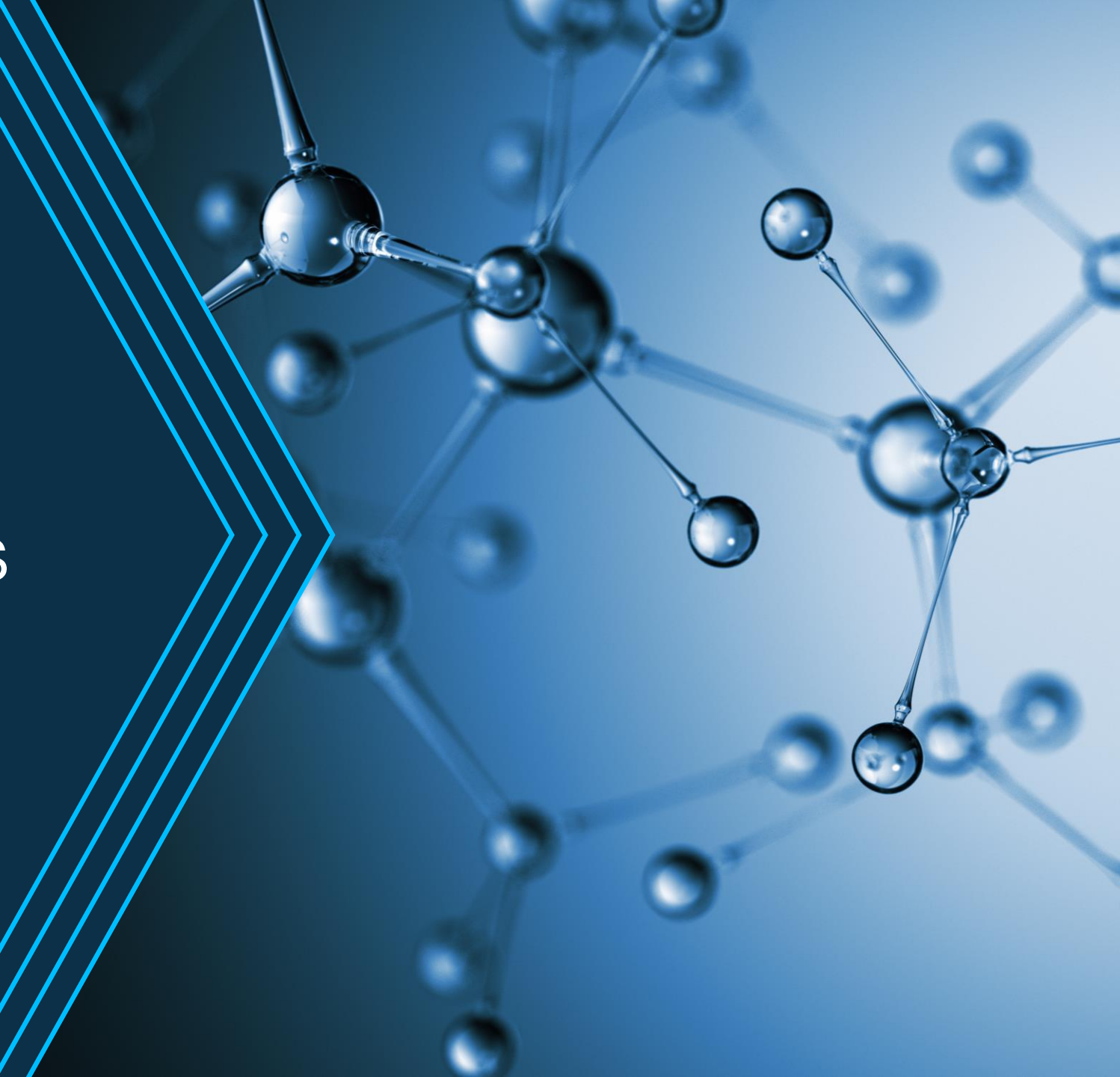
svb Silicon Valley Bank
A Division of First Citizens Bank

Healthcare Investments and Exits

Annual Report 2024

Biopharma | Healthtech | Dx/Tools | Device



Published January 7, 2025

Biopharma AI Asks, “Can We Call It a Giga-Deal?”

> AI doesn’t change the fact that establishing therapeutic effectiveness in human beings remains unpredictable and time-consuming. If bigger, deeper datasets are the Holy Grail for AI companies, tools to improve and accelerate clinical trials are the Holy Grail for biotech.”

Another year begins, and so we bring you our *Healthcare Investments and Exits 2024* report. After a few years of uncertainty and noise, we’re starting to get signals about where healthcare innovation is headed over the next 10 years.

Biopharma AI is *the* story of 2024. Overall investment in the space has exploded despite the headwinds still facing the innovation economy. The biggest impacts of AI in life science and biotech are still emerging. Clinical trials are a long, difficult process. A new drug candidate found today won’t be available as a product for at least five years. **That means investors wanting in on the cutting edge of commercial AI biotech need to be investing now.**

The success of AI companies in attracting investment, even in an environment insisting that companies demonstrate real value and results, shows the premium investors are placing on long-term transformation in biopharma. The first entirely AI-designed drugs are moving through clinical trials that started in 2020. **With those readouts coming up, 2025 will be a long-awaited “prove-it” year for AI drug discovery.**

One of the most exciting use cases for AI is in novel protein development. Venture funding into AI-driven protein design has skyrocketed alongside a shared Nobel Prize in Chemistry driven by work at the Institute for Protein Design and at Google DeepMind. The jump was mostly driven by a mammoth $1B Series A round given to Xaira, a company that’s been in existence for less than two years. Is there something bigger than a mega-deal?

The possibilities of these new protein tools are impressive. It’s increasingly realistic to envision custom-built antibodies or DNA/RNA binding proteins that would create astonishingly powerful anti-cancer and other treatments. We take a deeper look at the AI protein space in our Biotech AI spotlight (page 18).

On the exit front, a backlog of late-stage companies are waiting for positive signals and a more friendly market. A handful of companies have already filed for IPOs in 2025, and decent performances from companies that debuted in 2024 should build confidence (page 26). If the big IPOs of early 2025 are successes, many more wait in the wings. Prospects for the M&A market are murkier. The overall impression is that buyers and investors are all waiting for clarity on economic and regulatory variables.

The federal government has immense influence in how life science and healthcare progresses. We don’t know what the new administration will bring, but we can make some educated guesses. Fewer barriers to M&A could help an extremely slow exit market. Expedited FDA approvals could help bring new treatments into the clinic. Changes in how Software as a Medical Device (SaMD) restrictions are interpreted could help clinical decision support and device markets. Whatever happens, maintaining the reputation of the FDA as the gold standard for safety will be essential to building the confidence and trust in new drugs, therapeutics and technologies that providers and patients need.

It’s exciting to see the innovation that drives healthcare progress and investment continue. Watching these trends unfold and new technology emerge, we’re even more confident in the future of the life science and healthcare spaces. We can’t wait to see a clearer and brighter picture take shape as momentum and investment build in the coming year.

Jackie Spencer
Head of Relationship Management for
Life Science & Healthcare Banking
jspencer@svb.com

svb Silicon Valley Bank
A Division of First Citizens Bank

Contents

svb Silicon Valley Bank
A Division of First Citizens Bank

Healthcare Market Highlights

Market Highlights

Macro Outlook

"Thin margins and an uncertain reimbursement and payment environment are always weighing on buying decisions for healthcare organizations. A slowing GDP and increased costs could make those decisions even harder. A reduced pace of interest cuts will make debt less attractive to potential buyers. Changes in regulations and interpretations drive optimism on the future of M&A, especially for startups facing difficult decisions about the terms of their next round. Pharma AI is probably still the exception to every investing rule. AI has the potential to be transformative across the board in tech, but it can be hard to tell if the potential gains are worth the costs. **For pharma companies, the sheer cost of bringing a drug to market makes any potential reduction in the timeline too valuable to ignore."**

Phil Neuhart
SVP, Director of Market and Economic Research
First Citizens Wealth

Investor Sentiment

While total investment dollars are down from the recent peak, 2024 outpaced 2021 in number of deals. The valuation reset continued as VCs flee to quality. Investors are willing to bet big when there's a clinical product or the right mix of tech and founders. With a **flood of early-stage investments**, VCs are resetting portfolios and trying to build the next crop of winners.

Trending

1. **Biotech AI Solutions**
   $5.6B invested in 2024,[1] growing nearly 3X year over year (YoY).
2. **Planting Seeds**
   Seed rounds increased to **40% of all deals** as investors look forward.
3. **Down Rounds Are Okay**
   Losing the fear of a down round allows companies to add financing and drive development.

Biopharma

Clinical assets and strong pharma partnerships are the strongest tools biopharma startups can offer, but **AI remains a powerful lure for investors.** With AI-driven protein design taking a strong position in the space and results from clinical trials for AI-designed drugs on the way, the enthusiasm for biopharma AI looks unlikely to die down.

Healthtech

Unlike the other sectors, **healthtech hasn't seen much movement in up *or* down rounds.** With notable raises going to companies with proven track records and strong histories, a new crop of healthtech startups will need to prove themselves quickly. Incumbents are still struggling to exit, with historic lows in exit values and historic highs in undisclosed M&A. Successful IPOs early next year could be the signal companies and investors are waiting for.

Dx/Tools

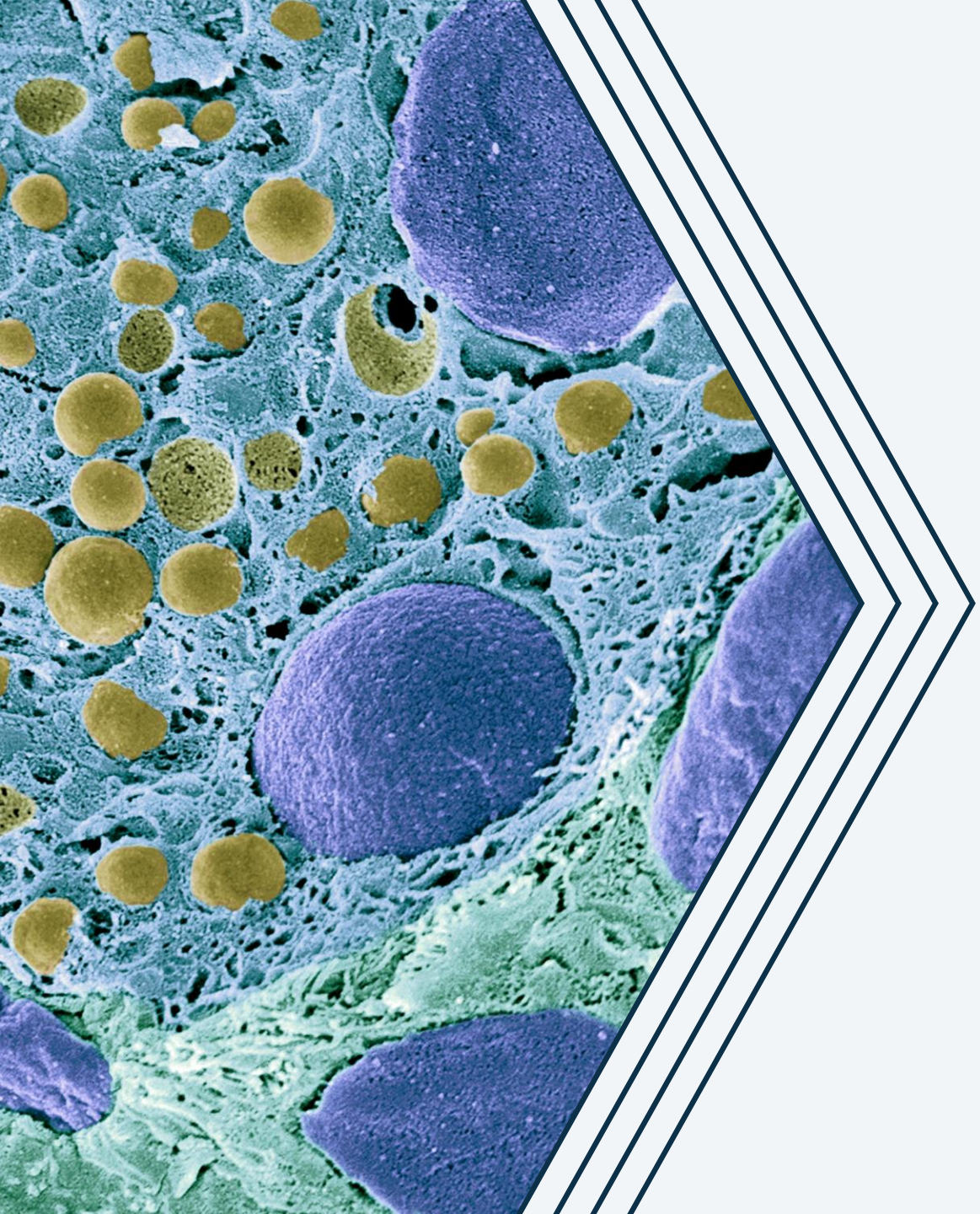
The peak of devaluations and down rounds may have passed for Dx/Tools companies. **Investing totals are still low but are climbing,** with innovations and new technology always good for a quick boost of cash. Liquid biopsy and precision diagnostic companies are showing strength, combining their close relationship to the success of precision therapy with a relatively untapped potential to collect and aggregate the data that AI is desperate for.

Device

Hospitals might turn out to be the key to reviving a slow device startup space, with new and emerging IPOs largely focused in the acute care space. Advances in imaging and monitoring tech are restoring some of the interest and hype that's been lost from wearables and home care. **Early-stage investing is still helping to drive the space, accounting for nearly a quarter of all investment since 2023.**

svb Silicon Valley Bank
A Division of First Citizens Bank

Note: 1) All 2024 data as of 11/30/2024.
Source: PitchBook Data, Inc. and SVB proprietary data.



Fundraising and Investment

Fundraising Remains Healthy

VC fundraising in healthcare has shown significant resilience. The proliferation of AI starting to find product market fit in the healthcare space has aided the positive bump in total funds raised since 2023. While including AI in funds' theses has been an effective technique for fundraising, according to Jonathan MacQuitty of Lightspeed Venture Partners, "the influence of VCs thinking AI is a slam dunk is waning."

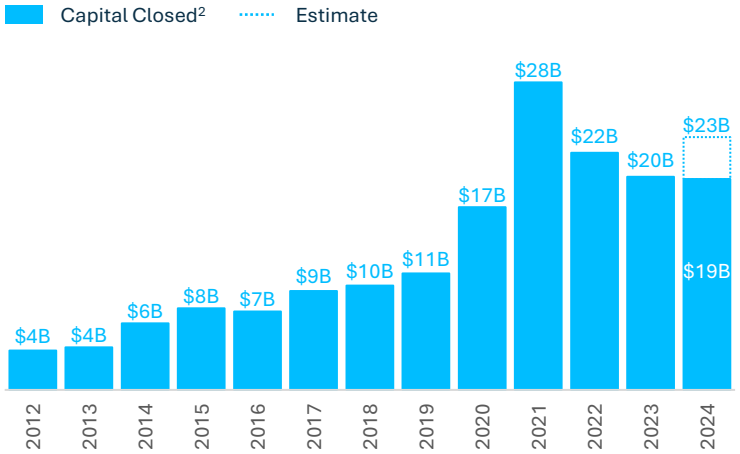
Massive funds have carried the load in 2024. Median fund sizes fell 22% in 2024, and 38% fewer healthcare funds closed than in 2023. **Yet our data shows a 9% increase in funds with at least $500M allocated to healthcare since 2023,** which is helping make up the gap. Firms such as ARCH Venture Partners, General Catalyst and Norwest Venture Partners all raised funds of $3B or more. First-time funds have not taken as big a hit in 2024 as established funds have. Median first-time fund sizes dropped 18% while the median size of established funds declined 31%.

Some notable first-time funds include Curie.Bio, Scion Life Sciences and Regeneron Ventures. These funds have all raised at least $300M. Curie.Bio is presenting itself as a new model of early-stage funding, offering access to experts and hands-on support. This focus on added services could signal that firms are finding new ways to offer value as they compete for the best deals.

svb Silicon Valley Bank
A Division of First Citizens Bank

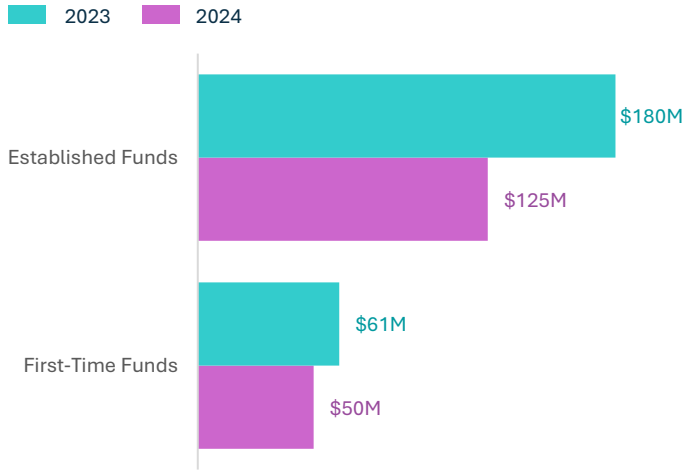
More of the Same for VC Fundraising

US Healthcare VC Fundraising 2012-2024[1]



Fundraising: A Heavier Lift in 2024

US Healthcare VC Median Funds Raised



Notable Funds with Over $100M Allocated to Healthcare[3]

ARCH Venture Partners | Flagship Pioneering | General Catalyst | Rubicon Founders | TCGX | Foresite Capital | Norwest Venture Partners

Goldman Sachs Asset Management | TPG | Sands Capital | venBio | Redesign Health | DC Bio

Notes: 1) US Healthcare Venture Capital Fundraising defined as an approximation of healthcare investment dollars to be invested by firms that historically invest in +50% US companies. Estimates based on anecdotal conversations with investors and expert analysis of last fund deal pace. Data as of 10/31/2024. 2) Funds that have closed as of 10/31/2024. 3) Notable funds based on largest estimated allocation to venture healthcare.
Source: Preqin, PitchBook Data, Inc. and SVB proprietary data.

