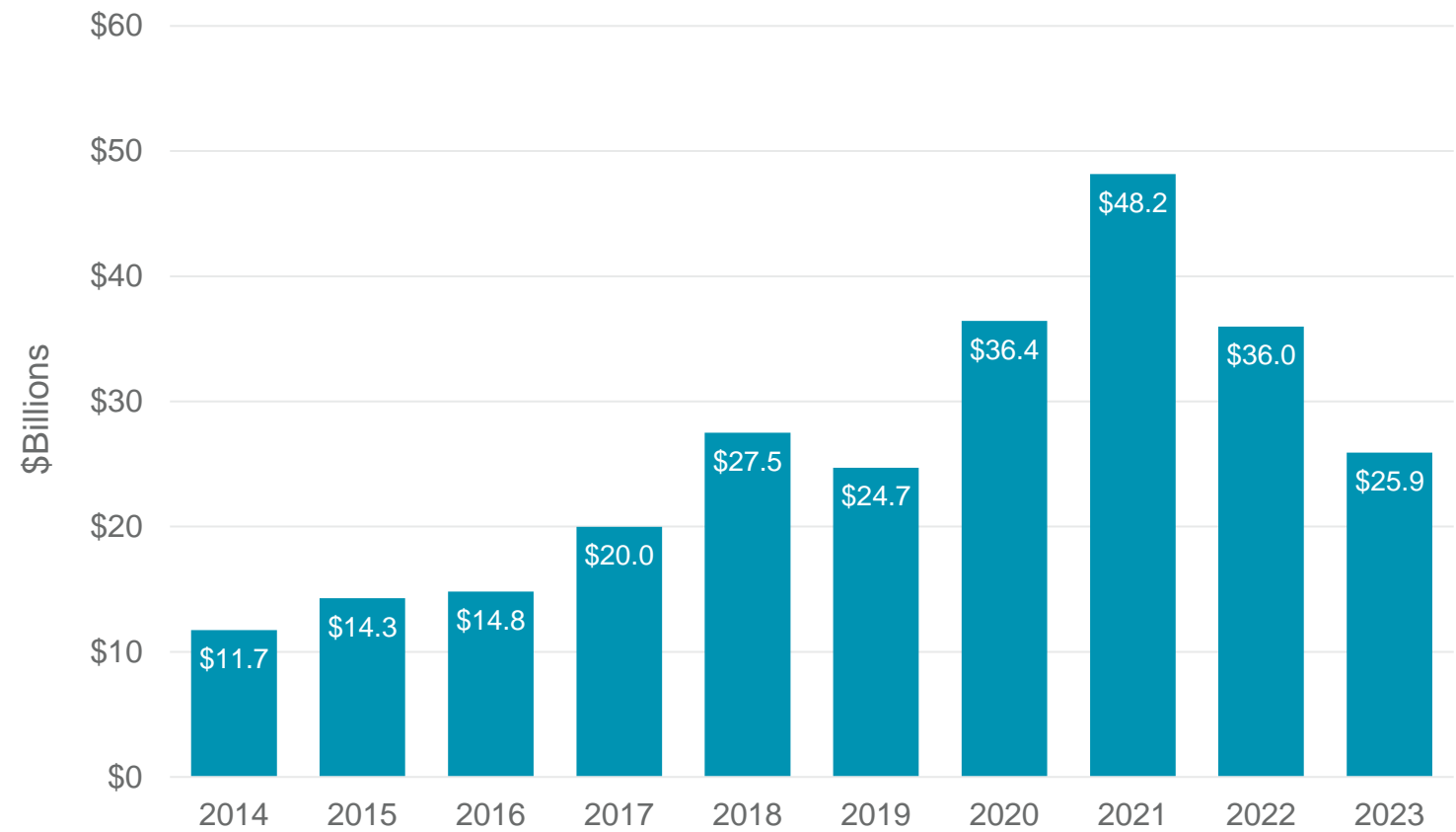
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# Top 10 Global VC Deals 2023

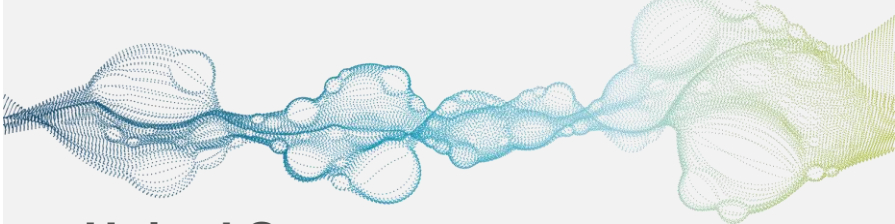
Companies	Deal Date	Deal Size (USD millions)	VC Round	Series	Primary Industry	Current Business Status	Deal Type	HQ Location
Aspect Biosystems	12-Apr-2023	\$2,700	6th Round		Biotechnology	Generating Revenue	Later Stage VC	Vancouver, Canada
Ailomics Therapeutics	31-May-2023	\$859	1st Round		Drug Discovery	Startup	Seed Round	Shanghai, China
Kriya Therapeutics	26-Jul-2023	\$430	3rd Round	Series C	Drug Discovery	Generating Revenue	Later Stage VC	Redwood City, CA
ElevateBio	24-May-2023	\$401	4th Round	Series D	Biotechnology	Generating Revenue	Later Stage VC	Waltham, MA
Neuralink	22-Nov-2023	\$323	4th Round	Series D	Therapeutic Devices	Generating Revenue	Later Stage VC	Fremont, CA
Cardurion Pharma	12-Jul-2023	\$300	3rd Round	Series A	Biotechnology	Pre-Clinical Trials	Later Stage VC	Burlington, MA
ReNAgade Therapeutics	23-May-2023	\$300	2nd Round	Series A	Therapeutic Devices	Startup	Early Stage VC	Cambridge, MA
Metagenomi (NAS: MGX)	05-Jan-2023	\$275	4th Round	Series B	Drug Discovery	Pre-Clinical Trials	Later Stage VC	Emeryville, CA
Generate Biomedicines	06-Sep-2023	\$273	3rd Round	Series C	Biotechnology	Clinical Trials - Phase 1	Later Stage VC	Cambridge, MA
Orbital Therapeutics	26-Apr-2023	\$270	2nd Round	Series A	Discovery Tools (Healthcare)	Startup	Early Stage VC	Cambridge, MA

