

# Healthcare Investments and Exits

Annual Report 2023

Biopharma | Healthtech | Dx/Tools | Device

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# Executive Summary

## Spotting the Green Shoots

It's been six months since we brought you our *Mid-Year Healthcare Investments and Exits 2023* report, and I wish I could say that much has changed since then — that investments have roared back, valuations are soaring and the IPO window has lifted wide open. Unfortunately, we're not there yet.

What has emerged is a clearer picture of where we're headed. Strategies that took shape months ago are now showing up in the data, as investors who once favored later stage deals have decisively pivoted toward earlier deals. The result has meant smaller checks spread to a growing number of companies at right-sized valuations.

While VC investment in healthcare has settled near half its 2021 peak, deal counts have rebounded in recent months and are approaching their prior pace. If investors were ever sitting on their hands waiting for clarity, that time is over. VCs are back to work.

Their investments are creating green shoots of optimism across the spectrum of healthcare innovation. Promising companies are being funded at rates that approach or even exceed historic norms, and the advent of generative AI technology offers immense possibility for innovative healthcare founders.

But the challenges of the current market remain significant. A generation of late-stage companies that took high valuations at the peak of the VC boom now face an uncertain future. Dozens or even hundreds of IPO-ready

companies have limited funding options outside of a public exit. For these companies, a public market turnaround couldn't come soon enough.

Life science companies are less affected by the slower market if they have strong clinical results. Biopharma companies with favorable clinical trials are finding plenty of interest among investors and achieving strong step-up valuations. The stickiness we've seen in biopharma reflects the longer term perspective many life science investors take. Fewer tourist investors enter this arena, and the LPs that invest in healthcare tend to be more immune to market whims. That reality is helping to bolster fundraising.

While tech-focused VC investors are struggling to raise new funds, healthcare investors have fared well. US investors raised \$19B in new health-specific funds in 2023, the third highest year on record. Growth in promising areas such as women's health, AI-enabled diagnostics, drug discovery and personalized medicine are reasons for immense optimism in healthcare innovation.

As we look to the year ahead, we understand that many companies will continue to face challenges. The reset now washing through the industry will take its toll. But if this process creates a reality more grounded in fundamentals, where positive and sustainable outcomes are possible for more companies in the long-run, then maybe it was worth it. After all, there's nothing more irrepressible than the power of a good idea.



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# Healthcare Market Highlights



# Top of Mind: What We're Hearing in Market

Healthcare investors, founders and stakeholders recently gathered for a week of healthcare conferences in San Francisco. Here are some of the most notable [talking points and highlights](#).

## Data as the Lifeblood of Innovation

“You have to navigate a 3D space if you want to be successful in predictive simulation and modeling. That requires data, it requires algorithms, and it requires compute.”

**Frank O. Nestle, M.D.**  
Global Head of Research & Chief Scientific Officer, Sanofi

“Good clinical data are always **important for creating momentum.**”

**Alessandro Maselli**  
President & CEO, Catalent

## AI more than a 'Nice to Have'

“AI gives the opportunity to move away from the artisanal craft of drug discovery to an engineered process.”

**Ray Pressburger**  
Global Life Science Lead, Accenture

“Over the last year we have moved to a view where we say ‘**AI is actually a necessity**’ [for understanding disease].”

**Dr. Matthias Evers**  
Chief Business Officer, Evotec

## Drivers of M&A Dealmaking

- Biopharma companies focused on large population categories such as **obesity, cardiovascular, and autoimmune diseases**, are likely to attract acquisition interest in 2024.
- For late-stage rare disease assets, interest is growing from buyers in Europe and Asia.
- Exit opportunities more plentiful for companies with strong clinical data.