Understanding Fund Performance

Healthcare funds are holding their own, performing on par with non-healthcare (non-HC) funds across all fund vintages, according to internal rate of returns (IRRs), though the top quartile of non-HC funds boast higher returns. Funds that invested before the 2020-2022 valuation runup were less exposed to overvaluations, and benefited from the wave of unicorns minted during that period. These funds capitalized on favorable market conditions, but the question now is whether they can hold onto their paper gains long enough to realize them through IPOs or positive M&A outcomes.

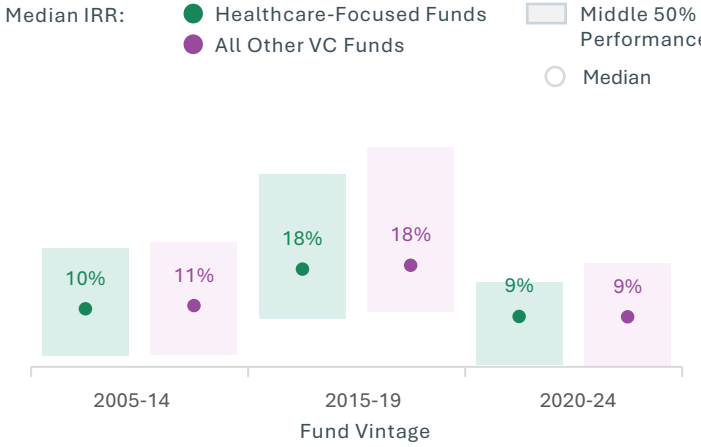
Late-stage-focused funds are leading with higher median IRRs, but there's a trade-off to consider. Early-stage funds aim to spot disruptive innovation early, while late-stage funds capitalize on scaling companies that have already proven themselves. It's a question of risk vs. reward and where you want to place bets.

The most recent vintages of small funds are seeing the downside of those wagers right now with a major drop in median net IRR. Historically, smaller, more specialized funds have outperformed their larger counterparts, though with more variability. It's hard to tell from the data whether their "white glove" approach will pay off again when the market shifts.

svb Silicon Valley Bank
A Division of First Citizens Bank

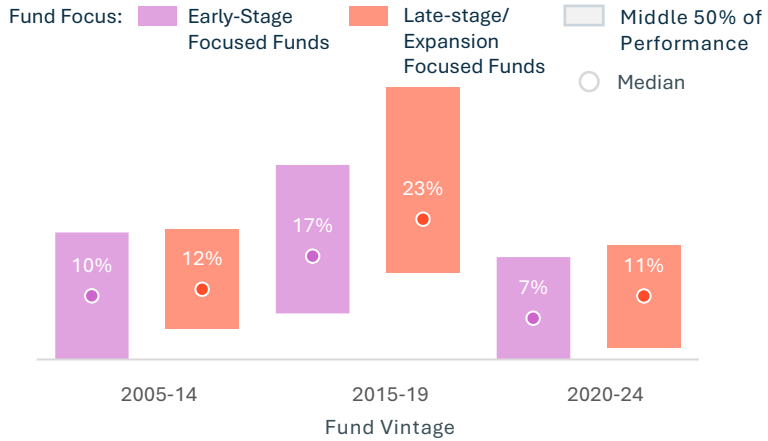
Healthcare Funds[1] Are Holding Their Own

Net IRR for US VC Funds With and Without Healthcare as a Vertical



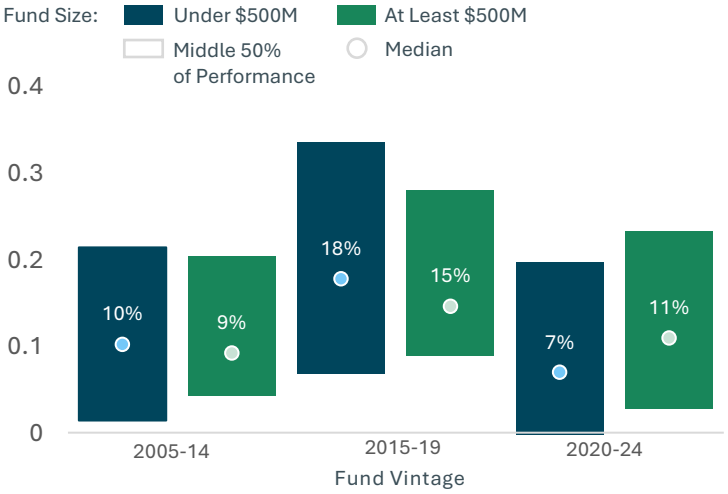
Stage-Focus Matters

Net IRR by Vintage Year for US VC Healthcare-Focused Funds



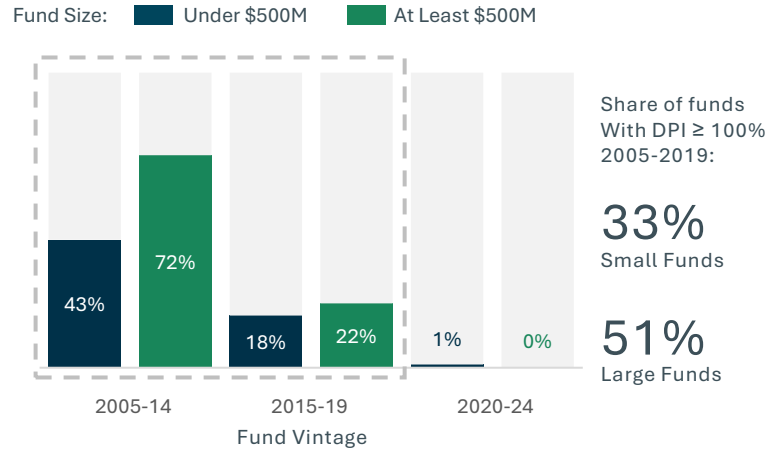
Smaller Funds, Better Results in Earlier Vintages

Net IRR by Vintage Year and Fund Size of US VC Healthcare Funds



But Large Funds Lead in 100%+ DPI Outcomes

Share of US HC Venture Funds that Have a DPI of at Least 100%



Notes: 1) Healthcare-focused funds reported as having healthcare as a main focus in Preqin's database, with a labelled VC asset class. IRR: internal rate of return. DPI: distributions to paid-in capital.
Sources: Preqin and SVB proprietary analysis.

Investment Finding Its Footing

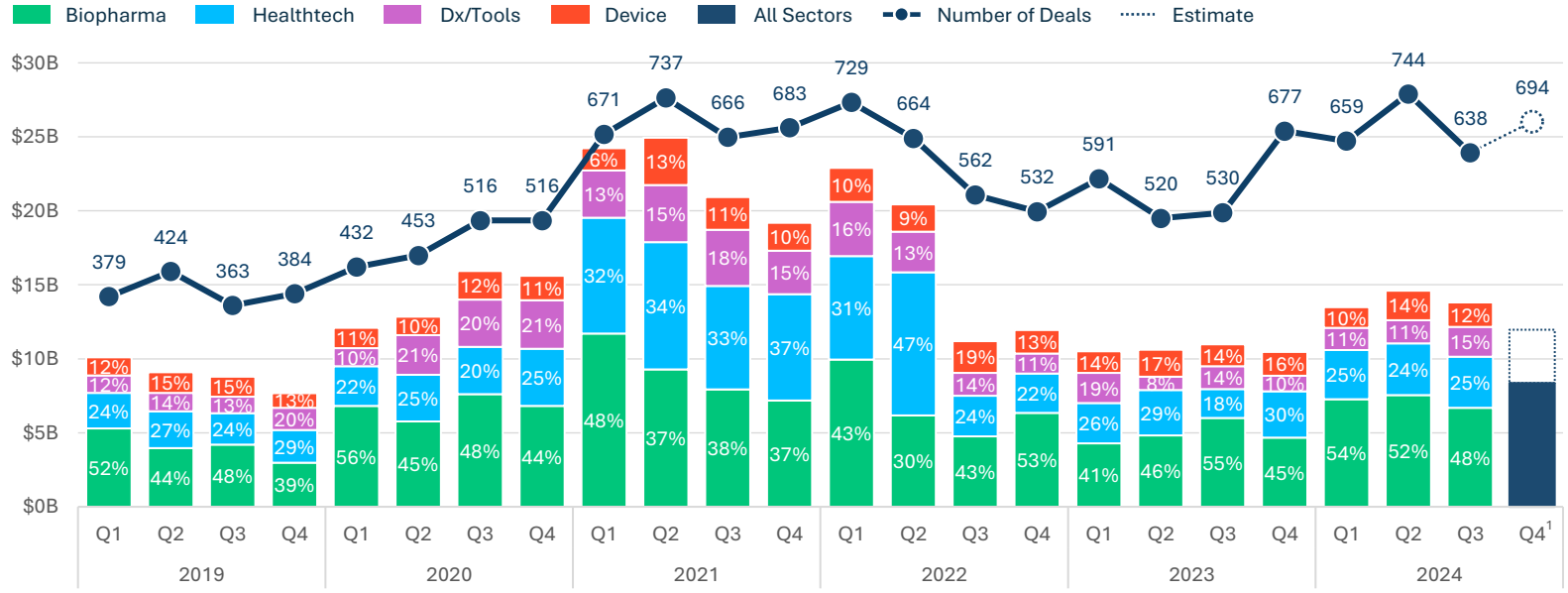
Biopharma companies are punching above their weight. **In 2024, the largest portion of healthcare investment (52%) went to biopharma companies compared to any of the prior five years.** AI, especially for therapeutics and biopharma research, is starting to find market fit.

Healthcare VC deal counts have rebounded to the heights witnessed during the pandemic bubble, but capital invested is still short of that pace. We are, however, seeing dollars invested climb 20% from last year. This disconnect between number of deals and total dollars is driven by spoon-feeding deals (see our Mid-Year 2024 report).

AI is becoming table stakes for new companies. **In 2024, 37% of companies raising their first round leveraged AI.** This far surpassed the next-highest total from 2022 (20% of first-deal companies). Overall, 28% of US healthcare investment goes to companies leveraging AI. AI has found a more defined role in biopharma, whereas healthtech use cases need to overcome the hurdle of buy-in from healthcare organizations. A common sentiment from investors is that AI will disrupt healthcare, but there is less clarity about where.

Biopharma Punching Above Its Weight

US and European VC Dollars and Deals by Healthcare Sector



	2021			2022			2023			2024[1]		
Sectors ($B)	**US**	**Europe**	**Total**	**US**	**Europe**	**Total**	**US**	**Europe**	**Total**	**US**	**Europe**	**Total**
Biopharma	29.9	6.2	36.1	22.9	4.3	27.2	15.8	3.8	19.6	21.2	5.3	26.6
Healthtech[2]	27.9	2.7	30.5	18.5	3.6	22.0	9.7	1.2	10.9	10.5	1.4	12.0
Dx/Tools	10.9	2.6	13.6	7.6	1.6	9.3	4.0	1.5	5.5	4.7	1.3	6.0
Device	6.6	2.2	8.8	6.3	1.5	7.9	5.1	1.3	6.4	5.0	1.3	6.2
Total[2]	**75.3**	**13.8**	**89.0**	**55.4**	**11.1**	**66.4**	**34.7**	**7.8**	**42.4**	**41.4**	**9.4**	**50.8**

Notes: 1) Available data as of 11/30/2024. 2) Healthtech deals that overlap with Dx/Tools and device sectors are not included in healthtech totals on this slide, but they are included in healthtech-specific analyses on page 15. 2) Total rows and columns may not add up due to rounding or companies in stealth.

Source: PitchBook Data, Inc. and SVB proprietary data.

Most Active[1] Healthcare Investors

Overall	Biopharma	Healthtech	Dx/Tools	Device
Gaingels	RACAPITAL	Gaingels	mercia asset management	European Innovation Council
RACAPITAL	ALEXANDRIA	GENERAL CATALYST	labcorp	Unorthodox Ventures
Alumni Ventures	novo holdings	Alumni Ventures	Alumni Ventures	bpifrance
G/	ARCH VENTURE PARTNERS	PLUGANDPLAY	SFC Capital	Alumni Ventures
GENERAL CATALYST	G/	andreessen horowitz	LifeX	VENSANA CAPITAL
bpifrance	Gaingels	CVSHealth	bpifrance	SV HEALTH INVESTORS
PLUGANDPLAY	Forbion	MEMORIAL HERMANN Foundation	Sofinnova partners	SBXi
novo holdings	Cormorant Asset Management	G/	TEDCO LEADING INNOVATION TO MARKET	PEGASUS TECH VENTURES
ALEXANDRIA	orbimed	First Trust Capital Partners	SOMA CAPITAL	Johnson & Johnson INNOVATION

svb Silicon Valley Bank
A Division of First Citizens Bank

Note: 1) Most active new investors calculated as new (first-time) activity level in US, EU and UK companies from 01/01/2023-11/30/2024. Dates of financing rounds subject to change based on add-on investments. Additional investors not listed due to space limitations.
Source: PitchBook Data, Inc., conversations with investors and SVB proprietary data.

Down and Flat Rounds Are Fine

Down rounds and flat rounds, once a stigma, are now just part of the survival game. In today's market, the real question isn't about the terms of your raise, but if you can raise at all. Valuations are still resetting, with down rounds becoming more common or staying flat across most subsectors, except for biopharma. Undisclosed rounds are also increasing. The message? Companies are keeping tough terms under wraps.

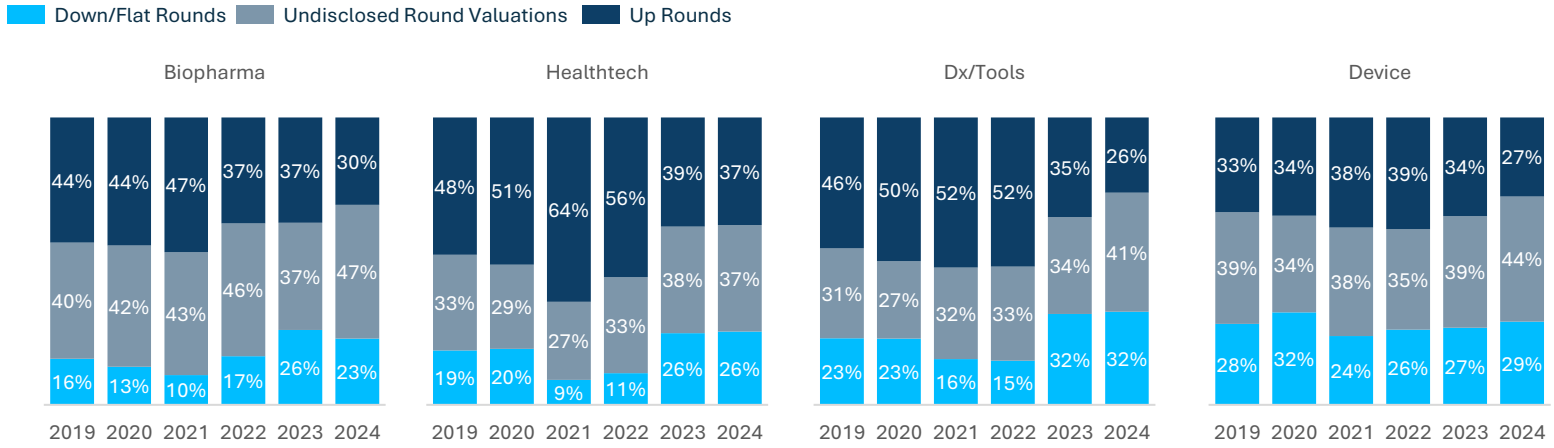
Surprisingly, healthtech companies only saw a 2% decrease in up rounds in the past year, while others saw more significant declines. However, many healthtech companies that raised big in 2021 or 2022 haven't been back to the table yet. Biopharma down round appear to be hiding in a swell of undisclosed valuations, while healthtech valuations seem steady-state. Device and dx/tools both saw down and undisclosed rounds grow between 2023 and 2024, a clear sign of market-wide valuation headwinds.