Source: PitchBook Data, Inc.; \*Data has not been reviewed by PitchBook analysts

## 2023 Total U.S. Life Sciences VC Funding



Source: PitchBook Data, Inc.; \*Data has not been reviewed by PitchBook analysts



## United States

Coming off a funding decline in 2022, the U.S. life sciences sector began 2023 with cautious optimism. However, the failure of Silicon Valley Bank in the first quarter brought funding to a near standstill as the VC market evaluated the implications. Deals continued to be funded throughout the year, and the market saw a marked uptick in activity in the third quarter. However, this momentum fizzled in the fourth quarter, with deal volume down 34% quarter-over-quarter (QOQ) and down 28% YOY from fourth quarter of 2022 levels.

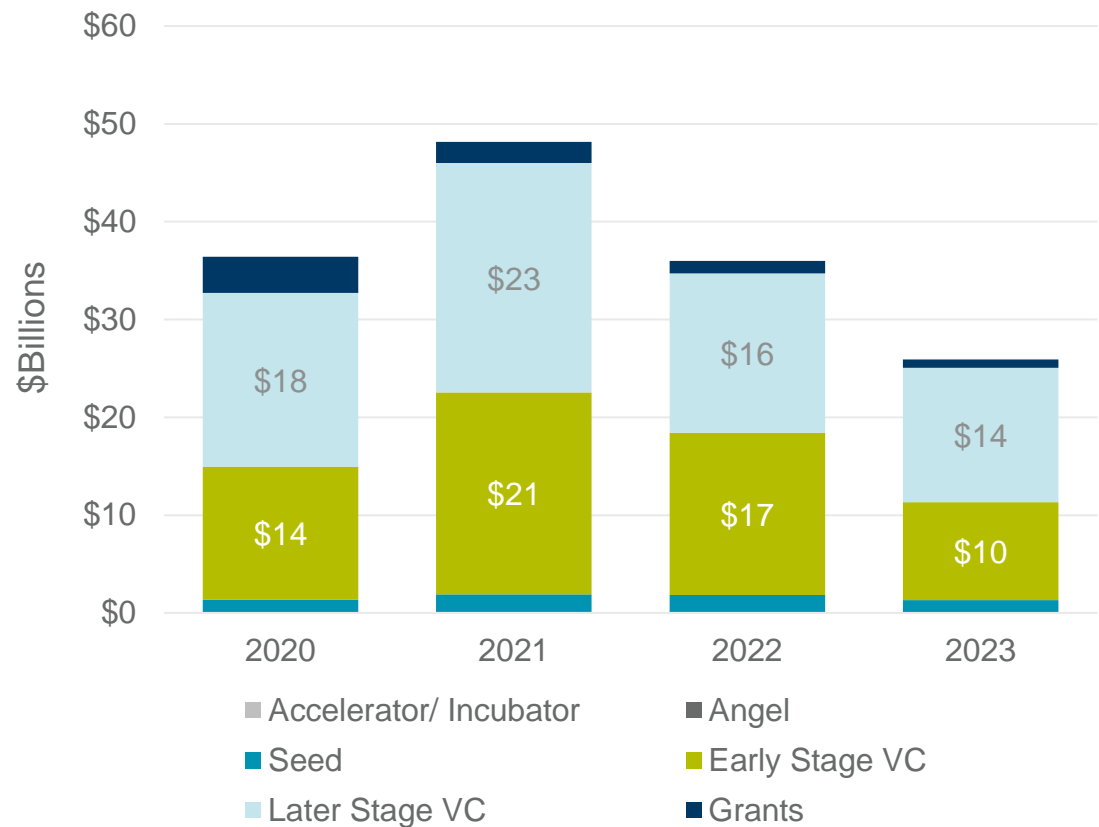
Volume fell across all deal types, but it's evident that investors favored later stage companies, with nearly \$14 billion in deals (-16% YOY), accounting for 53% of all 2023 funding. Early-stage companies saw a significant decrease in funding in 2023, with just over \$10 billion (-39% YOY).

Slower funding impacted most industries, with drug discovery companies receiving \$12 billion, (-23% YOY), comprising the largest share of funding, at 46% of total 2023 commitments. The next-largest segment, biotechnology companies, had a steeper drop, receiving over \$6 billion (-44% YOY) and comprising 25% of 2023 volume. A few industries saw an uptick in volume in 2023, including discovery tools at \$880 million (+3% YOY), pharmaceuticals at \$187 million (+16% YOY), and therapeutic devices with over \$1 billion in funding, which exceeded both 2022 (+83% YOY) and 2021 (+20%).