New Deals on the Block:

**Johnson & Johnson**



**\$2B acquisition**



**\$680M acquisition**



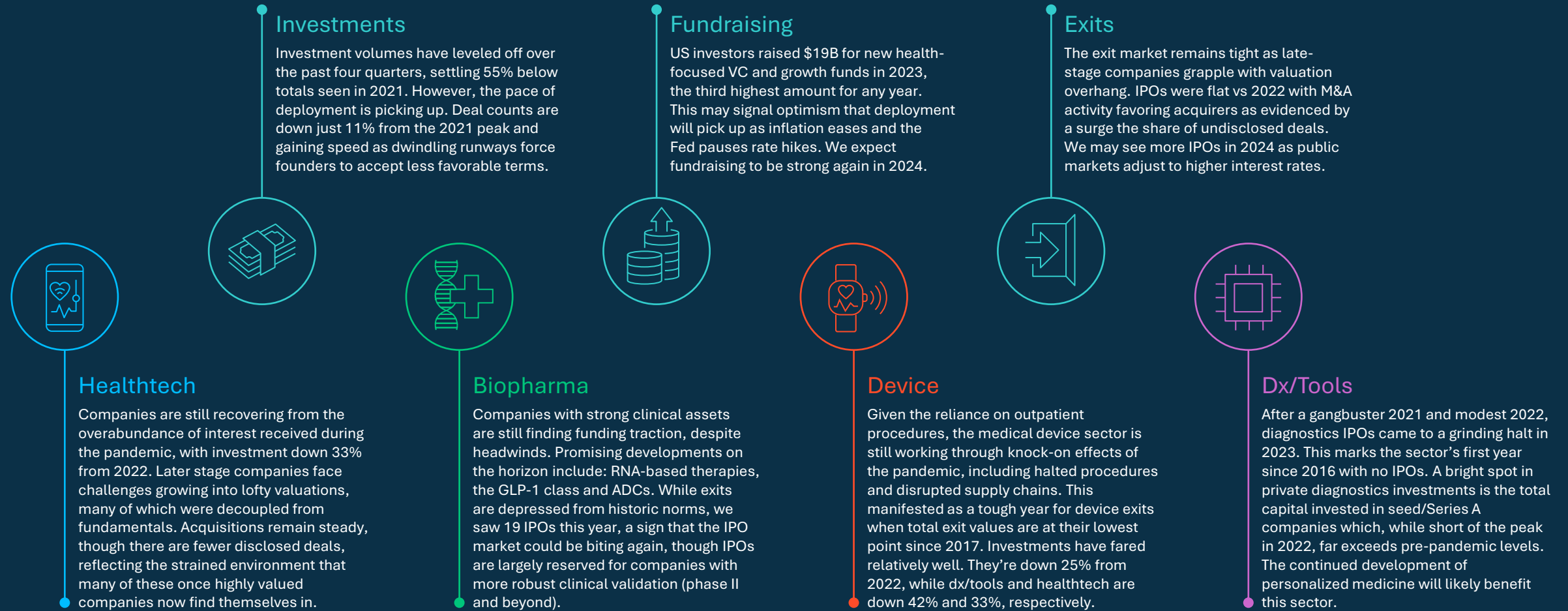
**\$250M acquisition**



**West Street Life Sciences Fund I**

**\$650M fundraising**

# Market Highlights: Fundraising, Investment and Sector Outlooks





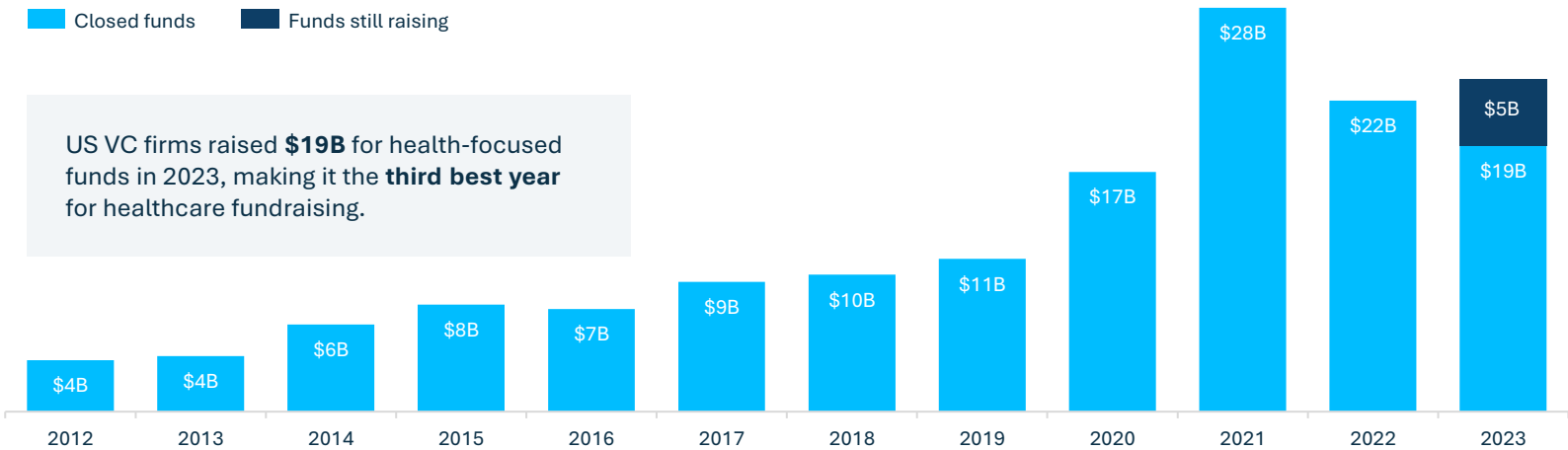
# Fundraising and Investment

# More Dry Powder Added to the Mix

Defying a trend in the overall innovation economy, fundraising was a bright spot for healthcare in 2023. US investors raised \$19B for health-focused venture and growth funds, the third-highest total for any year and just a 14% decrease from last year. While tech-focused VCs are struggling to raise new funding amid the VC downturn, healthcare investors are refilling their reserves, hoping to maximize their upside potential as valuations drop. Promisingly, the Fed’s recent mention of potential interest rate drops in 2024 may speed up additional fundraising.

Fourteen firms raised \$1B+ funds last year, but that fresh capital could sit on the sidelines for a while. The frenzied sense of urgency we saw in 2021 is largely gone, giving investors more time to focus on diligence. With valuations still settling, investors are cutting smaller checks and stretching their funds further. Firms that focused on later stage deals when the market was hot are now turning their attention to early-stage deals, which are more sheltered from public market volatility and may have cleaner cap tables unencumbered by down rounds or out-of-reach valuations. In one notable example, Lux Capital announced they pivoted toward earlier stage deals. In 2021, Lux invested 44% of their deployments into later stage companies. Now, the trend has flipped with 81% of deals going to early stage in 2023. This shift may be a bellwether for other firms.

## US Healthcare Venture Capital Fundraising<sup>1</sup> 2012-2023



## Notable Funds with Allocations to Healthcare<sup>2</sup>



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. 2) Notable funds based on largest estimated allocation to venture healthcare.  
Source: PitchBook and SVB proprietary data.