Despite these challenges healthcare companies tend to find a way forward, whether it's raising another equity round or exiting after a down round. And for those that bounce back with an up round, the rewards are significant. In 2023, companies that raised after a down round saw a median valuation increase of 46%, a reminder that even after tough times in the venture market, there's room for recovery.

svb Silicon Valley Bank
A Division of First Citizens Bank

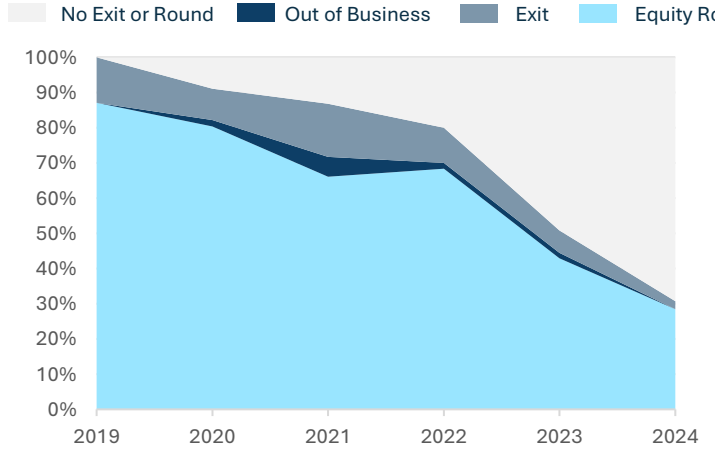
Up Rounds Are Still Down

Healthcare Valuation Changes for Series A and Beyond for US Deals[1]



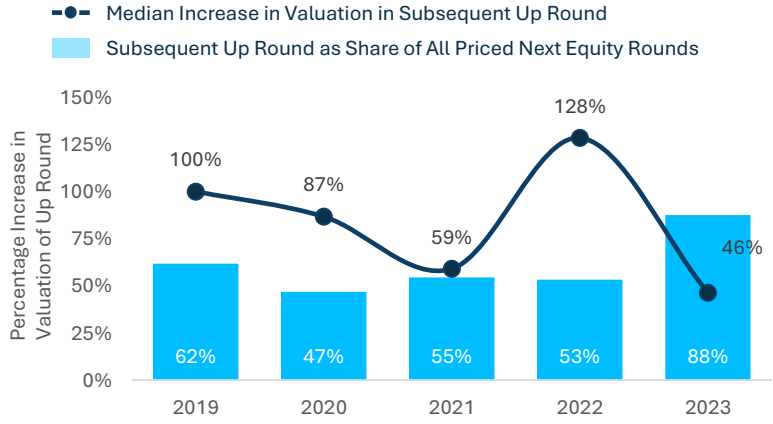
For Most Startups, Down Rounds Aren't Fatal

Share of Next Round Outcomes Post-Down Round for US Startups[2]



Those That Do Raise May See an Up Round

Share of US VC-Backed Healthcare Startups that Raised a Subsequent Up Round and Median Valuation Increase of Those Up Rounds[2]



Notes: 1) Up rounds are defined as deals where the pre-money valuation is higher than the prior deal's post-money valuation. Only deals with a reported deal size are considered for this analysis. Total rows and columns may not add up due to rounding. 2) Analysis looks at only the next deal (either exit via buyout, M&A or IPO, or equity raise) immediately following the down round. If a startup has not raised an equity round or exited via buyout, M&A or IPO, it is classified as "No Exit or Round."
Source: PitchBook Data, Inc. and SVB proprietary analysis.

Macro Matters

The rapid rise in the US federal funds effective interest rate from 2022 to 2023 wrangled the soaring private investment in healthcare. It appears private healthcare investment was affected more than the public market. **The S&P 500 market cap has grown more than private healthcare investment** has in the last 5 years.

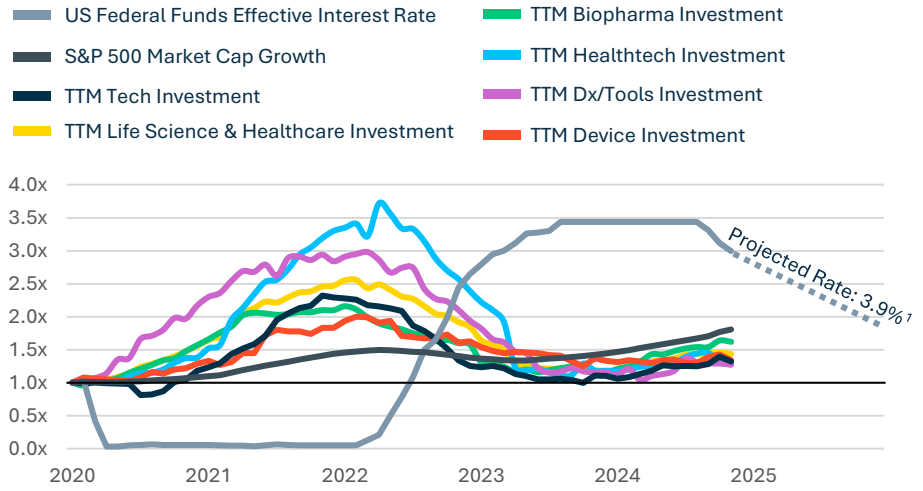
Overall, healthcare investment has grown 44% since the start of 2020. While investment has tapered off since the pandemic years, it has shifted to more deals for early-stage companies. More than ever, companies landing their first VC deal are leveraging AI. Up 311% from the number of companies in 2019, **152 companies earning their first deal in 2024 are leveraging AI** — pointing to a future where AI is primed to capture more of the market. Now that the federal funds rate has started declining and the median Federal Open Market Committee (FOMC) member estimates rates to stand at 3.9% by the end of 2025, this year is set up to build upon 2024's healthcare investment growth.

Thanks to cost inflation, **seed deals are not worth as much as they were six years ago.** The average healthcare seed deal has not grown as much as the cost to treat diseases has grown. Device seed deals are not only falling behind the rising costs to beat inflation, but are also decreasing in nominal value. This is due to the decline in the proportion of $5M+ device seed deals from 25% in 2019 to just 15% in 2024. Whether from device or another sector, seed founders are being challenged to do more with less.

svb Silicon Valley Bank
A Division of First Citizens Bank

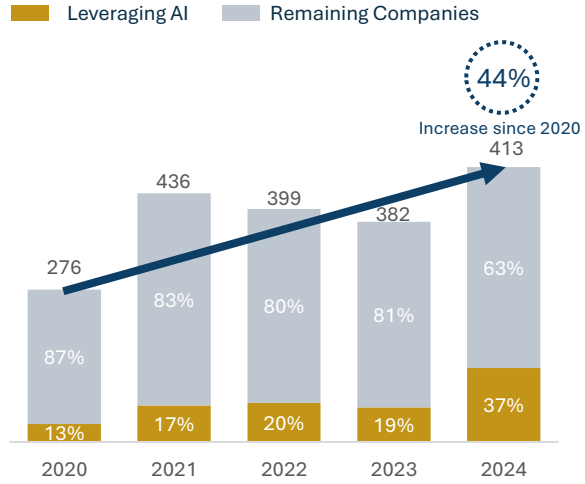
Rates Affecting Private Investment More Than Public

Index: Growth Since 2020 (US and Europe VC-backed Companies)



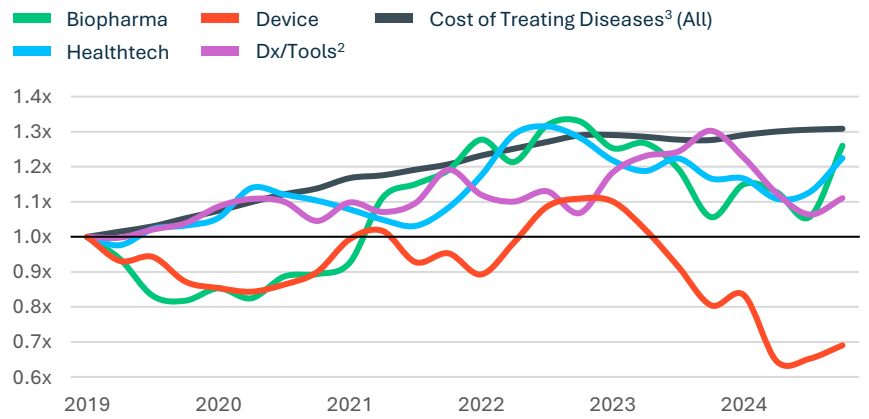
Entering the Ring

First VC Deal US & Europe Healthcare Companies



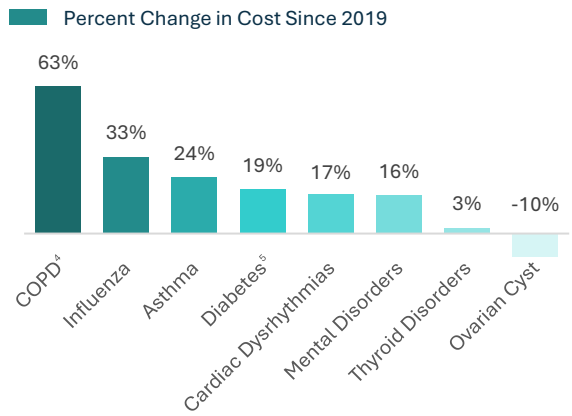
Treatment Cost Growth > Seed Deal Size Growth

Index: Growth in Trailing 4-Quarter Average Seed Deal Size



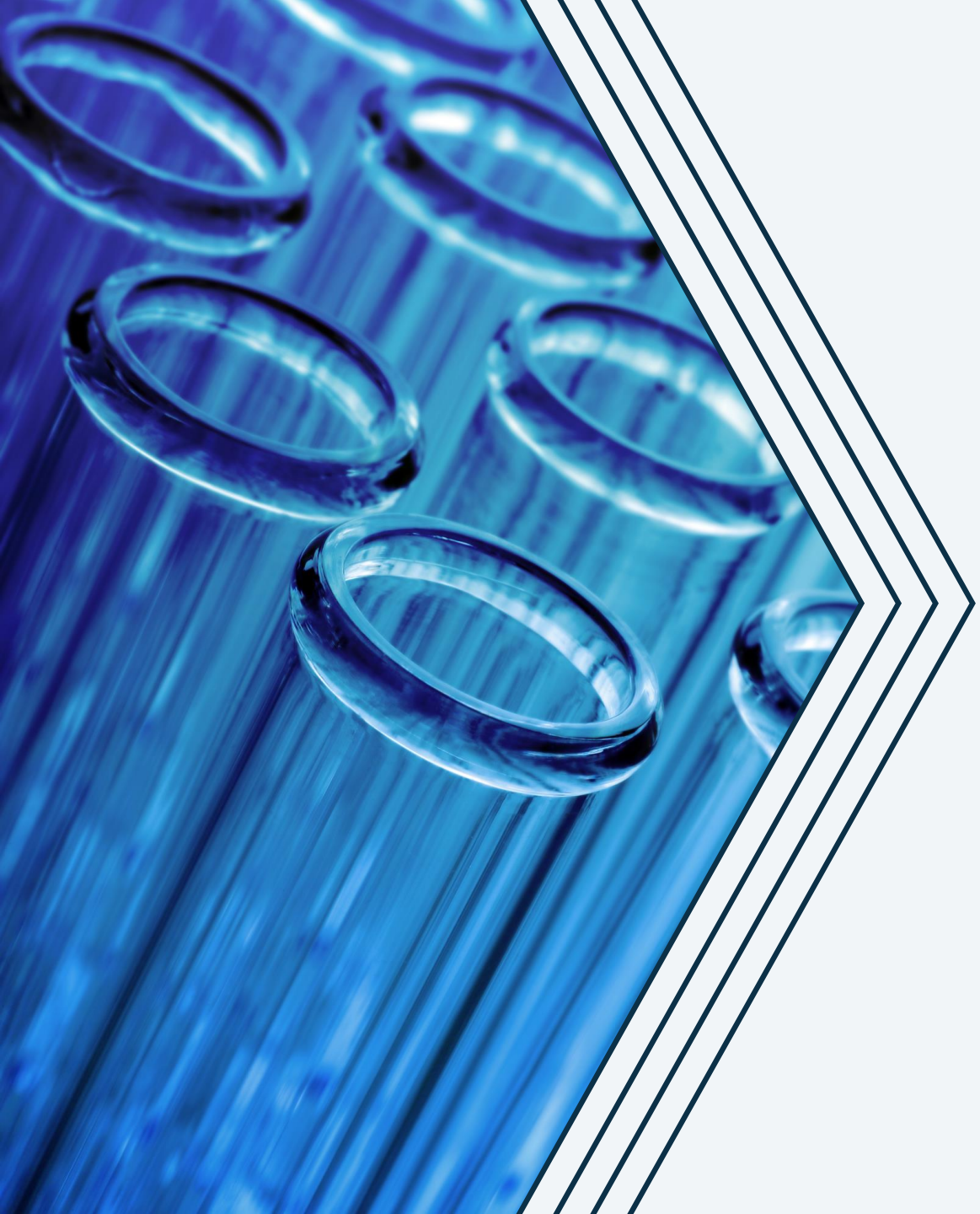
Inflating Treatment

Change in Cost to Treat Diseases[3] Since 2019



Notes: 1) Projected rate based off the median estimate for end of 2025 interest rates by the 19 FOMC board members. Projections announced 12/18/2024. 2) Outlier $142M seed round on 06/25/2024 for EvolutionaryScale is not included in this analysis. 3) According to the U.S. Bureau of Labor Statistics cumulative cost index for all diseases with comorbidity adjustment and adjusted/smooth quantities. Data as of 10/1/2024. 4) Chronic obstructive pulmonary disease and bronchiectasis. 5) Diabetes mellitus without complication.

Source: Federalreserve.gov, Federal Reserve Bank of St. Louis, PitchBook Data, Inc., U.S. Bureau of Labor Statistics and SVB proprietary analysis.



Investment by Sector

Biopharma Investment

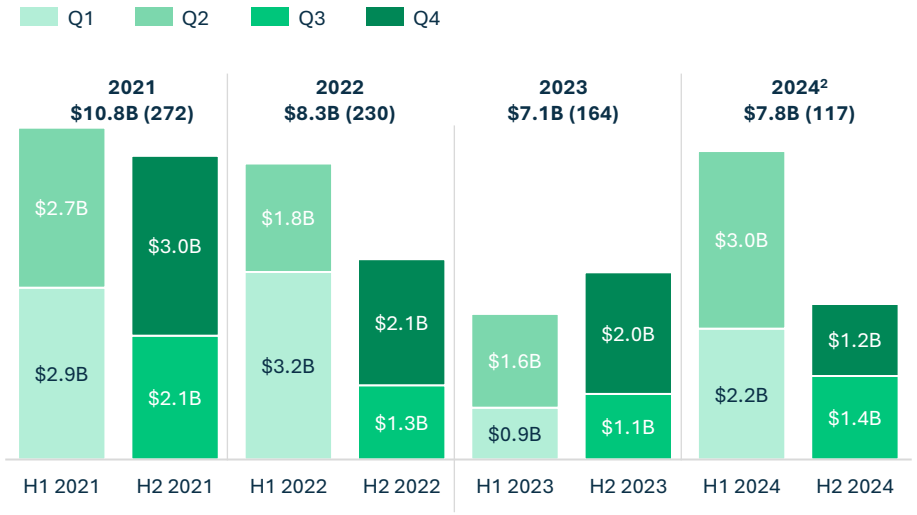
Biopharma investment has soared, borne on the back of biopharma AI. One company, Xaira, accounted for a good chunk of overall investment in the space, taking $1B for its Series A just a few months before co-founder David Baker was awarded a share of the Nobel Prize for Chemistry. Xaira will compete against Google DeepMind spinout Isomorphic Labs, along with a variety of well-funded peers.

Even without Xaira, **early-stage investing has been a strength of the biopharma market.** It grew to more than a third of overall investment this year, up from 27% in 2023. In terms of total dollars, 2024 was the biggest year for early-stage biopharma investment since 2021. These massive early deals are a reflection of how committed VCs are to shepherding companies through key inflection points via ample runway.