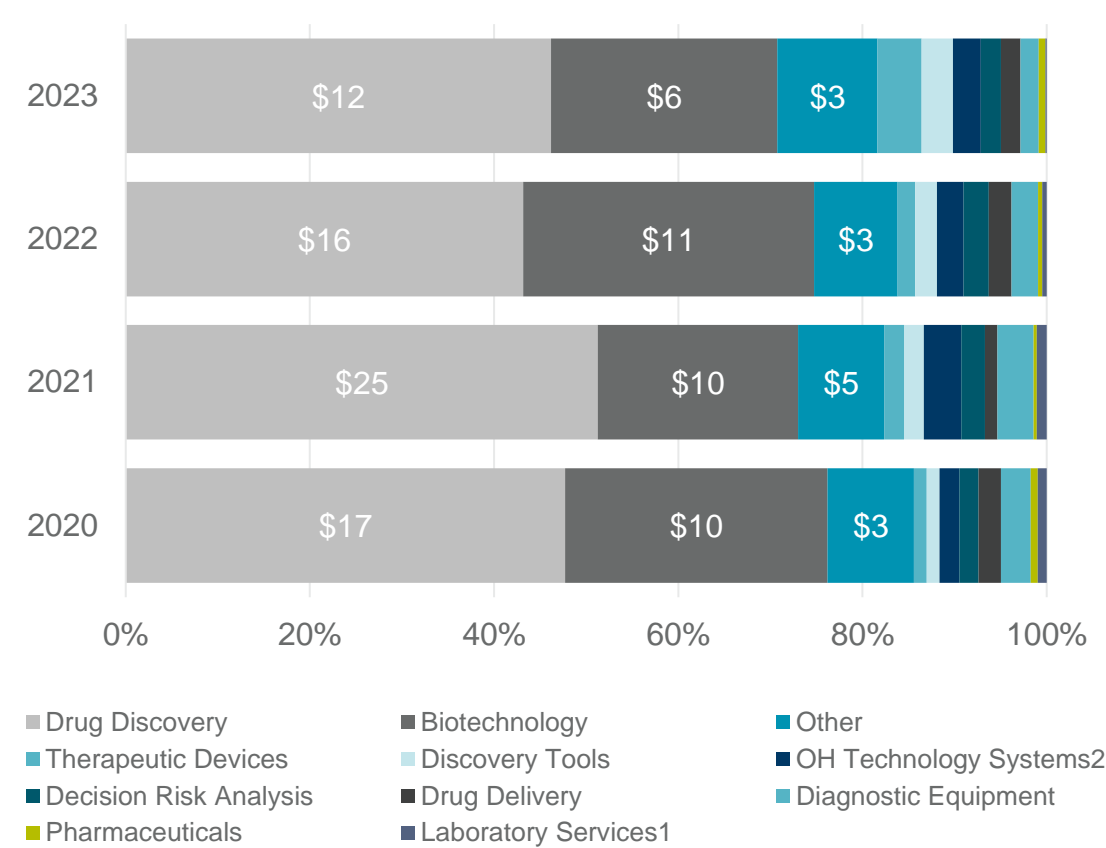


# U.S. Funding by Deal Type and Industry

## U.S. Funding by Deal Type



## U.S. Funding by Top 10 Industries, in \$Billions



Source: PitchBook Data, Inc.; \*Data has not been reviewed by PitchBook analysts  
1. Healthcare Laboratory Services; 2. Other Healthcare Technology Systems

# Venture Capital

## U.S. Markets

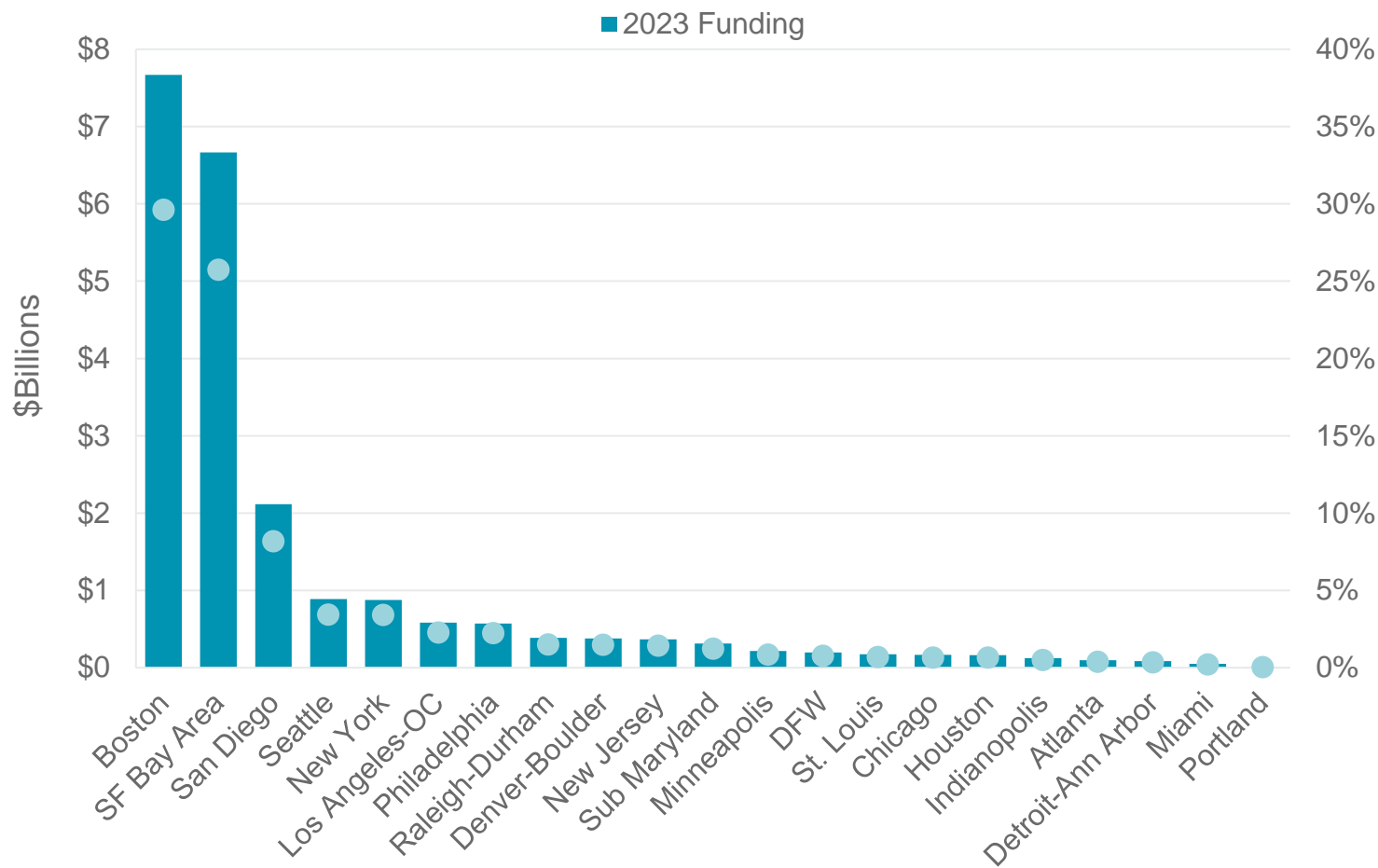
Most hub markets saw decreased activity in 2023 but continued to attract a large share of life sciences VC funding. Boston saw funding levels fall to \$8 billion (-18% YOY) but garnered 30% of total funding in the U.S., the largest share of funding across markets. While volume was down, Boston's deal size increased to \$32 million per deal (+20% YOY). The San Francisco Bay Area saw a significant drop in investment while receiving the second-largest funding volume at \$7 billion (-40%), a 26% share of total U.S. volume. Deal size decreased to \$28 million per deal (-8% YOY). However, 2023 funding was on par with 2020 and continues to trend higher than pre-pandemic years. San Diego's VC volume fell to \$2 billion (-16% YOY), but like Boston, the average deal size increased to \$24 million per deal (+8%). Philadelphia and Raleigh-Durham also saw funding activity slip in 2023, to \$572 million (-37% YOY) and \$385 million (-64% YOY), respectively. Suburban Maryland was the only hub market to experience an uptick in activity, with \$312 million (+167% YOY) and an average deal size of \$13 million (+263% YOY).