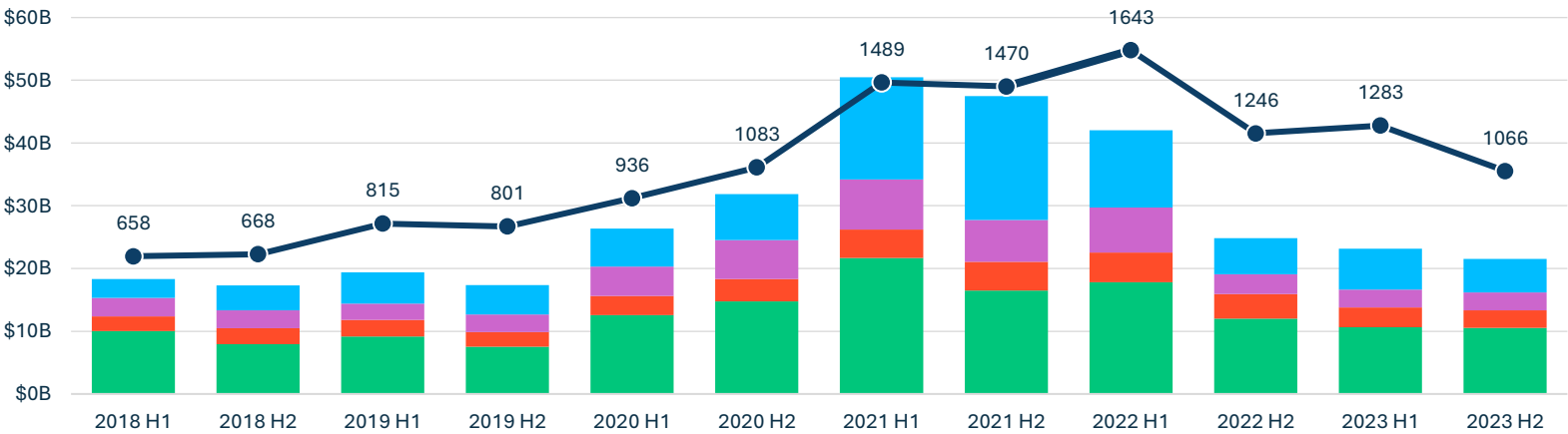
# Honey, I Shrunk the Deals

This time last year, investors were mostly treading water. Deal counts dropped nearly 30% from H1 2022 to H2 2022, as valuations reset. Today, valuations remain muted, but deployments are picking up as more investors have committed to a new strategy of backing earlier stage companies. Across the US and Europe, average deal size has fallen from \$35M in H1 2021 to \$24M in H2 2023.

These shifts may signal stabilization. After a rapid decline that began in January 2022, VC investment has leveled off, averaging around \$11B per quarter over the last year, a roughly 55% decline from 2021. From the great heights of two years ago, that drop may feel extreme, but in the context of VC history, we’re back to 2019 levels. The question on everyone’s mind seems to be: is this a return to normal or the start of a new, more cyclical normal? Whichever the case, the days of unchecked up-and-to-the-right growth expectations are likely behind us (for now).

Investment trends vary by sector. Healthtech, a pandemic darling with an influx of tourist VC investment, saw a spike of capital during 2021 but has failed to keep pace as virtual care and other pandemic trends recede. Biopharma, however, has been less impacted by market volatility. Companies with strong clinical assets are generally finding enough investment to pursue the next milestone.

VC Dollars and Deals by Healthcare Sectors  
US, EU and UK































	2021			2022			2023			
Sectors (\$M)	US	EU & UK	Total	US	EU & UK	Total	US	EU & UK	Total	YoY Change <sup>1</sup>
Biopharma	31,215	6,924	38,138	24,997	4,830	29,827	17,003	4,161	21,164	-25%
Healthtech	33,129	2,881	36,010	14,063	3,957	18,020	10,471	1,372	11,843	-33%
Dx/Tools	11,955	2,713	14,668	8,650	1,659	10,309	4,281	1,415	5,696	-42%
Device	6,691	2,383	9,074	7,091	1,572	8,663	4,723	1,239	5,962	-25%
Total	82,990	14,901	97,890	54,801	12,019	66,819	36,477	8,187	44,665	-30%

Note: 1) YoY change calculated from January through November of 2023 and the same period in 2022.  
Source: PitchBook and SVB proprietary data.

# Most active<sup>1</sup> healthcare investors

Deal count (2022-2023)