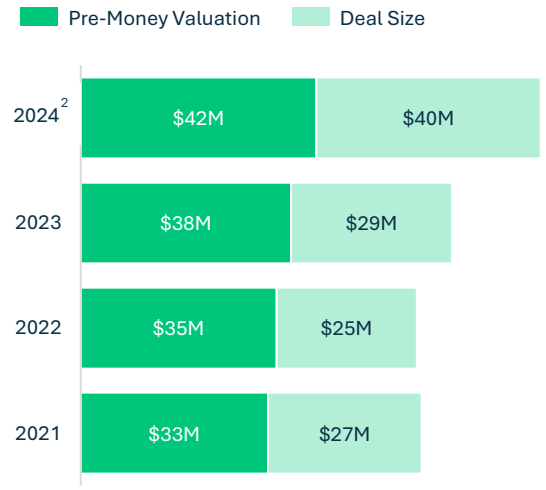
Those deals aren't focused exclusively in drug development and proteins. The largest Series A deals of the year crossed the breadth of conditions. Startups specializing in metabolic diseases, weight loss, asthma, immune conditions, fibrosis, and oncology all pulled down enormous amounts. **Four of those six companies have either licensed or purchased clinical-stage assets.** While AI-driven companies will still be the flag bearers of the biopharma space, putting a treatment into clinics and showing success will always be welcome.

svb Silicon Valley Bank
A Division of First Citizens Bank

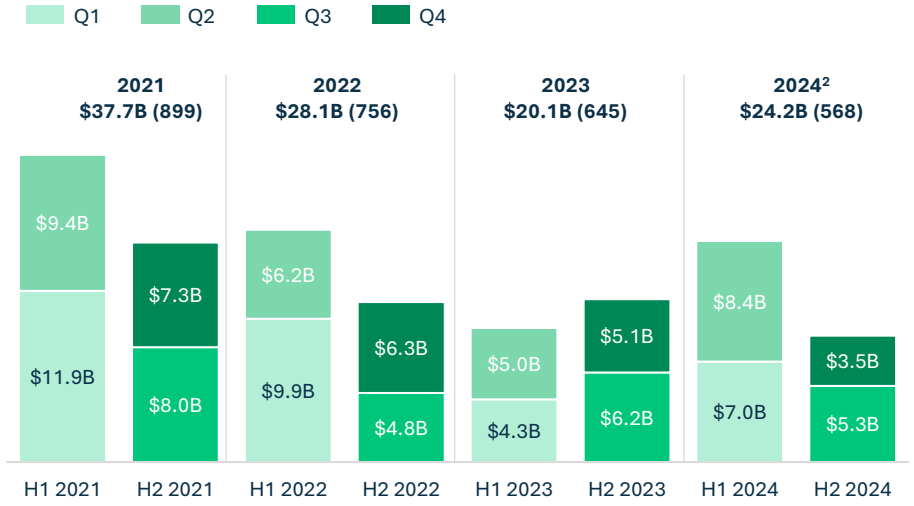
Series A[1] Dollars (and Deals)



Median Series A Valuations



Total Dollars (and Deals)



Notable 2024[2] Deals

Series A		Later-Stage	
xaira	$1.0B	Formation Bio	$372M
areteia therapeutics	$425M	APOLLO THERAPEUTICS	$260M
kailera	$400M	alumis	$259M
mirador THERAPEUTICS	$400M	ALTRUBIO	$225M
Metsera	$350M	Zenas BioPharma	$205M
AVENZO THERAPEUTICS	$223M	BBOT BridgeBio Oncology Therapeutics	$200M

Notes: 1) The Series A criteria used for this report has been updated from previous versions of this report. Investments are considered Series A if the deal is disclosed as such and either includes institutional venture investment, corporate venture investment or is equal to or greater than $2M, regardless of investor. Dates of financing rounds are subject to change based on add-on investments. 2) All 2024 data is as of 11/30/2024.
Source: PitchBook Data, Inc. and SVB proprietary data.

Healthtech Investment

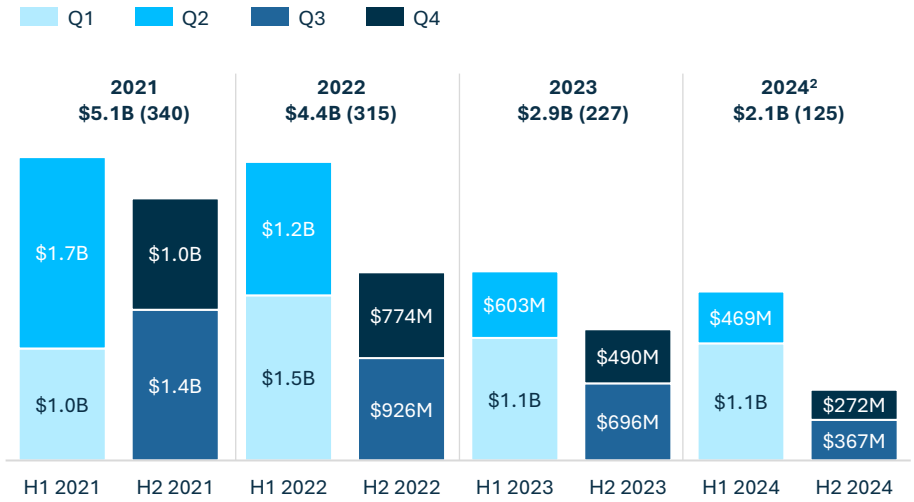
While overall healthtech investment dropped, early-stage (Seed plus Series A) funding saw a slight bump. Later-stage investments focused on established companies, with **every notable late-stage deal with a disclosed valuation going to companies that were already unicorns.** While moving away from the enthusiasm of 2021 is healthy, it would be a shame to lose an entire generation of mid-tier startups.

The flight to quality in healthtech is in full force, with investors disclosing that reduced risk is taking a priority in their late-stage spending. The overall view is that while AI disruption in healthtech is inevitable, there's no clear view of what that disruption will look like, or the next phase of healthtech will look like. In the face of that uncertainty, many are taking a wait-and-see approach, holding off on big spends for now.

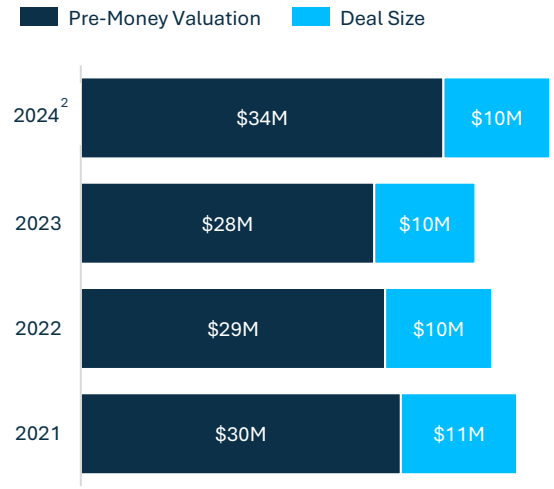
2025 will be an important year for healthtech valuations. IPOs by Hinge Health and Omada will be the first major virtual care exits since 2021. If they're successful, they'll be a major counterpoint to the lingering disappointment that's been dragging the space down. Omada has even more riding on it, where it has the chance to reinvigorate a virtual chronic care space long overshadowed by Livongo. If VCs can see an exit for companies in this space again, other late-stage incumbents are likely to follow suit, and earlier-stage startups can expect to see the benefits.

svb Silicon Valley Bank
A Division of First Citizens Bank

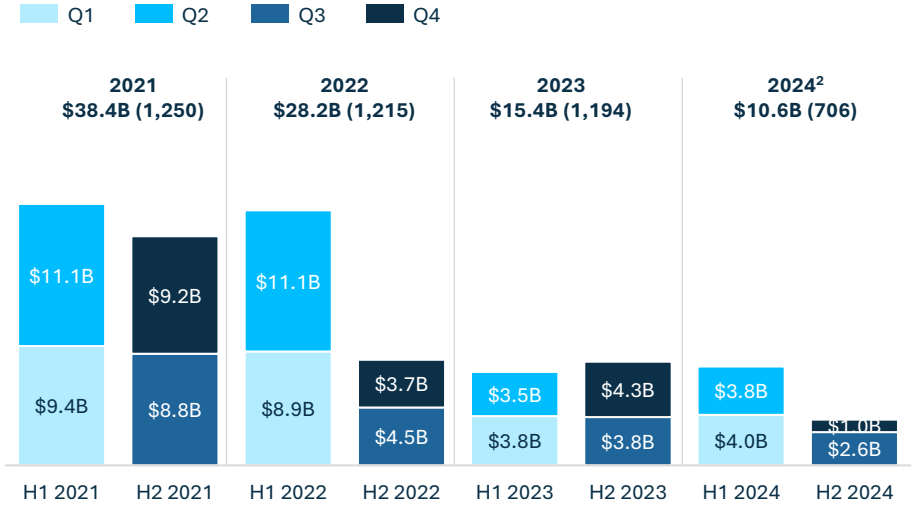
Series A[1] Dollars (and Deals)



Median Series A Valuations



Total Dollars (and Deals)



Notable 2024[2] Deals

Series A		Later-Stage	
ZEPHYR AI	$111M	innovaccer	$250M
LORE Contagious health	$80M	ABRIDGE	$150M
Pi Health	$73M	sword	$130M
tuesday health	$60M	Talkiatry	$130M
fabric	$60M	transcarent	$126M
accompany health	$56M	Capital Rx	$115M

Note: 1) The Series A criteria used for this report has been updated from previous versions of this report. Investments are considered Series A if the deal is disclosed as such and either includes institutional venture investment, corporate venture investment or is equal to or greater than $2M, regardless of investor. Dates of financing rounds are subject to change based on add-on investments. 2) All 2024 data is as of 11/30/2024.

Source: PitchBook Data, Inc. and SVB proprietary data.

Dx/Tools Investment

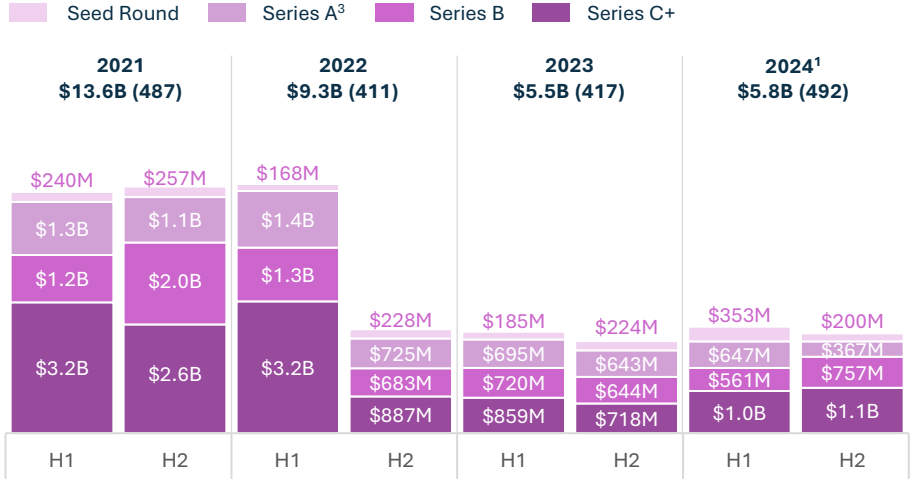
Hovering around investment levels experienced at the start of the market downturn in 2022, diagnostics is still waiting on the upward trend in investment totals that the biopharma and healthtech sectors experienced in 2024. AI holds a lot of promise for the diagnostics and tools sector and could be a catalyst for increasing investment. In 2024[1], **45% of deals and 48% of Dx/Tools investment went to companies leveraging AI.** Still, there are significant hurdles[2] for AI adoption, including payers not reimbursing for improved test quality and regulatory requirements for clinical decision support tools.

Beyond AI, the buzz in the diagnostics space is often focused on liquid biopsy. Notably, GRAIL spun out of Illumina to go public in June and is using blood tests for multi-cancer early detection (MCED). Since June, GRAIL has seen its market cap increase 40%. Successful public performance like this greases the gears for private investment to improve again.

Later-stage (Series B+) Dx/Tools companies showed a positive turnaround in 2024, improving in both deal size and pre-money valuations. Of the 77 companies that had a Series A in 2023, 29% had a subsequent round in 2024[1], led by Cellanome with a $150M Series B.

Waiting for a Rebound

US and Europe Dx/Tools Total Dollars (and Deals)

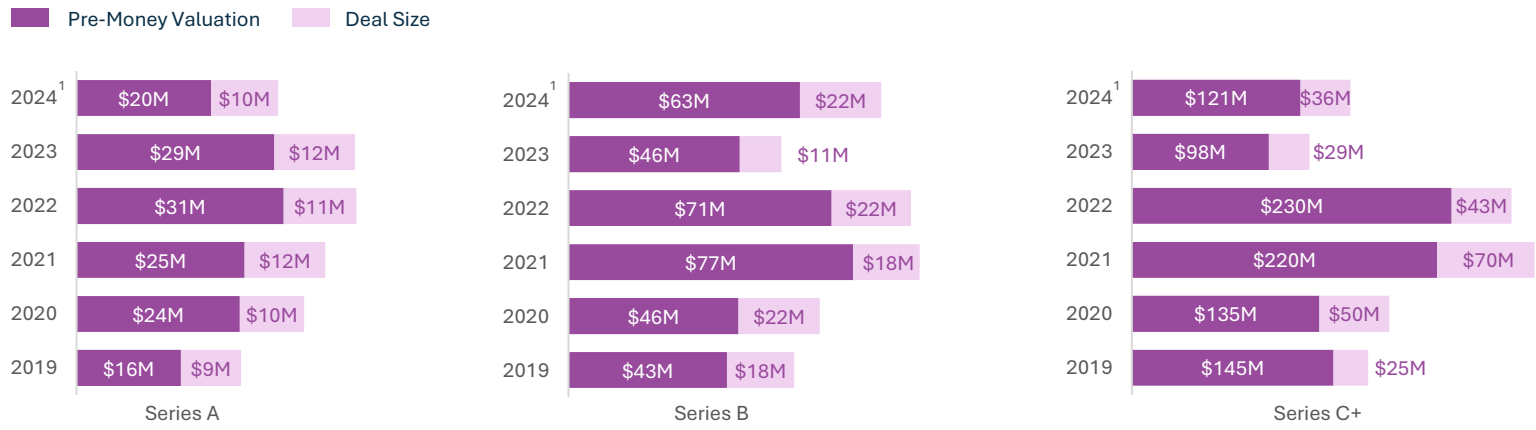


Notable Dx/Tools 2024[1] Deals

Series A		Later-Stage	
constructive.bio	$58M	caresyntax	$310M
Precede Biosciences	$57M	Element Biosciences	$277M
Mirai Bio	$50M	Freenome	$254M
adela	$49M	colossal	$163M
SpearBio	$45M	cellanome	$150M
PinkDx	$40M	BILLION TO ONE	$130M
glyphic//bio	$38M	ALAMAR BIOSCIENCES	$128M

Series A Slipping

Median Dx/Tools Valuations and Deal Sizes



Notes: 1) All 2024 data is as of 11/30/2024. 2) See our AI-Powered Healthcare Experience report released June 2024 for a deeper dive into the hurdles for AI adoption. 3) The Series A criteria used for this report has been updated from previous versions of this report. Investments are considered Series A if the deal is disclosed as such and either includes institutional venture investment, corporate venture investment or is equal to or greater than $2M, regardless of investor. Dates of financing rounds are subject to change based on add-on investments.

Source: PitchBook Data, Inc. and SVB proprietary data.

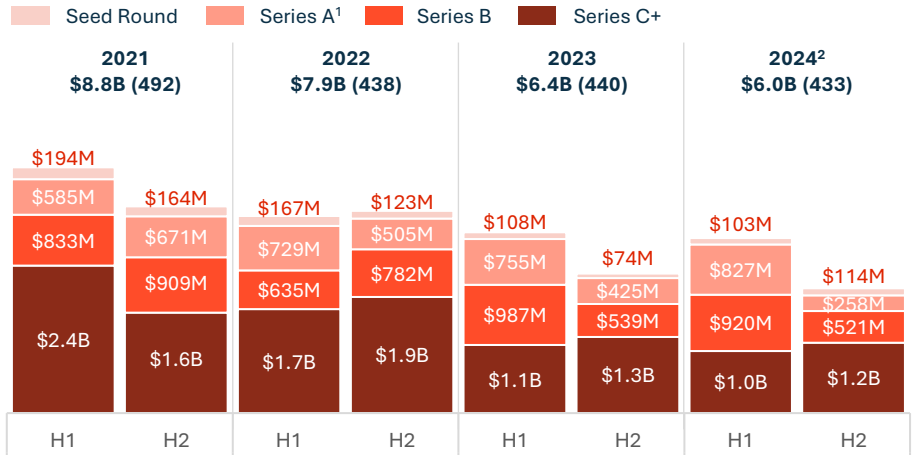
Device Investment

Steady investment has continued to support device companies. While the total investment numbers are well below the highs of 2021, the growth in valuations and deal sizes across Series A and later-stage deals are positive signs for the device sector.

A growing segment of the device sector is neuromodulation. Among the neuromodulation companies that landed deals was Cala Health. One of the largest deals ($50M) in 2024, the round was oversubscribed by new and existing investors for their Series C in December. In addition to neuromodulation, there is a growing buzz in the application of AI in robotics that could positively affect device investment total in the future.