Secondary markets also experienced a slower funding climate in 2023, except for the Dallas-Fort Worth market. Dallas-Fort Worth funding totaled \$195 million (+40% YOY), with an average deal size of \$14 million (+131% YOY). The top five markets in total funding included Seattle at \$886 million (-9% YOY); New York at \$877 million (-26% YOY); Los Angeles-Orange County at \$582 million (-53%); Denver-Boulder at \$378 million (-31%); and New Jersey at \$366 million (-27%). Seattle not only attracted the most funding among secondary markets, but it also had the largest average deal size at \$22 million (+20% YOY).

Like the national trend, most markets saw the majority of 2023 funding focused on later stage companies, with a few exceptions.



# 2023 U.S. Funding by Market



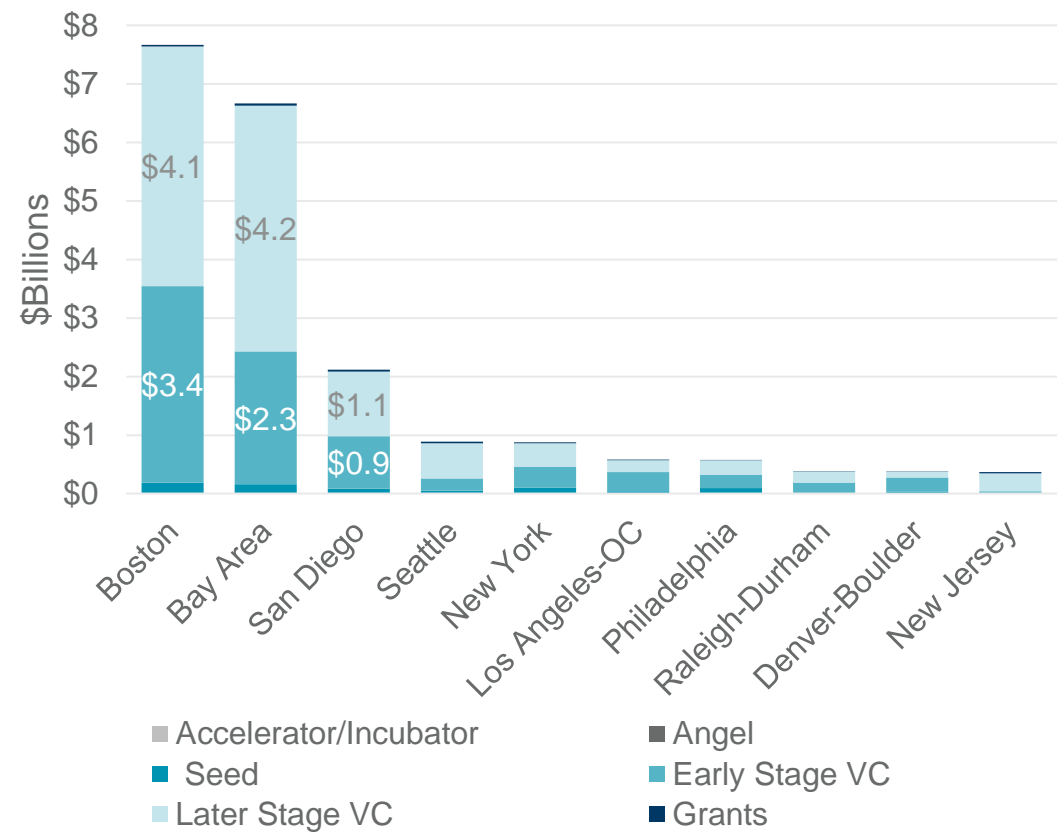
Source: PitchBook Data, Inc.; \*Data has not been reviewed by PitchBook analysts