Going Steady

US and Europe Device Total Dollars (and Deals)

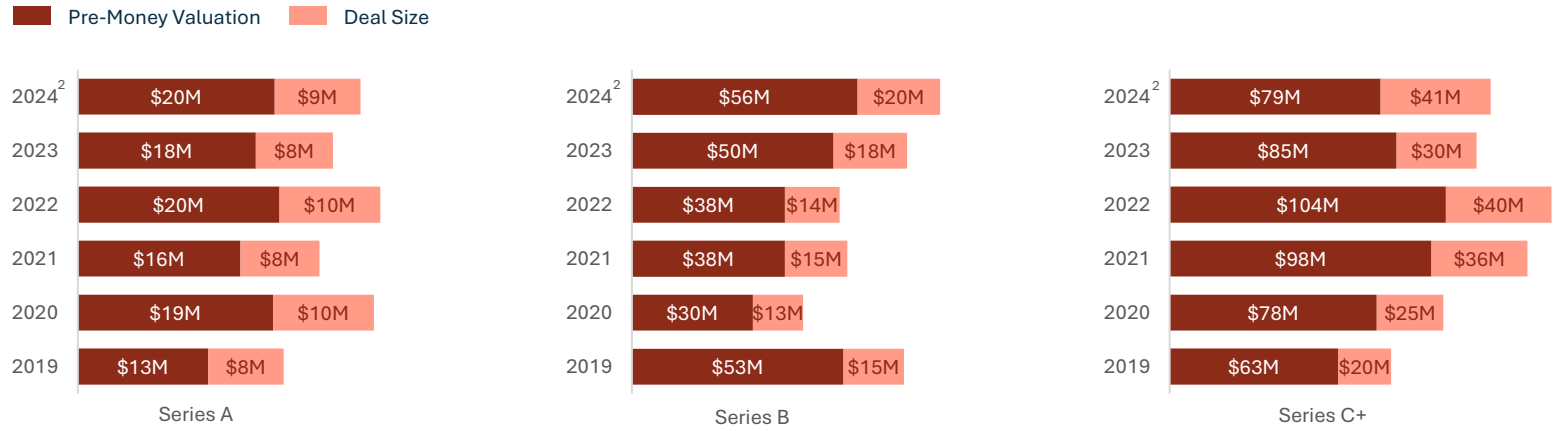


Notable Device 2024[2] Deals

Series A		Later-Stage	
Amber Therapeutics	$100M	egenesis	$191M
restorgd	$70M	ImperativeCare™	$150M
allez health	$60M	Mainstay Medical	$128M
Horizon Surgical Systems	$51M	nalu neurostimulation	$115M
Sonorous	$50M	MMI	$110M
Levels	$47M	Histosonics	$102M
AKTi!A	$41M	Nectero Medical	$96M

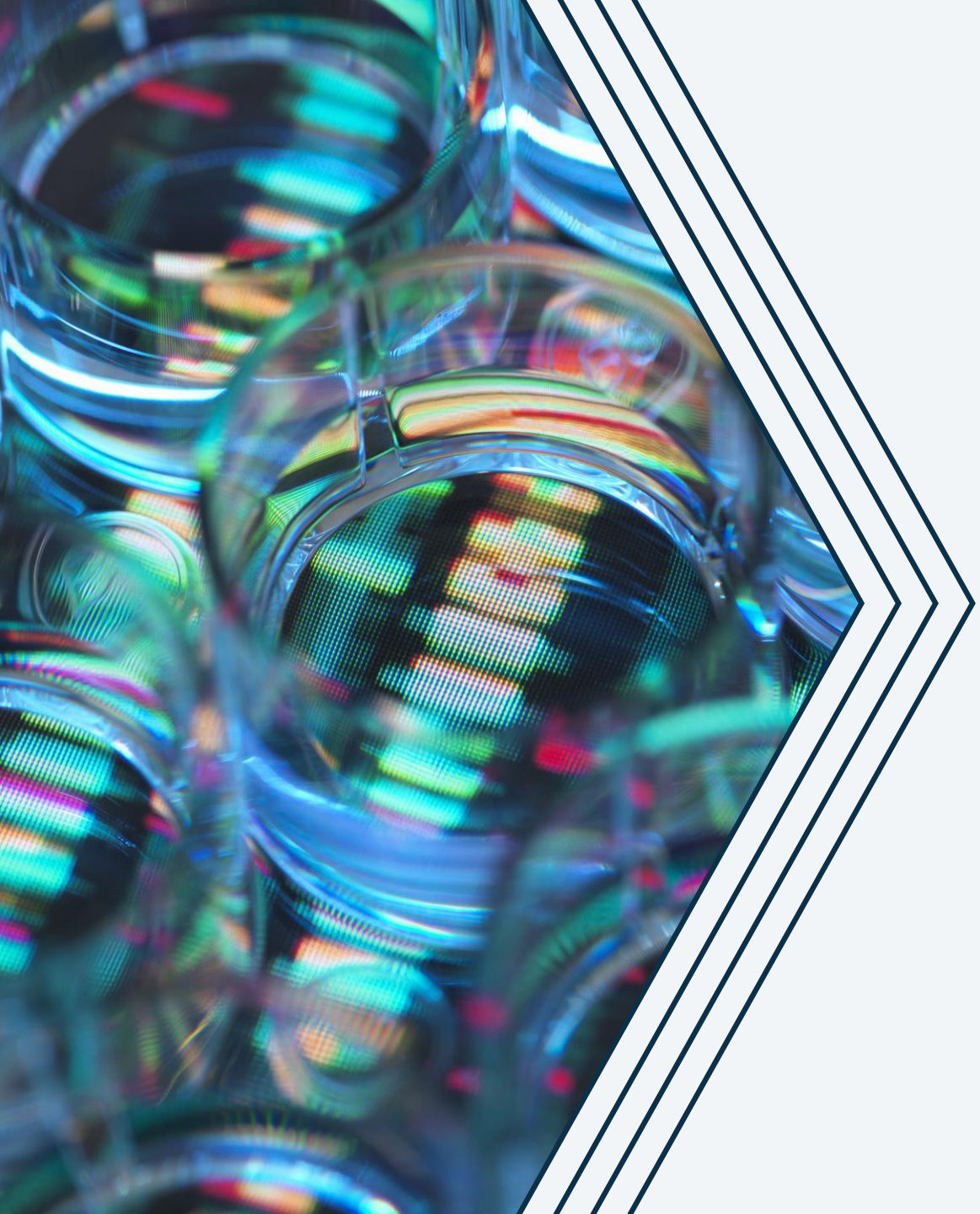
Deal Sizes Improve Across the Board

Median Valuations and Deal Sizes



Notes: 1) The Series A criteria used for this report has been updated from previous versions of this report. Investments are considered Series A if the deal is disclosed as such and either includes institutional venture investment, corporate venture investment or is equal to or greater than $2M, regardless of investor. Dates of financing rounds are subject to change based on add-on investments. 2) All 2024 data is as of 11/30/2024.

Source: PitchBook Data, Inc. and SVB proprietary data.



Spotlight: Biopharma AI

Defining Biopharma AI

Biopharma AI companies are reimagining how drugs are discovered, tested and put into use. Uses range from initial discovery work to identify novel targets, screening potential drug candidates *in silico* to predict outcomes and reduce failed trials, informing trial design and patient selection in the clinic, to providing deep insights to repurpose existing drugs toward new indications. With industry estimating that nearly half of all current preclinical assets are AI-derived and over 100 AI-derived assets currently in clinical trials, the coming years for this generation of AI-derived therapeutics will be focused on proving these innovations can translate into real-world improvement for patients.

De Novo Proteins	AI Drug Discovery Platforms	Clinical Trial Assistance	Synthetic Data & Digital Twins	Testing & Precision Medicine
Faster predictive modeling	Natural Language Processing (NLP) to identify understudied diseases and orphan drugs	Biomedical NLP for research	Creation of synthetic and simulated datasets	Multi-omic analysis for disease risk and optimized treatments
More precise binding design	Faster analysis of interactions and indications	Patient identification and recruitment	Extending datasets for underrepresented populations and rare diseases	Population analysis
Novel associations and protein designs	Therapeutic & delivery designs	Data aggregation and normalization	*In silico* testing and simulations	Improved identification of novel associations or determinants
		Improved analytics	Simulated control groups	Personalized dosing and compounding
		In silico trials for risk prediction and early modeling		
		Data summaries for publication		

DEERFIELD®
Advancing Healthcare®

> Understanding your patient population, recruiting your patient population... Patient selection is going to be really improved... because we're going to know so much more about the patient."
>
> Cam Wheeler
> Partner, Deerfield Management

What Downturn?

It is rare to find a segment of the innovation economy that is outperforming 2021 investment totals, but that is just what biopharma AI has pulled off. **Surging past 2021 total capital invested by nearly $2B, 2024's investment is largely driven by mega-deals.**[1] An eye-popping cohort of $100M+ deals makes up 71% of the 2024 investment in biopharma AI.

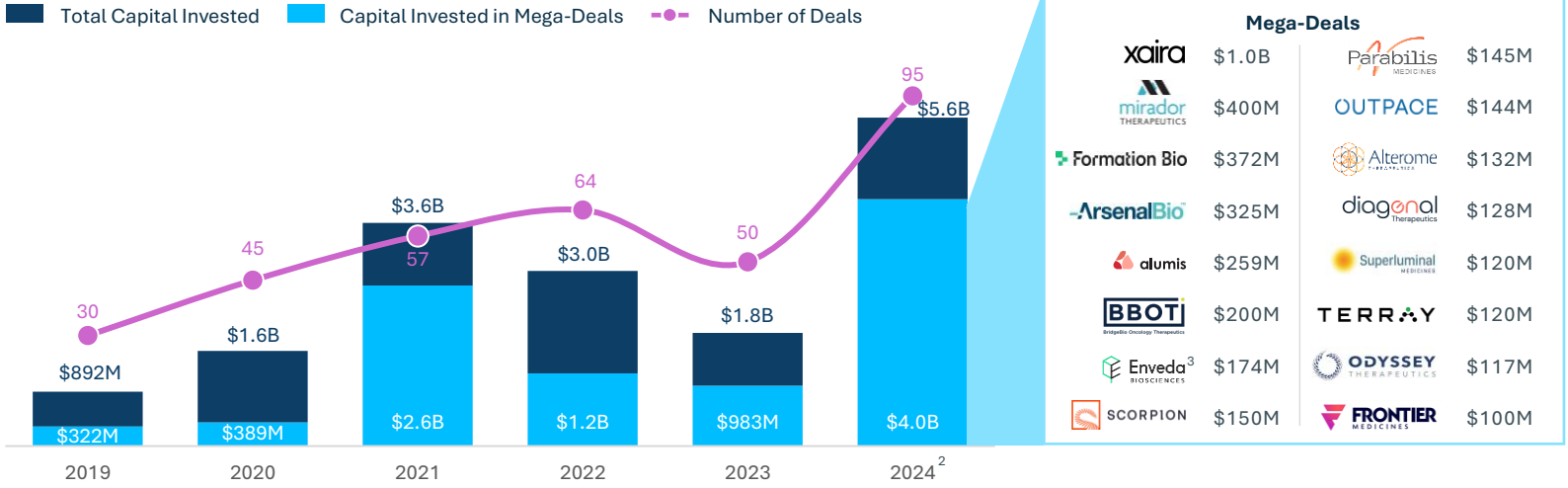
What is the justification for this level of investment in biopharma AI companies? For starters, the technology unlocks massive efficiency gains in research and drug development. **"What used to take three months now takes three days,"** Dr. Jeremiah Sims, Post-Doctoral Fellow at the Institute of Protein Design and Senior Fellow at Artis Ventures, told us. But only so much time can be shaved off the entire process to get therapeutics from the lab to patients. Clinical trials still require time, but even just a couple fewer months in the drug discovery phase can yield tens of millions of dollars worth of cost savings.

While some investors are clearly betting that AI used in therapeutics and research will lead to faster trials and a higher probability of successful outcomes, this has not yet been proven when it comes to drug trials in humans. AI might not change the probability of success yet, but it makes the process faster and cheaper. For now, that's more than enough to drive the attention it is getting in biopharma investment.

svb Silicon Valley Bank
A Division of First Citizens Bank

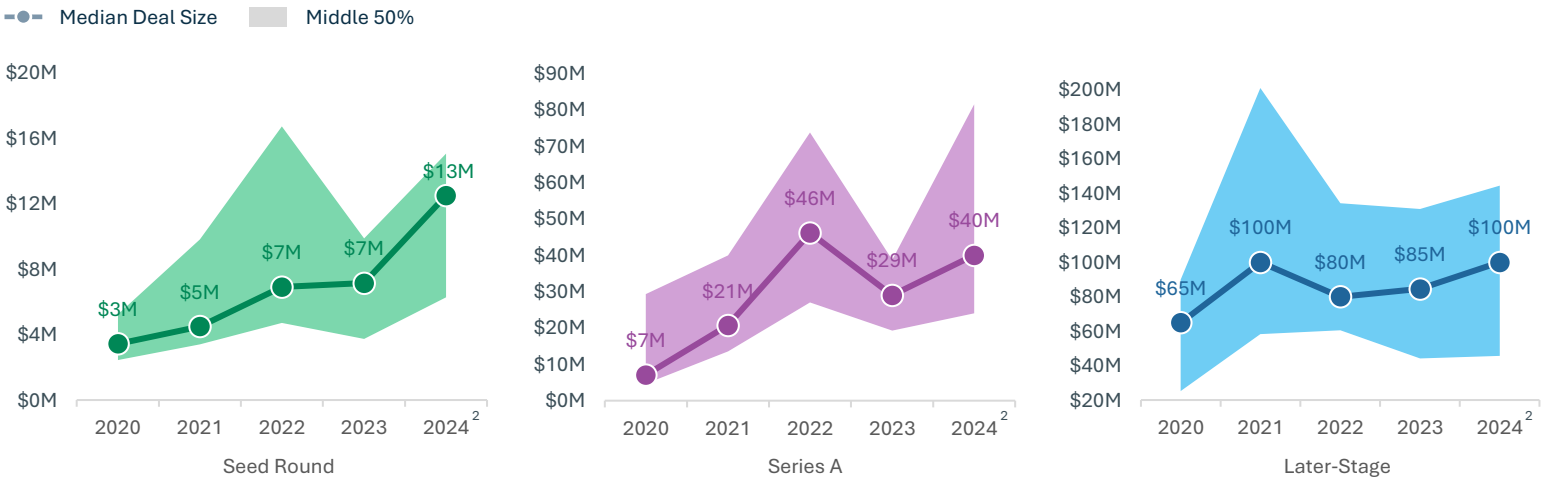
2024 Biopharma AI Investment Surpasses 2021

US and Europe Biopharma Therapeutics & Research AI Investment



Valuations Soar for the Early Stage

Median Biopharma AI Deal Sizes by Stage



Notes: 1) Deals $100M and above are considered mega-deals. 2) All 2024 data is as of 11/30/2024.
3) On 11/21/2024 Enveda Biosciences had a second 2024 mega-deal — a $130M Series C.
Source: PitchBook Data, Inc. and SVB proprietary data.

Plumbing the Unknome

Algorithmic protein design has been a confounding problem for decades. Even for very small proteins, predicting the actual three-dimensional structure of the protein from its basic amino acid sequence is computationally intensive, extremely time-consuming and unpredictably accurate.

AI has made a difference. In 2020, Google DeepMind demonstrated exponential improvements with its AlphaFold2 platform. Now new breakthroughs, applying technology and concepts from generative algorithms like DALL-E 2, have improved protein structure prediction by orders of magnitude.

More importantly, proteins designed with these tools are achieving better success during *in vivo* testing. Higher-order proteins can be used for vaccine platforms, delivery vehicles and catalytic agents.

Startups have been working in the novel protein space for years, but with new advancements come new enthusiasm and new deals. Xaira Therapeutics — co-founded by David Baker, head of the Institute for Protein Design at the University of Washington and co-winner of the Nobel Prize for Chemistry in 2024 — built a heavy-hitting team of backers that included ARCH Venture Partners, Breyer Capital, Foresite Capital, F-Prime Capital and Lightspeed Venture Partners. A year after being founded, those backers gave it a staggering $1B Series A. Isomorphic Labs, spun out from DeepMind to commercialize the AlphaFold platform, hasn't reported a raise yet. EvolutionaryScale, backed by Amazon and NVIDIA, somehow looked like an underdog with its $142M seed round.

Impacts of Protein Design

Vaccines

Precision customizable vaccines with no live virus.

Drug Delivery

Nanoscale delivery mechanisms that can deliver drugs only to specific cells.

Oncology Care

High-specificity, low-toxicity treatments that only target cancerous cells.

Protein Therapeutics

Computer-generated molecules for cell reprogramming or toxin capture.

Biological Devices

Programmable switches, sensors and nanoscale machines that function inside cells.

Clinical Research

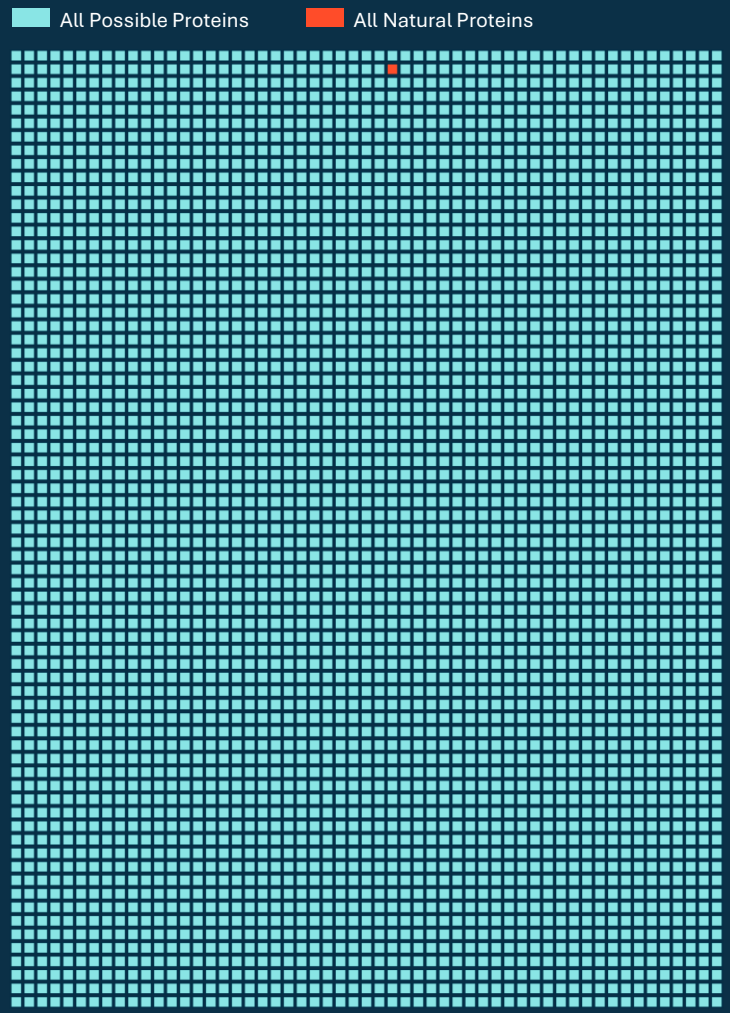
Closer results to *in vivo* testing and a faster design process.

Notable 2024 Deals in AI Protein Design and Therapeutics[1]

xaira	Series A	$1.0B
TREELINE BIOSCIENCES	Series A	$422M
35Pharma	Series C	$350M
OBSIDIAN THERAPEUTICS	Series C	$160.5M
FOG PHARMA	Series E	$145M
OUTPACE	Series B	$144M
EvolutionaryScale	Seed	$142M

Protein Possibilities

Nature has been evolving proteins for more than three billion years, but the number of unexplored proteins remains astronomical:



Note: 1) Venture-backed US and European companies based on available records.
Source: National Institutes of Health (NIH), Nature (Journal), PitchBook Data, Inc. and SVB analysis.

Keys to the Kingdom

Success in AI has often been associated with some kind of proprietary algorithm — a sense that a startup has something special, expertly designed and uniquely tailored to its research and product.

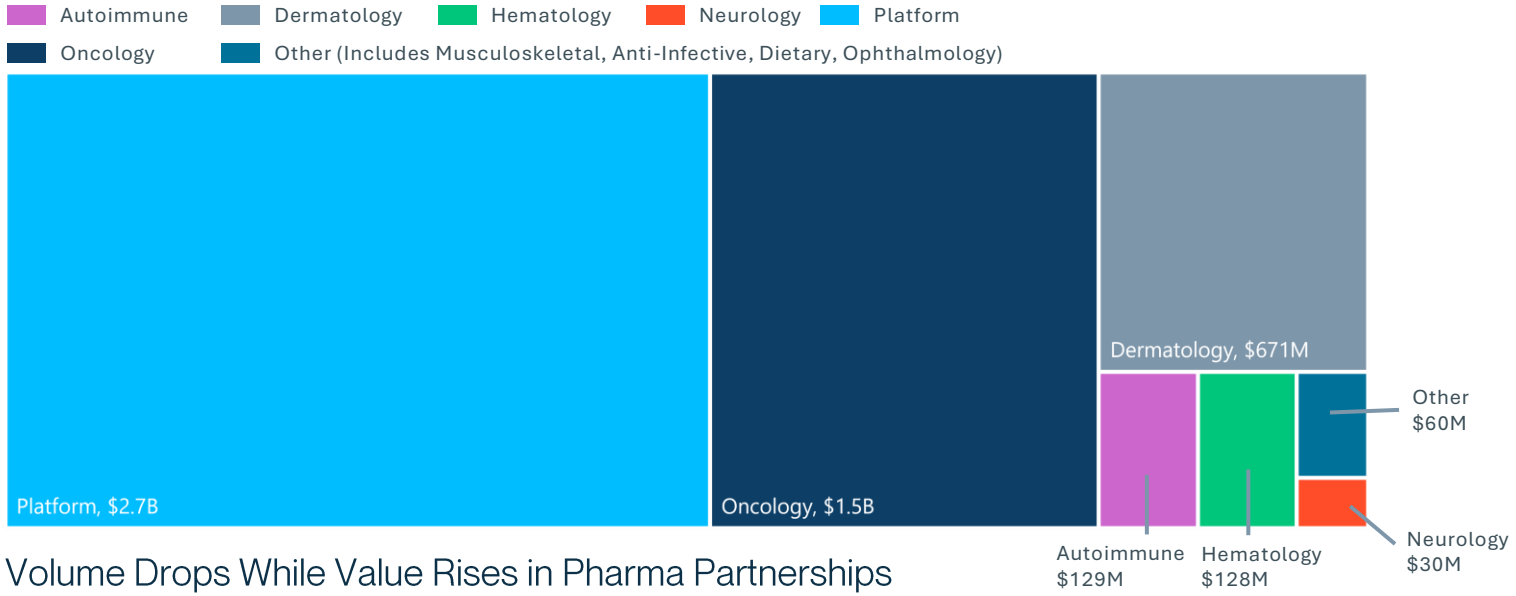
The reality is that algorithms, at least at the start, are increasingly similar or even identical. The differentiating factor, and the far more valuable IP for startups, is in the datasets an algorithm can be trained on. Access to the Worldwide Protein Data Bank (PDB), a public domain research database, was essential to the work in protein design that led to the AlphaFold2 and RFdiffusion breakthroughs. Pharma companies regard their internal datasets as invaluable internal IP. Along with an infusion of cash, access to those datasets can be one of the most valuable things to come along with an R&D partnership.

The cash, of course, is still important. And those payments are growing. After drops in 2021 and 2022, the average upfront payment to platform drug development companies rose to $83.5M in 2023. 2024 continued the trend, with the average payment in Q1 growing to $58M, up more than 40% quarter over quarter (QoQ). Pharma companies aren't the only ones putting increased value into these development partnerships. Having a clinical-stage drug is becoming table-stakes for later stage rounds, so a development partnership is now even more important for a startup to stand out, signaling broader industry trust in the company and product.

svb Silicon Valley Bank
A Division of First Citizens Bank

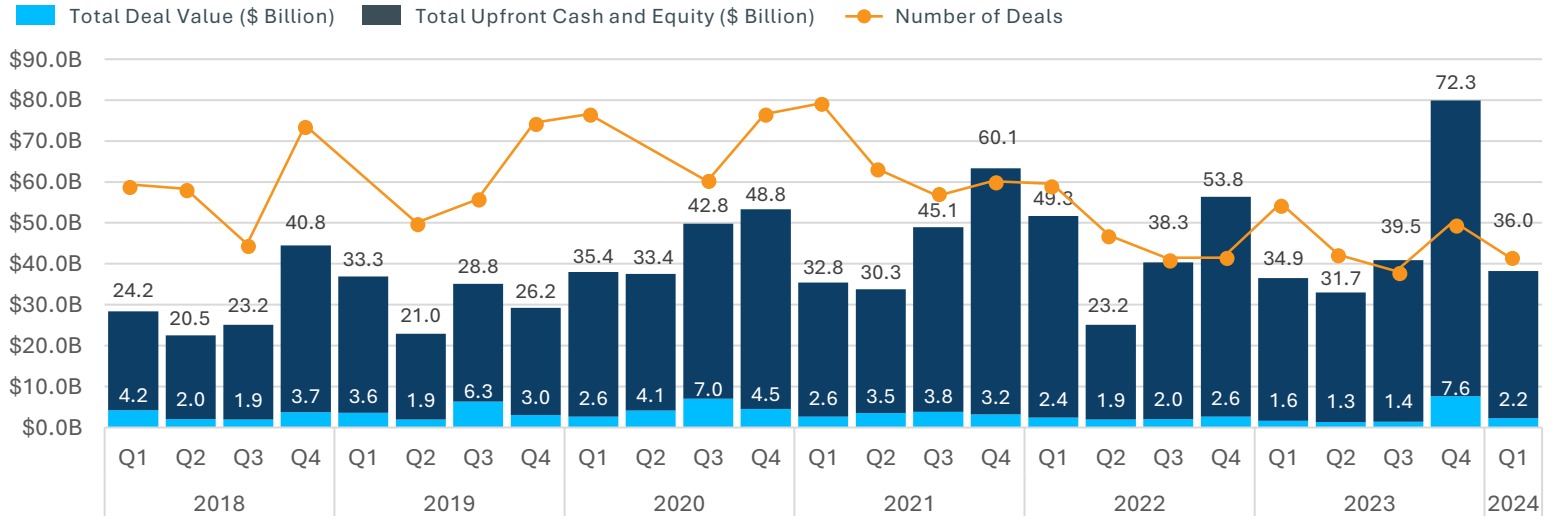
Who's Got The Ick?

Primary Indications of VC Investments in US Biotech AI[1]



Volume Drops While Value Rises in Pharma Partnerships

Publicly Announced R&D Partnerships Between Therapeutics & Platform Companies



Note: 1) Venture-backed US companies based on available records.
Source: DealForma database, PitchBook Data, Inc. and SVB proprietary data.

Spotlight: Early Stage

Planting the Seed

In a market where there has been a flight to established players, early-stage companies have faced an uphill battle. Seed deal sizes are not keeping up with the rising costs to treat diseases, compelling founders to do more with less. **Among all companies receiving a seed deal in 2024,[1] 36% are leveraging AI, up from 25% in 2023.**

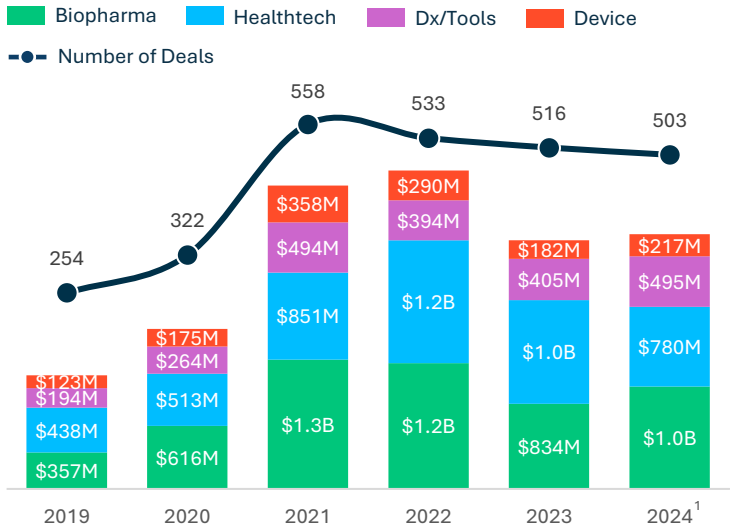
Leading the way in yet another category, biopharma companies displayed a strong seed round performance in 2024. Pre-clinical investment has been a significant driver for the category. **For biopharma seed deals in 2024,[1] 87% of the investment went to pre-clinical companies.[2]** This is up nearly 20 percentage points from 2023 and nearly 30 percentage points from 2022.

Diagnostics and tools seed companies are showing some promising signs as well. Median pre-money valuations have increased 44% since 2023, supported by a $142M seed round reported by EvolutionaryScale, that leverages AI for protein sequence modeling and now sits at a $1B valuation.

> The beginning of ’25 [is] the beginning of a new cycle that will reach its zenith three, four years later bolstered by ... AI, genetic medicines and precision medicine.”
>
> CIVILIZATION VENTURES
>
> Shahram Seyedin-Noor
> Founder & Managing Partner,
> Civilization Ventures

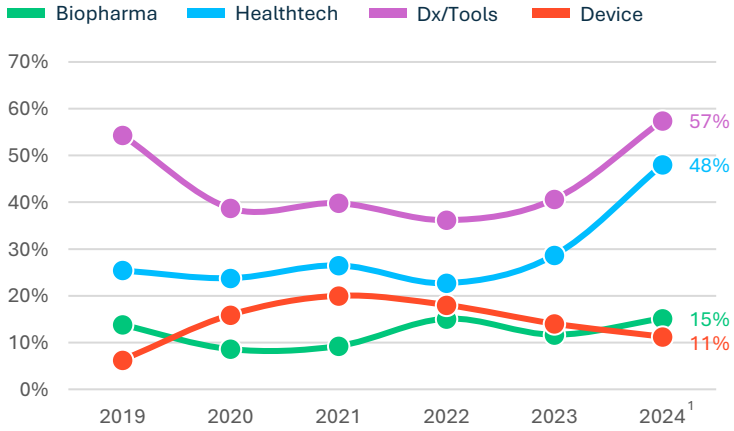
Life Sciences Seed Investment Rising

US and Europe VC Seed Dollars and Deals



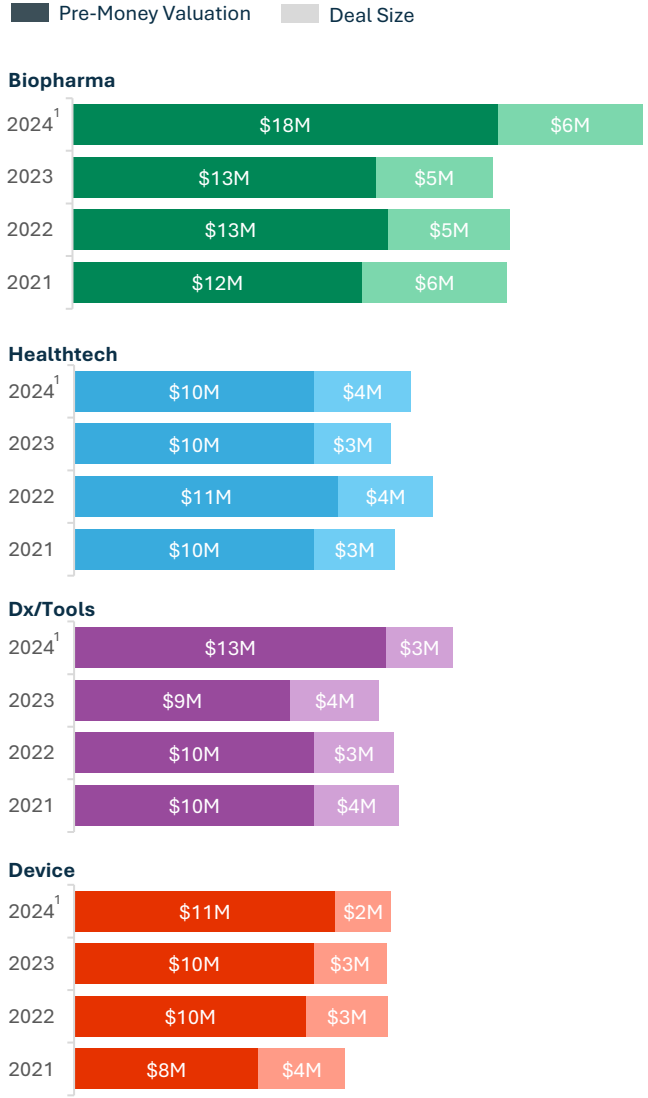
Dx/Tools Seeds Leveraging AI More Often

Proportion of US and Europe VC Seed Companies Leveraging AI



Healthtech Valuations Lag Other Sectors

Median Seed Valuations and Deal Sizes



Notes: 1) All 2024 data is as of 11/30/2024. 2) Only deals for companies with clinical trial statuses reported are in included in this analysis.
Source: PitchBook Data, Inc. and SVB proprietary data.

Finding Room to Grow

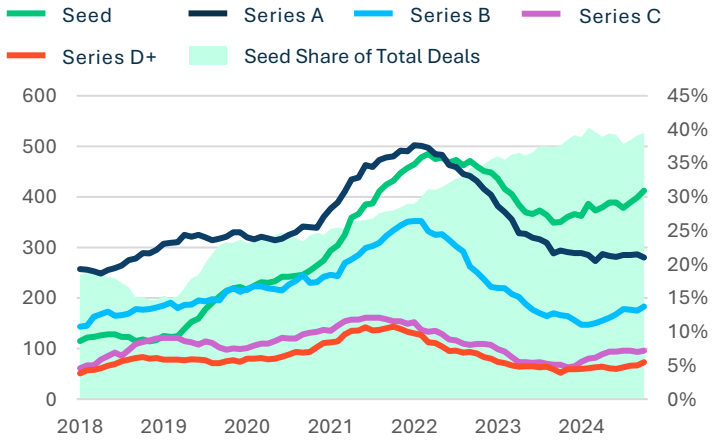
Seed rounds' share of total funding in healthcare is surging, with nearly 40% of all deals now going to seed-stage companies, up from just 26% in 2021. However, these startups, much like the broader venture landscape, are facing longer delays in advancing to Series A. What's causing the holdup? Longer development cycles, regulatory hurdles and tougher investment conditions.