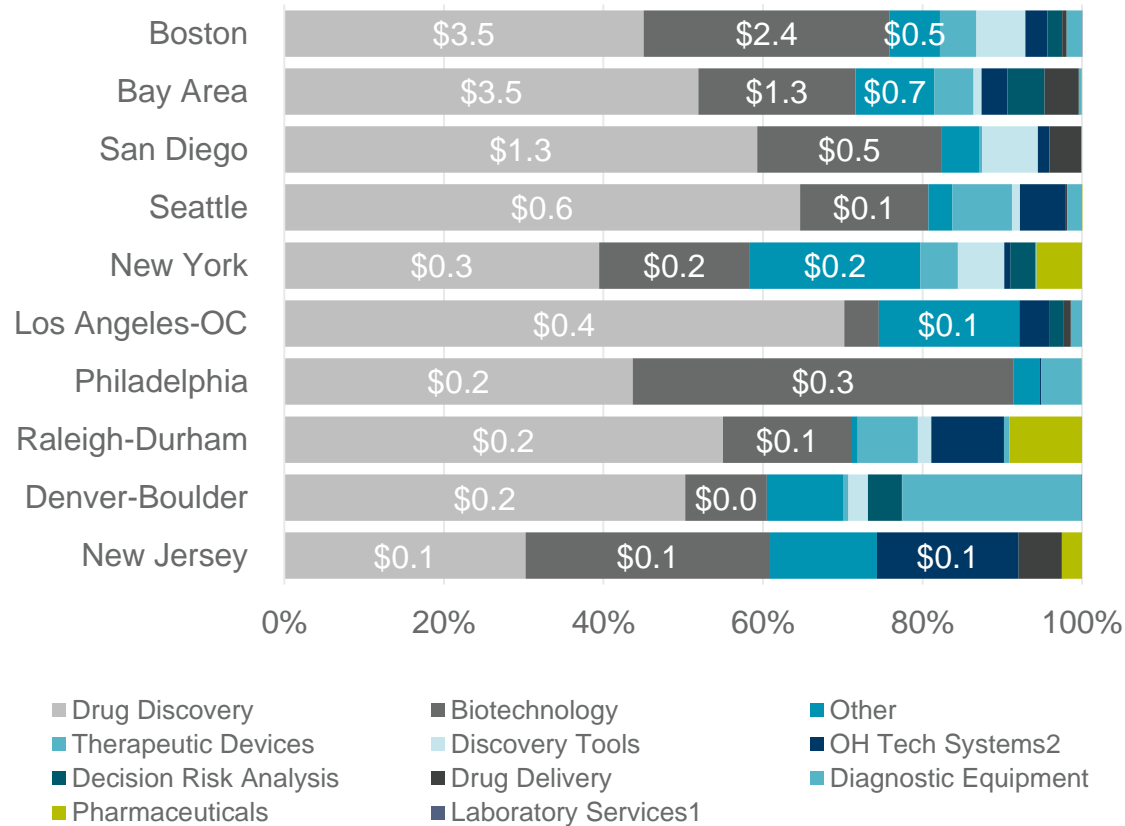


# U.S. Funding by Top 10 Markets

U.S. Top 10 Markets 2023 by Deal Type

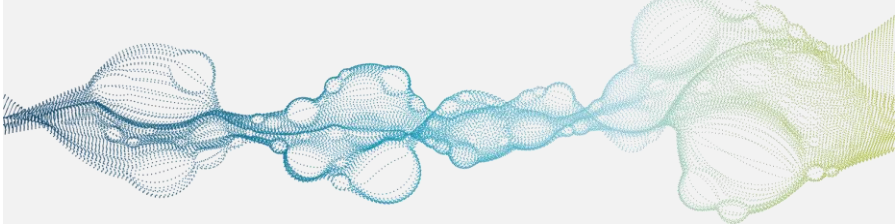


Top 10 Markets 2023 by Top Industries, in \$Billions

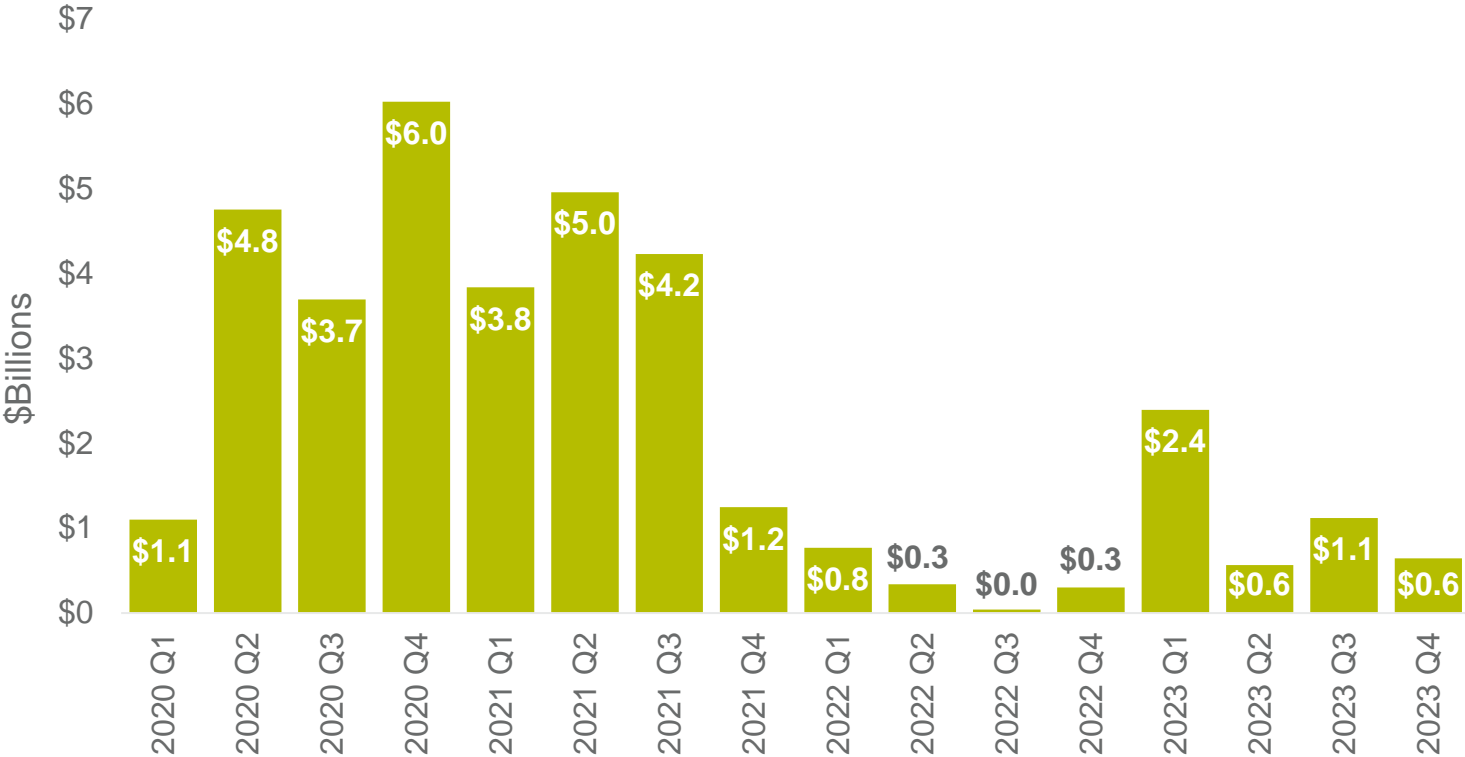


Source: PitchBook Data, Inc.; \*Data has not been reviewed by PitchBook analysts  