For those raising Series A this year, the wait time since their seed round is telling: almost three years for healthtech and a little over two years for biopharma. Startups need to secure enough funding at the seed stage to last two to three years, depending on their subsector.

The differences between healthtech and biopharma are striking. Healthtech seed deals outpace Series A 2:1, reflecting a high volume of early-stage companies. Lower barriers to entry and strong investor interest in scalable models make healthtech attractive for smaller bets. Meanwhile, biopharma operates differently, with seed and Series A deals nearly 1:1. Fewer, higher-stakes seed rounds dominate here, with larger median deal sizes and a more structured drug development pipeline keeping investors cautious at the seed stage but more likely to back Series A.

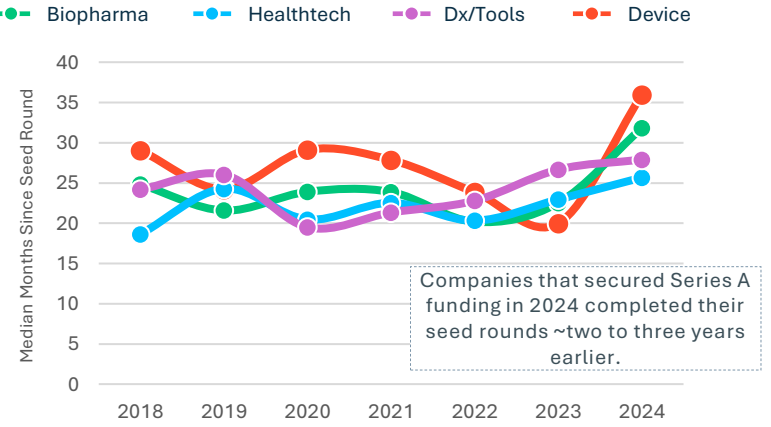
US Healthcare Seed Share Surges

TTM Deal Count by Series and Seed Share of Deals[1]



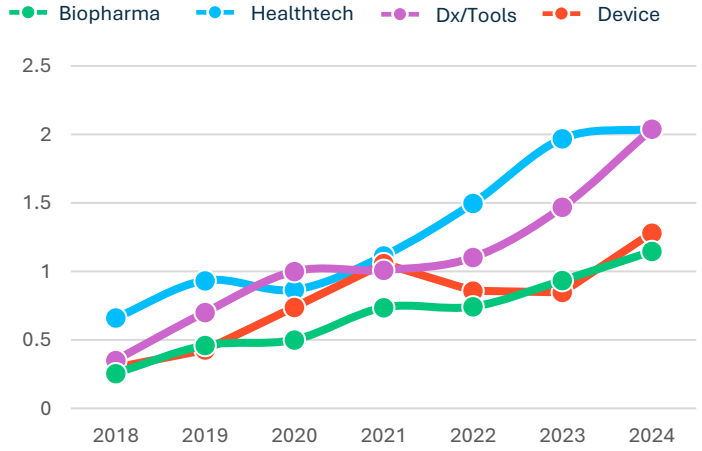
Seed-to-A Fundraising Timeframe Widens

Median # of Months Since Seed Round for Series A Deals Each Year[2]



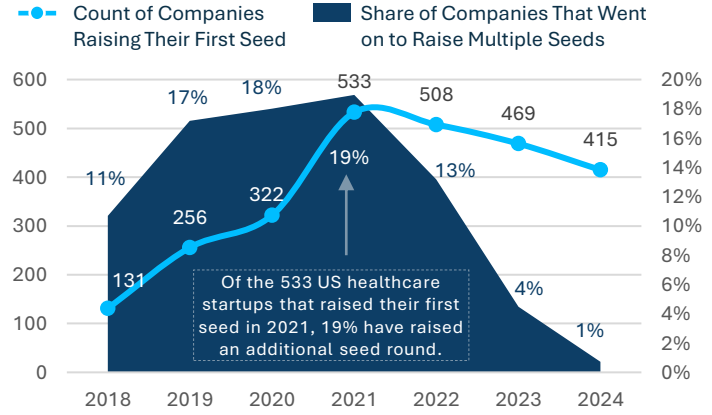
Healthtech, Dx/Tools Seeds Double Series A

Seeds per Series A for Healthcare Deal Counts by Subsector



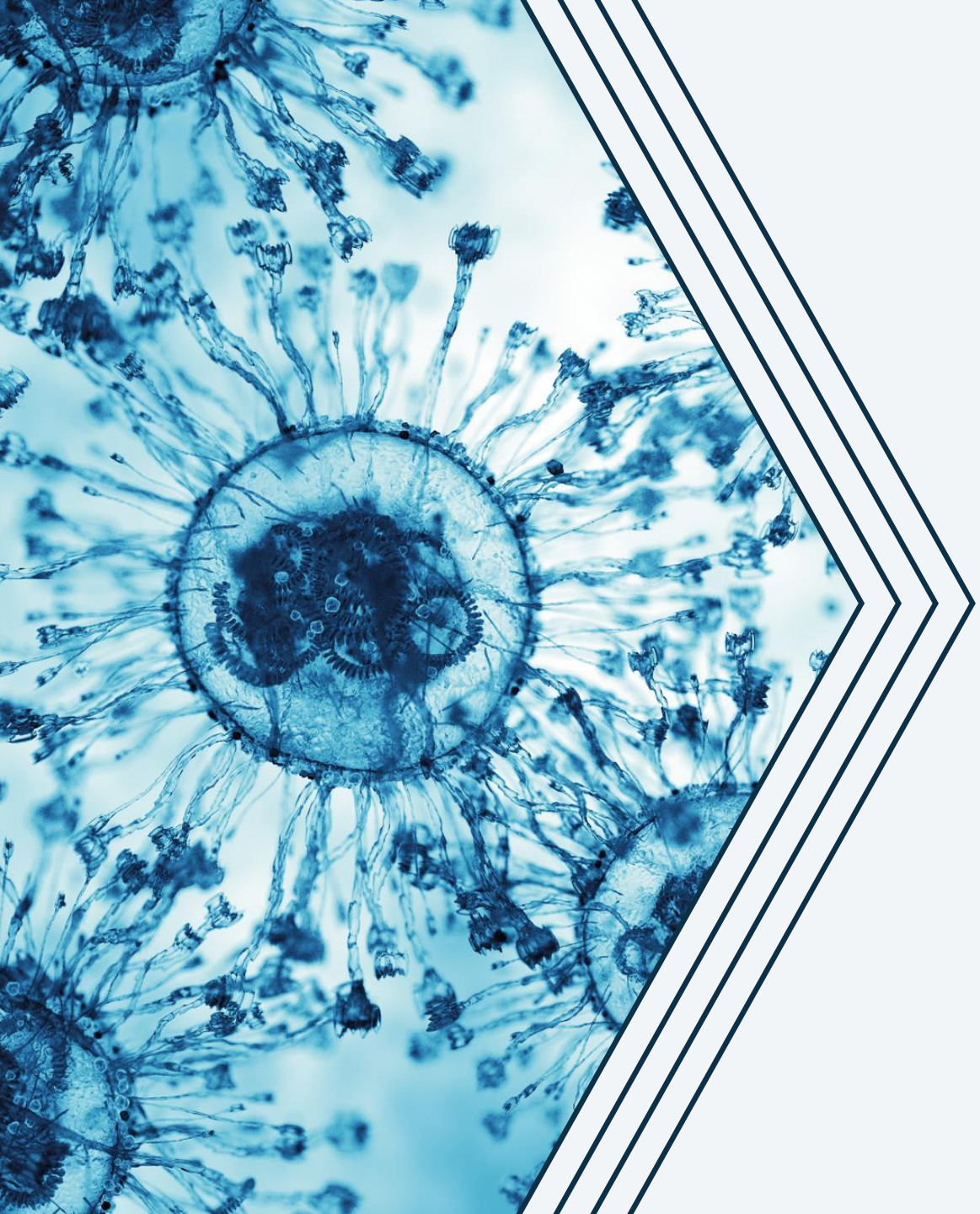
Healthcare Startups Take Multiple Seeds

US Healthcare Startups Raising Multiple Seeds and Unique Companies Raising First Seed



Notes: 1) Analysis includes only rounds with a declared series round. 2) Analysis provides the timeframe between seed to Series A rounds by showing the median months since seed round at the time of a company's Series A funding round.
Source: PitchBook Data, Inc. and SVB proprietary data.

svb Silicon Valley Bank
A Division of First Citizens Bank



Healthcare Exits: M&A and IPO Trends

Biopharma Exits

Public performance remains a challenge for biopharma. The difficulties of public biopharmas are reflected in IPO market cap numbers, where private M&A spend is outpacing IPO totals for the first time we've tracked.

Merck, Bristol Myers Squibb and others are all facing loss of exclusivity for essential drugs in their portfolios over the next five years. The sudden burst of M&A comes during alongside a suppressed IPO market and lagging public performance, helping drugmakers who are eager to refill their pipelines, looking for the next blockbuster drug to boost their bottom lines.

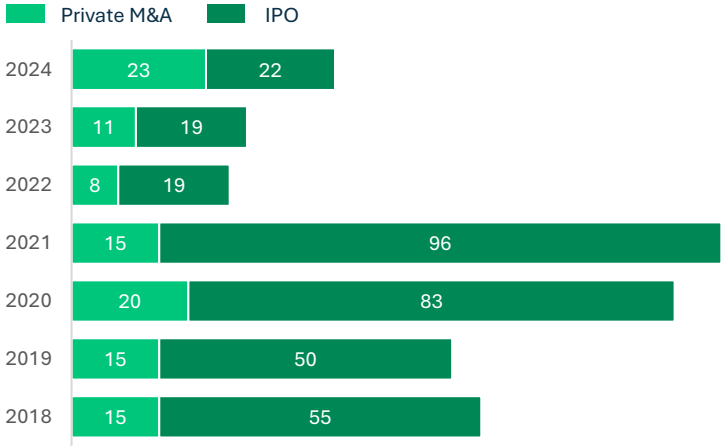
Drug companies spent the most on oncology and metabolic drugs in 2024. The largest part of the $4.6B in private oncology M&A came as Genmab acquired ProfoundBio, with clinical-stage antibody-drug conjugates, and Novartis bought Mariana Oncology, a pre-clinical company focusing on radiopharmaceuticals. Metabolic spending was largely driven by Roche's acquisition of Carmot Therapeutics and its group of GLP-1 agonists.

Oncology and autoimmune led in the number of private M&A deals. Biogen, Incyte, Novartis and AbbVie all completed deals in the autoimmune space. Eli Lilly and Ligand Pharmaceuticals made moves in the oncology space alongside Novartis and Genmab.

svb Silicon Valley Bank
A Division of First Citizens Bank

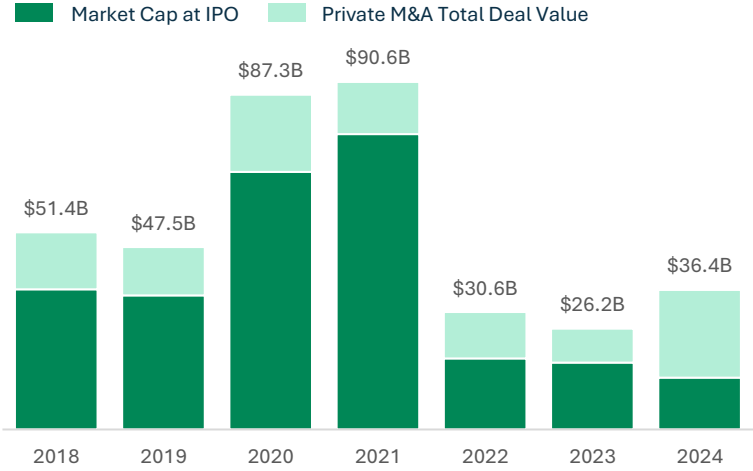
Biopharma M&A Surges Back

Biopharma Private M&A Deals & IPOs



IPOs Lag as M&A Flips the Script

Biopharma Exit Values by Year



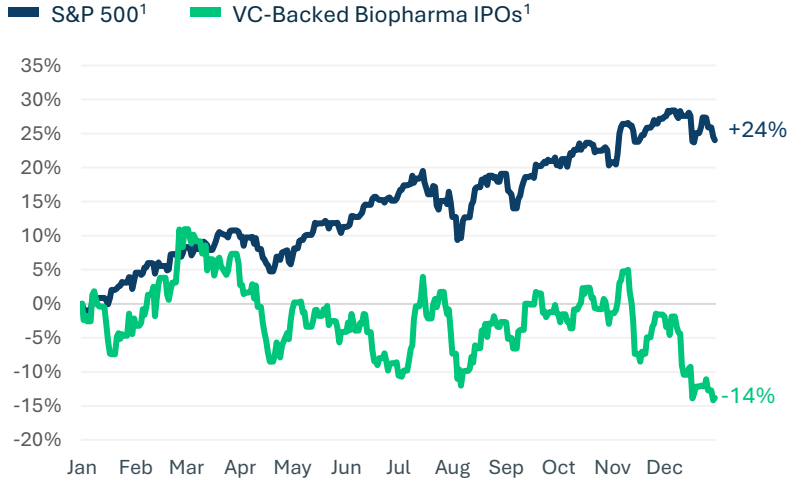
Oncology & Autoimmune IPOs Led Market Cap at Launch

2024 Biopharma IPOs by Initial Market Cap

	CG ONCOLOGY	BICARA THERAPEUTICS	kyverna
SVB Indication	Oncology	Oncology	Autoimmune
Stage at IPO	Phase III	Phase I	Phase II
IPO Price per Share (Date)	$19 (01/25/2024)	$18 (09/13/2024)	$22 (02/08/2024)
Market Cap at IPO	$1.2B	$979M	$898M
Step-Up to IPO	1.9x	1.9x	3.6x
Price +/-	50%	-3.3%	-88%
Market Cap as of 12/31/2024	$1.9B	$947M	$108M

Biopharma Public Performance

Formerly VC-Backed Public Biopharma Index: Global 2024 Performance[1]



Note: 1) Stocks for biopharma companies that went public from 2015 to 2024. Performance measured by change in index value as of 12/31/2024.

Source: PitchBook Data, Inc. and SVB proprietary data.

Healthtech Exits

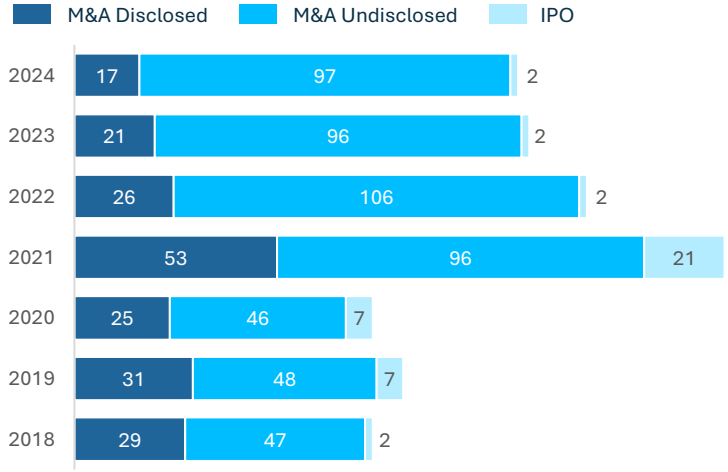
Undisclosed deals continue to dominate healthtech exits, while values are still dropping. The huge percentage of undisclosed deals makes it difficult to estimate actual values assigned to different indications, but provider operations is still maintaining a healthy lead in deal volume.

While alternative care still has the second largest historical deal volume, clinical trial enablement had the larger number of M&A deals in 2024. In both clinical trial enablement and provider operations, there was a particular focus on workflow optimization. Half of all the deals in both indications went to workflow optimization. The median age before an exit is also growing, reflecting increased attention to how effective and mature a solution is before pulling the trigger on a purchase.

Companies are still testing the waters with exits, with an impressive bump in IPO market caps. With big-name IPOs already filed for 2025 from Hinge Health and Omada, this may be the beginning of the dam-opening investors have been looking for.