1. Healthcare Laboratory Services; 2. Other Healthcare Technology Systems

# Initial Public Offering Activity



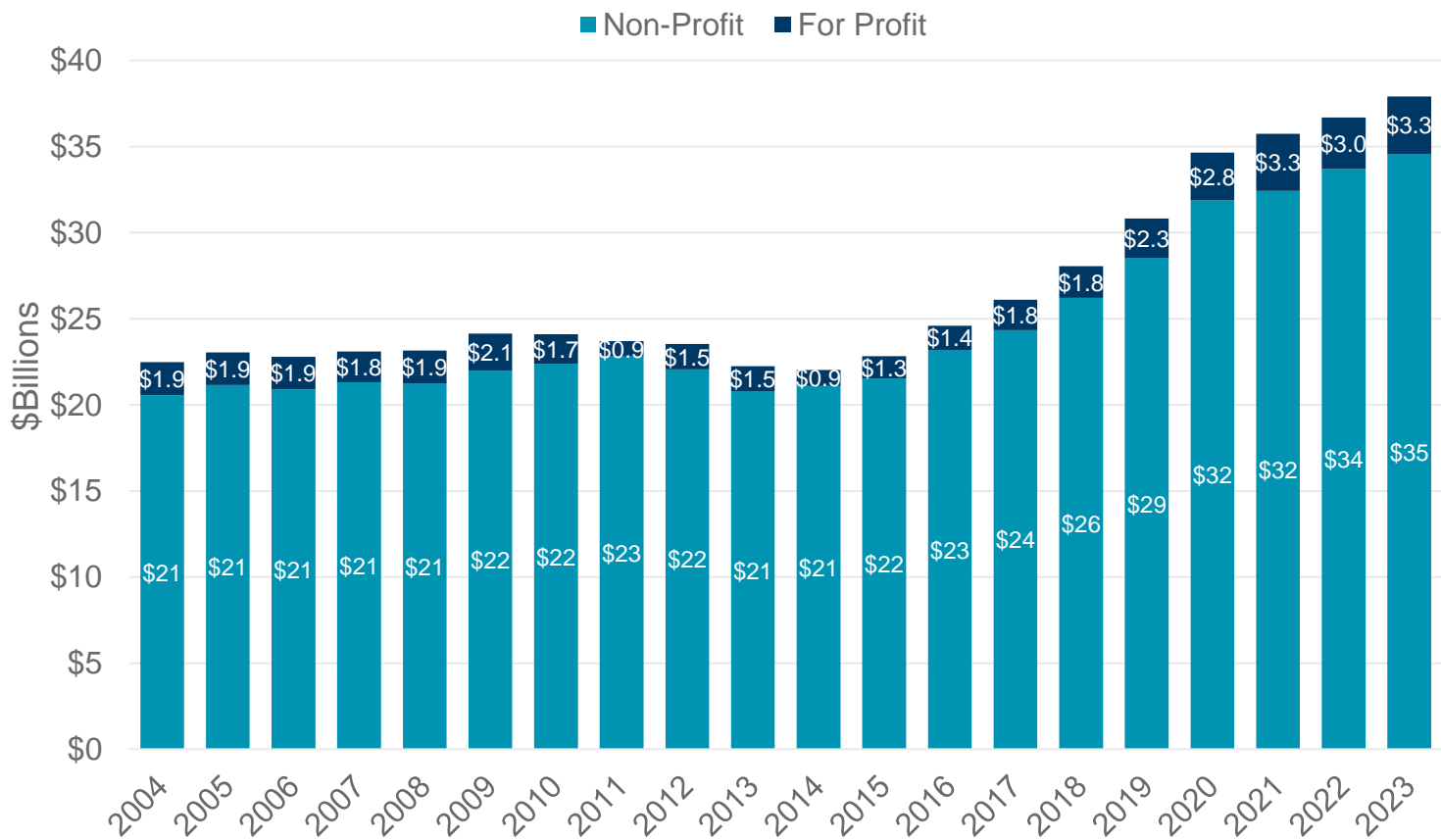
## U.S. Quarterly IPO Activity



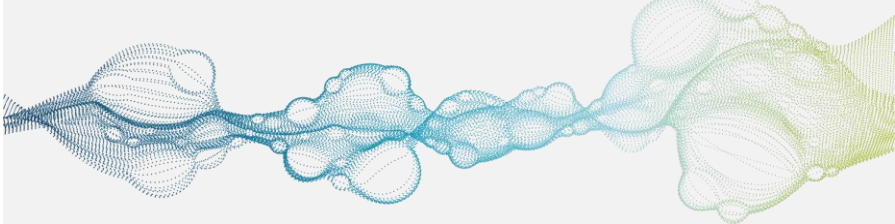
Source: PitchBook Data, Inc.; \*Data has not been reviewed by PitchBook analysts

Global life sciences deal volume fell to \$8 billion (-25% YOY) in 2023, mainly led by the -73% YOY drop in APAC to \$2 billion. The European IPO market also receded significantly, with only \$1 million in deals, a far cry from the \$686 million in IPO activity posted in 2022. North America saw increased IPO activity in 2023 with \$5 billion, nearly four times higher than 2022 volume, but significantly lower than the \$17 billion from 2020. Global overall IPO activity fell 19% YOY, led by slower volume in APAC (-31%), while activity grew in North America (+15%) and Europe (+39%). In the U.S., life sciences IPO activity was much stronger in 2023 on a YOY basis, but it still lags the strong volume posted in 2020 and 2021. IPO deal volume totaled \$5 billion (+226% YOY), buoyed by the \$2 billion GE Healthcare (NAS: GEHC) IPO, which was announced in November 2021 but closed in January 2023. Underwriting for IPOs became more stringent in 2023, and companies with clear revenues and a path to profitably were more likely to IPO. Some companies were able to take a different route and use reverse mergers to enter the market.

# U.S. NIH Funding



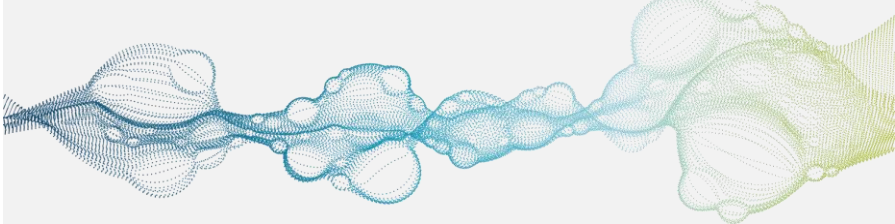
Source: National Institutes of Health



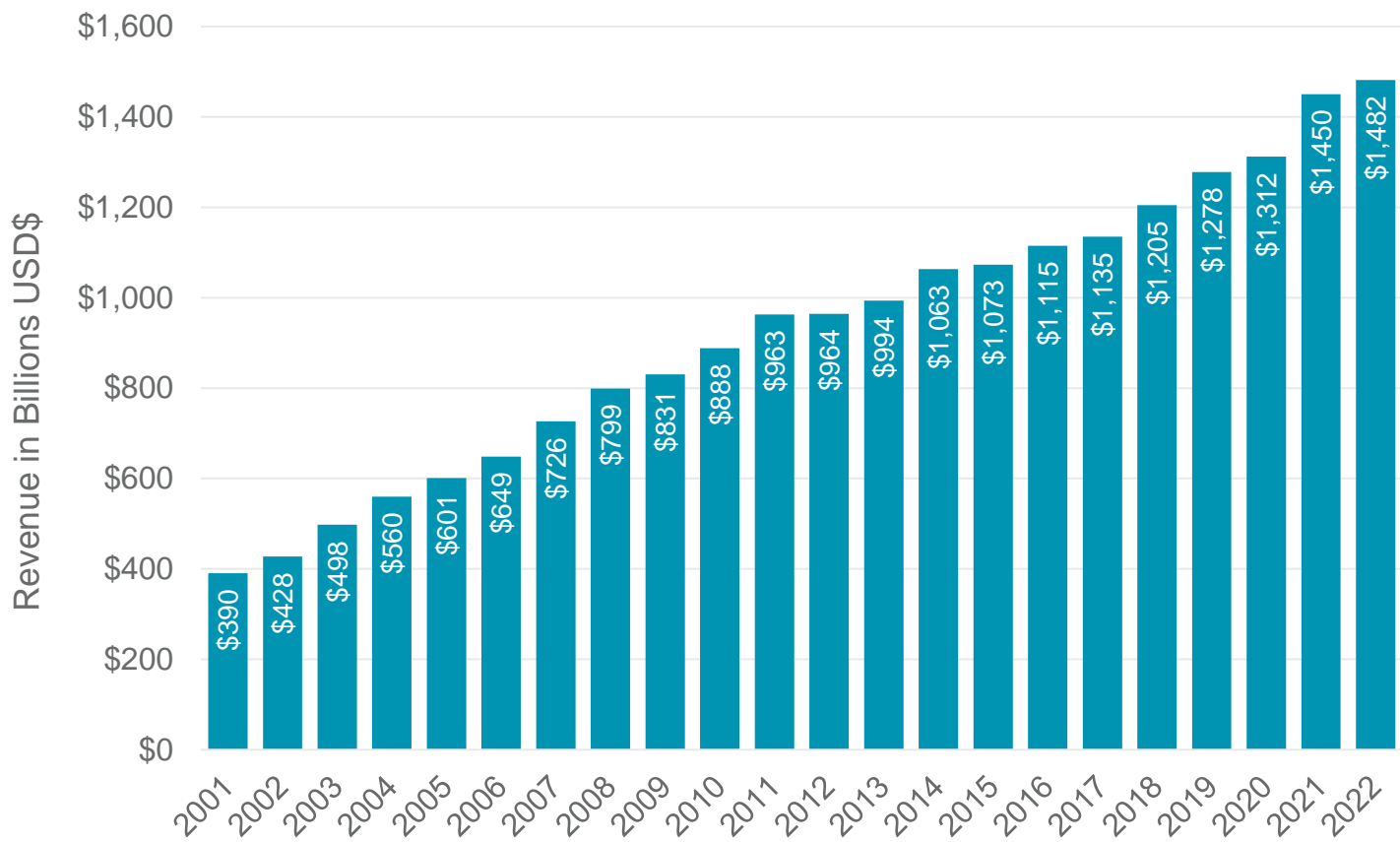
The National Institutes of Health (NIH) continues to increase its annual funding budget. Funding totaled \$38 billion in 2023, (+3.3% YOY), with over \$3 billion allocated to the for-profit sector. The proposed budget for fiscal year 2024 is \$51 billion, the bulk of which will fund research. Another 3.3% increase in total annual funding should result in an additional \$3 billion committed by privately held companies to fund research in 2023.