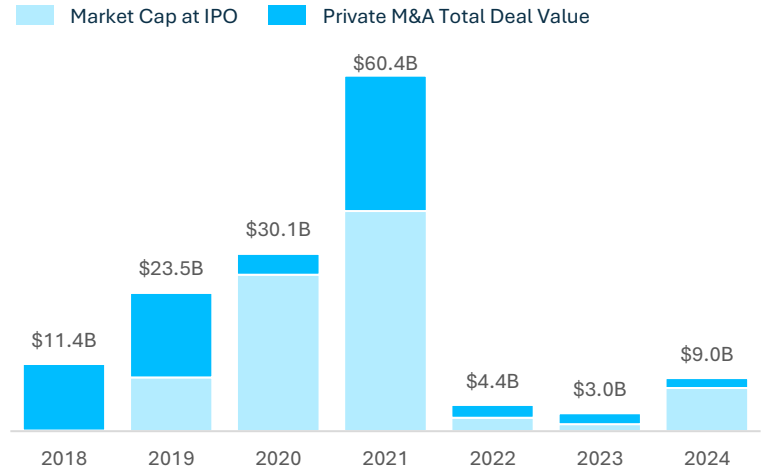
Undisclosed Deals Dominate M&A

Healthtech Private M&A Deals & IPOs



IPO Values Finally Show Some Strength

Healthtech Exit Values by Year



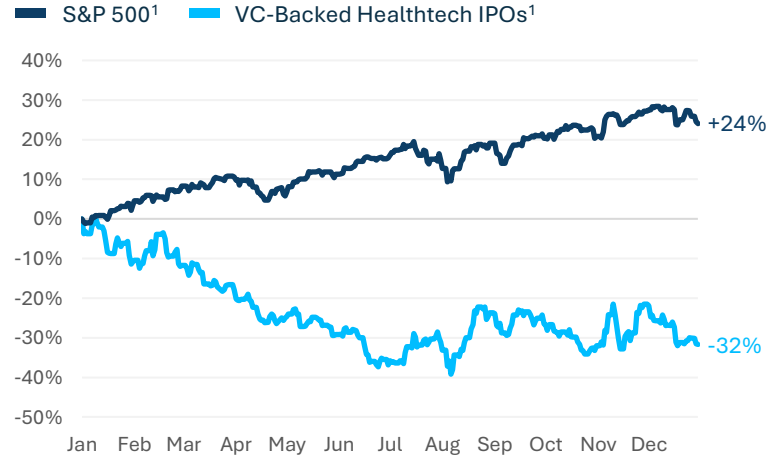
Buyers Love Optimization

Healthtech M&A by Indication 2017-2024

Indication	M&A Deals	Total Deal Value	$B+ Exits	Median Years to Exit
Provider Operations	368	$31.0B	5	7.4
Alternative Care	154	$17.0B	6	4.7
Wellness & Education	98	$3.0B	1	4.0
Clinical Trial Enablement	68	$3.3B	1	5.5
Healthcare Navigation	40	$1.9B	1	3.9
Medication Management	39	$3.9B	1	6.0

Healthtech Public Performance

Formerly VC-Backed Public Healthtech Index: Global 2024 Performance[1]



Note: 1) Stocks for healthtech companies that went public from 2015 to 2024. Performance measured by change in index value as of 12/31/2024.

Source: PitchBook Data, Inc. and SVB proprietary data.

svb Silicon Valley Bank
A Division of First Citizens Bank

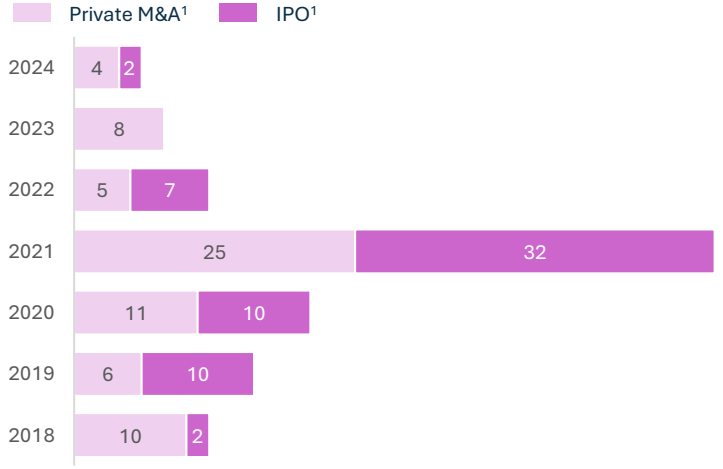
Dx/Tools Exits

Just getting back to pre-pandemic exit levels would be a win for the Dx/Tools sector. While we would love to say the trajectory has changed since our midyear report, we have yet to see an IPO in the second half of the year. VCs have expressed that the Dx/Tools private market could benefit from churn at the public levels where zombie companies are laid to rest.

Despite the challenges in the public markets, the sector continues to evolve. AI's increasing implementation in the sector puts a premium on data for training models. There is a possibility that data acquisition and aggregation are seen as a more common business strategy to combine testing with research and development.

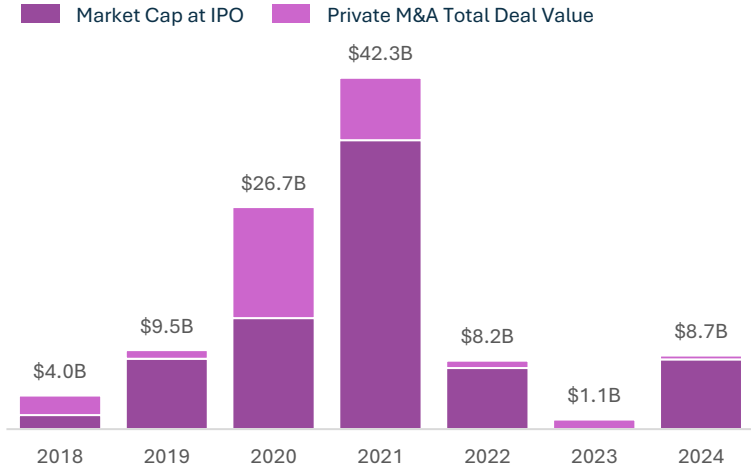
Exits Still Below Pre-Pandemic Levels

Dx/Tools Private M&A Deals & IPOs



DX/Tools Exit Dollars Start to Rebound

Dx/Tools Exit Values by Year



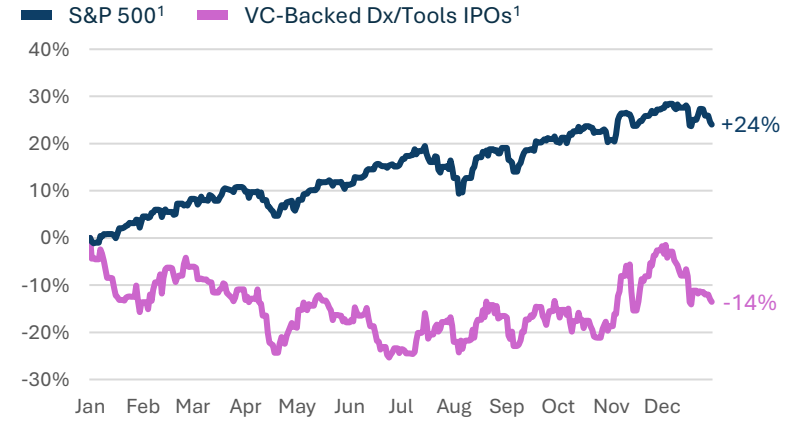
Dx Tests M&A M.I.A. since 2022

Dx/Tools M&A by Indication 2017-2024

Indication	M&A Deals	Known Deal Value	$B+ Exits	Median Years to Exit
Dx Tests	20	$16.0B	2	6.2
R&D Tools	35	$8.7B	1	5.7
Dx Analytics	13	$2.0B	0	5.8

Dx/Tools Public Performance

Formerly VC-Backed Public Dx/Tools Index: Global 2024 Performance[1]



Note: 1) Stocks for Dx/Tools companies that went public from 2015 to 2024. Performance measured by change in index value as of 12/31/2024.

Source: PitchBook Data, Inc. and SVB proprietary data.

svb Silicon Valley Bank
A Division of First Citizens Bank

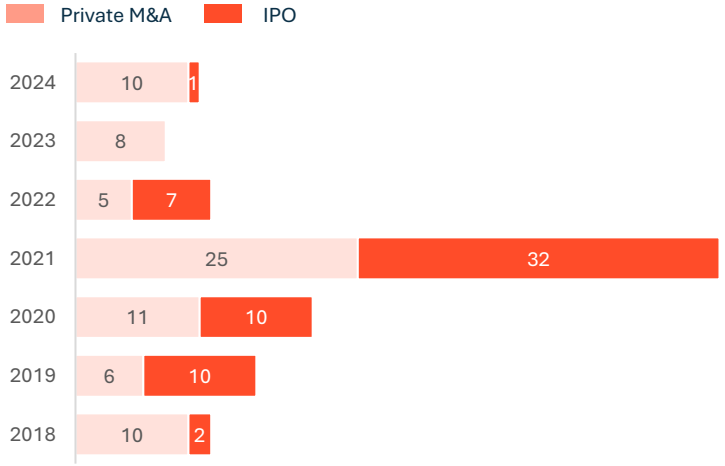
Device Exits

The device sector is finally showing some signs of life on the exits front. Ceribell, a point-of-care electroencephalogram (EEG), had the first IPO from a device company since 2022. They went public in October, raising $180M, and are up 15% as of the end of 2024. As is often the story with companies finding success in this macroeconomic landscape, Ceribell is leveraging AI. Its success thus far has contributed positively toward device companies' public performances, which were down 13% in September but rebounded to being down just 4% for the year.

Device M&A is also looking up compared to 2023. Supported by a surge of M&A in the cardiovascular space, M&A activity is starting to look a lot more like the pre-pandemic levels.

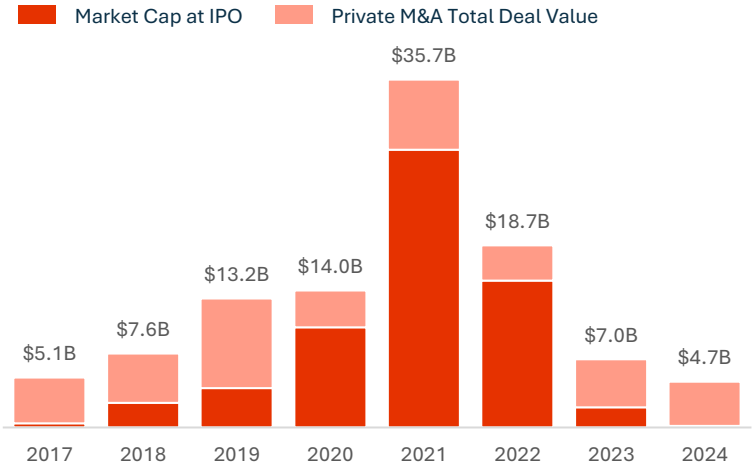
Device M&A Picking Up...

Devices Private M&A Deals & IPOs



...But M&A Dollars Lagging

Device Exit Values by Year



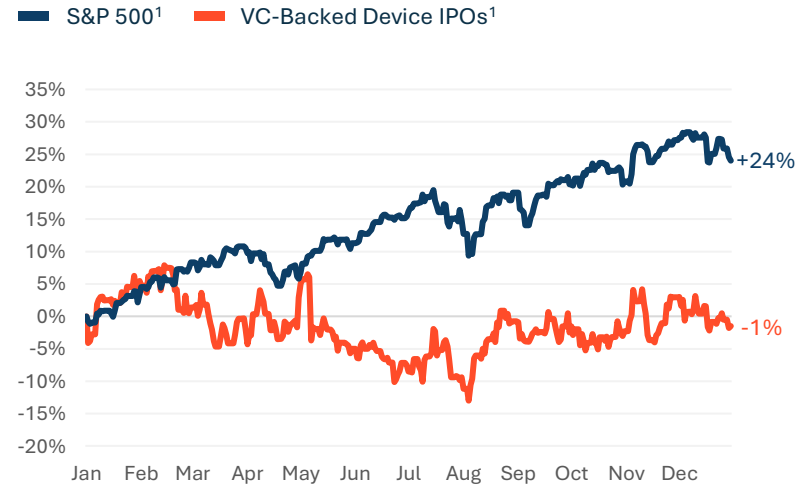
Cardiovascular M&A Activity Pumping

Device M&A by Indication 2017-2024

Indication	M&A Deals	Known Deal Value	$B+ Exits	Median Years to Exit
Cardiovascular	19	$8.0B	1	5.4
Surgical	13	$8.0B	1	8.8
Vascular	16	$5.6B	1	6.3
Orthopedic	17	$3.3B	0	8.1
Uro/Gyn	9	$3.4B	1	9.2
Non-Invasive Monitoring	8	$3.3B	1	8.9
Ophthalmology	4	$1.5B	0	8.9

Device Public Performance

Formerly VC-Backed Public Device Index: Global 2024 Performance[1]



Note: 1) Stocks for device companies that went public from 2015 to 2024. Performance measured by change in index value as of 12/31/2024.

Source: PitchBook Data, Inc. and SVB proprietary data.

svb Silicon Valley Bank
A Division of First Citizens Bank

Authors & Acknowledgments

Lead Authors

Jackie Spencer

Head of Relationship Management for Life Science & Healthcare Banking
jspencer@svb.com

Jackie Spencer leads the US Relationship Management team for Life Science and Healthcare Accelerator and Growth. Jackie and her team are focused on providing banking and financing solutions to innovative companies in the sector. Since joining SVB in 2007, Jackie has worked across both the technology and healthcare practices from emerging market to late-stage corporate finance.

Jackie graduated from St. Mary's College of California with honors, receiving a bachelor's in finance.

Raysa Bousleiman

Vice President
Healthcare Venture Capital Relationship Management
rbousleiman@svb.com

Raysa Bousleiman manages relationships with traditional VC firms focused on healthcare and life science investments. She is also responsible for conducting data-driven analyses on the global healthcare innovation economy that SVB serves. Prior to SVB, Raysa worked as a healthcare consultant focusing on health systems revenue cycle management and operations.

Raysa graduated from the University of Southern California with honors, receiving a bachelor's in human biology.

Tim Lew

Director of Business Development for Startup Banking – Life Science
tlew@svb.com

Tim Lew leads business development for early-stage life science efforts in the San Francisco Bay Area. In this role, he mentors and advises startups at the beginning stages of their journey, connecting them to the larger SVB ecosystem and accelerating them to their next series goals via company building and fundraising strategies.

Tim holds a Master of Science in biology from UC Santa Barbara and an MBA from the UNC Kenan-Flagler Business School.

Market Insights Team Authors

Alexander Lennox-Miller

Senior Researcher
Market Insights
alennoxmille@svb.com

Timot Lamarre

Researcher
Market Insights
tlamarre@svb.com

Anjalika Komatireddy

Researcher
Market Insights
akomatireddy@svb.com

Acknowledgements

Thank you to the following for lending their subject-matter expertise to this report:

Contributor

Tyler Dean

Vice President
Biotech, Tools, & Diagnostics Relationship Management
tdean@svb.com

svb Silicon Valley Bank
A Division of First Citizens Bank

Check Out Our Other Reports

The Future of Healthtech
October 2024

Our latest analysis of today's healthtech innovation market finds positive trends even as the overenthusiasm and overvaluations of 2021 continue to weigh on the sector. It looks at healthtech investment, the uses of AI, and the ongoing evolution of technology to support value-based care.

The AI-Powered Healthcare Experience
June 2024

Our inaugural report on AI-powered healthcare focuses on emerging AI applications in healthcare, particularly the administrative and clinical use cases that account for the majority of current venture capital investment.

Innovation in Women's Health
December 2023

Our first-ever report on the Women's Health sector examines the blue ocean opportunities and market factors creating momentum in women's health. It analyzes the current state of the women's health market, including VC fundraising, deal trends and the impact of sex and gender biases and disparities in research and funding

About Silicon Valley Bank

Silicon Valley Bank (SVB), a division of First-Citizens Bank, is the bank of some of the world's most innovative companies and investors. SVB provides commercial and private banking to individuals and companies in the technology, life science and healthcare, private equity, venture capital and premium wine industries. SVB operates in centers of innovation throughout the United States, serving the unique needs of its dynamic clients with deep sector expertise, insights and connections. SVB's parent company, First Citizens BancShares, Inc. (Nasdaq: FCNCA), is a top 20 US financial institution with more than $200 billion in assets. First Citizens Bank, Member FDIC. Learn more at svb.com.

#SVBHealthcare

Silicon Valley Bank

www.svb.com

See complete disclaimers on the following page.

Disclaimers

The views expressed in this report are solely those of the authors and do not necessarily reflect the views of SVB.

First-Citizens Bank & Trust Company is not licensed to undertake banking business in any country outside the United States, or to undertake any other regulated activity in any country outside the United States.

This material, including without limitation to the statistical information herein, is provided for informational purposes only. The material is based in part on information from third-party sources that we believe to be reliable but which has not been independently verified by us, and, as such, we do not represent the information is accurate or complete. The information should not be viewed as tax, accounting, investment, legal or other advice, nor is it to be relied on in making an investment or other decision. You should obtain relevant and specific professional advice before making any investment decision. Nothing relating to the material should be construed as a solicitation, offer or recommendation to acquire or dispose of any investment, or to engage in any other transaction.

All non-SVB named companies listed throughout this document, as represented with the various statistical, thoughts, analysis and insights shared in this document, are independent third parties and are not affiliated with Silicon Valley Bank, a division of First-Citizens Bank & Trust Company. Any predictions are based on subjective assessments and assumptions. Accordingly, any predictions, projections or analysis should not be viewed as factual and should not be relied upon as an accurate prediction of future results.

Investment Products:

Are not insured by the FDIC or any other federal government agency	Are not deposits of or guaranteed by a bank	May lose value