# Merger & Acquisition Activity



## Global Pharmaceutical Revenue by Year



Source: Statista

Pharmaceutical (pharma) companies had record revenues in the last few years. As of 2022, global pharma revenue reached \$1.5 trillion, (+2.4% YOY)<sup>1</sup>, giving them significant buying power. Based on PwC data, 2023 life sciences M&A activity totaled \$238 billion (+50% YOY) on 268 deals<sup>2</sup>. The top 10 deals alone totaled \$121 billion, nearly 50% of the overall M&A deal volume, and include: Pfizer's \$43 billion acquisition of cancer drugmaker Seagen; Bristol-Myers Squibbs' \$14 billion acquisition of Karuna Therapeutics, maker of schizophrenia treatment that is close to FDA approval; Merck & Co.'s \$11 billion acquisition of Prometheus Biosciences, a gain that strengthens its immunology pipeline; and AbbVie's \$10 billion acquisition of Immunogen, thereby also acquiring Elahere, an FDA-approved ovarian cancer treatment. In the U.S., some pharma companies used M&A deals to strengthen their R&D pipelines, especially with drug repricing and shorter exclusivity terms.

1 Statista  
2 <https://www.pwc.com/us/en/industries/health-industries/library/pharma-life-sciences-deals-outlook.html#:~:text=Healthy%20activity%20levels%20expected%20in,billion%20range%20across%20all%20subsectors>

## United States

Last year was full of uncertainties for life sciences companies. Some of this uncertainty will likely spill over into 2024, however, many companies are now adept at navigating a more challenging landscape. Developing strategies to operate lean in a capital-constrained environment will continue to be an important tool in 2024, as investors continue to be cautious with their allocations. Some things to consider in 2024 include:

- **VC funding:** More of the same? Several life sciences funds announced an aggregate raise of over \$6 billion during the fourth quarter of 2023. Goldman Sachs started 2024 by announcing a new \$650 million fund focused on life sciences, \$90 million of which has already been committed to five companies<sup>3</sup>. The overall VC market has nearly \$300 billion in dry powder, based on first quarter 2023 Pitchbook data. This means that \$46 billion potentially could be allocated to life sciences deals, since life sciences historically have accounted for 16% of total annual funding on average. While VC funding will likely not reach early pandemic highs, there is a lot for life sciences companies to be optimistic about in 2024. Deals may take longer to close, as investors are more cautious about commitments, but there is plenty of capital waiting to be deployed.
- **Potential uptick in IPOs:** Many companies that intended to IPO in 2023 sat on the sidelines waiting for a better environment. Some could be ready in 2024, which would lead to a flurry of announcements. In the first IPO of 2024, CG Oncology was listed in Nasdaq on January 25<sup>th</sup> at a \$19 share price, \$1 higher than its proposal<sup>4</sup>. At the current share price, the company can achieve its proposed market capitalization of \$1 billion. The CG listing will potentially be a bellwether for activity in 2024.

- **Interest rate stabilization:** Rates remain high, and cuts may not come before the middle of the year. Life sciences companies should expect debt to continue to be more expensive in 2024, however, having some clarity may allow banks to increase lending volume.
- **Another banner year for M&A:** As 2024 kicked off, several M&A deals were announced, and like 2023, pharma companies will continue to look for strategic targets. Companies with strong clinical trials that are close to Food and Drug Administration (FDA) approval are the most likely candidates for M&A. Expectations of strong M&A activity may have a positive effect on early- to mid-stage fundraising in 2024.
- **Softening commercial real estate (CRE) fundamentals provide opportunity:** Life sciences companies planning their space requirements this year will be in a great position to take advantage of a softening CRE market. New space deliveries, coupled with higher vacancy rates and lower effective rents means that deals signed in 2024 will likely be tenant favorable.

More information on the state of life sciences real estate around the globe will be released in Cushman & Wakefield's upcoming *Life Sciences Update* report – [subscribe here to receive exclusive access](#).

<sup>3</sup> <https://www.reuters.com/business/finance/goldman-sachs-asset-management-raises-650-mln-life-sciences-fund-2024-01-03/>

<sup>4</sup> <https://endpts.com/cg-oncology-kickstarts-2024-biotech-ipo-class-with-380m-listing/>



## About Cushman & Wakefield

Cushman & Wakefield (NYSE: CWK) is a leading global commercial real estate services firm for property owners and occupiers with approximately 52,000 employees in approximately 400 offices and 60 countries. In 2022, the firm reported revenue of \$10.1 billion across its core services of property, facilities and project management, leasing, capital markets, and valuation and other services. It also receives numerous industry and business accolades for its award-winning culture and commitment to Diversity, Equity and Inclusion (DEI), Environmental, Social and Governance (ESG) and more. For additional information, visit [www.cushmanwakefield.com](http://www.cushmanwakefield.com).

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