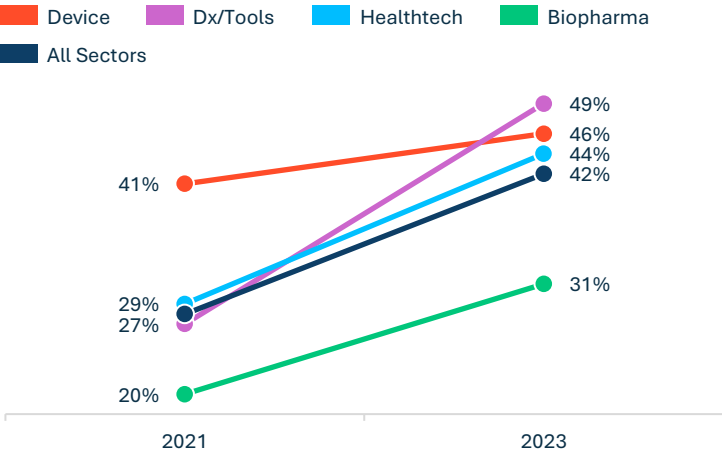
Overall		Biopharma		Healthtech		Dx/Tools		Device	
55	<b>Gaingels</b> 	36	RACAPITAL	36	<b>PLUGANDPLAY</b>	10	<b>PLUGANDPLAY</b>	12	 <b>SHANGBAY</b> CAPITAL
54	<b>PLUGANDPLAY</b>	33	 <b>ALEXANDRIA</b>	34	<b>Gaingels</b> 	9	 <b>CASDIN</b> CAPITAL LIFE SCIENCE INVESTMENTS	10	 <b>JobsOhio</b>
47	 <b>Alumni Ventures</b>	22	 <b>ARCH</b> VENTURE PARTNERS	26	 <b>Alumni Ventures</b>	7	 Bristol Myers Squibb™	7	 <b>Alumni Ventures</b>
44	RACAPITAL	21	 <b>OrbiMed</b> Healthcare Fund Management	25	<b>GENERAL</b>  <b>CATALYST</b>	7	<b>GENERAL</b>  <b>CATALYST</b>	7	<b>Startx</b> 
42	<b>GENERAL</b>  <b>CATALYST</b>	17		18	<b>10X</b> CAPITAL	7	 <b>ALEXANDRIA</b>	6	 <b>HealthTech</b> CAPITAL
40	 <b>ALEXANDRIA</b>	17	 <b>Pfizer</b> Ventures	18	 <b>First Trust</b> Capital Partners	6	<b>CATALIO</b> CAPITAL MANAGEMENT	6	
37		16	<b>sanofi ventures</b>	14		6	<b>breyercapital</b>	5	 <b>GOOD</b> GROWTH CAPITAL
34	<b>10X</b> CAPITAL	14	<b>Gaingels</b> 	12	8VC	6	<b>AIX</b> Ventures	5	 <b>Ally Bridge Group</b>

# Spoon-Fed Deals Act as Lifelines

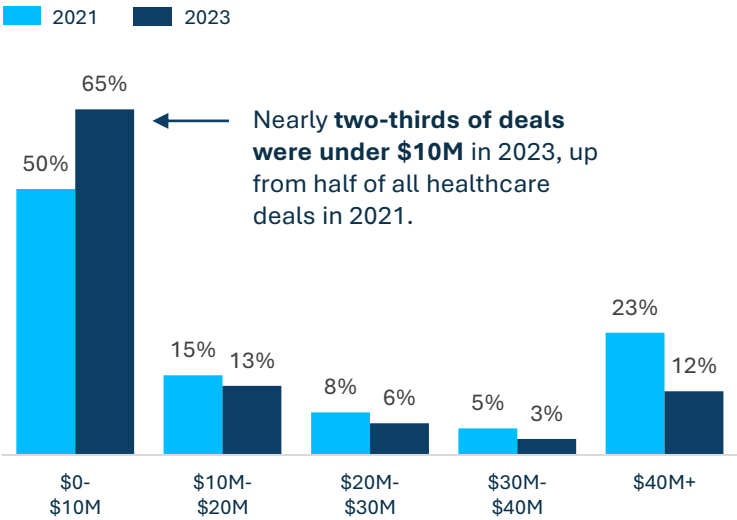
The days of the vanity valuation are long gone. Now it’s all about the spoon-fed deals. Just like an IV in the hospital, these investments — often in the form of inside rounds — keep companies alive until they can thrive again. Investors are increasingly using inside and extension rounds to kick the can down the road for companies that would otherwise fail or be forced to take a down round. To get a sense of this trend, we defined spoon-fed deals as later stage companies valued at or above \$20M raising a round of \$15M or below. Deals in this range are up across all healthcare. Nearly half of all later stage diagnostics deals are spoon-fed deals, up from 27% in 2021. The spike in the proportion of spoon-fed deals is similar for healthtech and biopharma, but are lower for devices, which already had a higher rate of spoon-fed deals.

In general, deal sizes are trending lower as companies are forced to do more with less, and investors are more interested in earlier deals with cleaner cap tables. In 2023, VC deals less than \$10M accounted for 65% of all deals, up from 50% in 2021. Greater scrutiny on pricing is also affecting step-ups, which have fallen below the pre-pandemic norm for all stages. Series C companies, which were getting a median 2x increase in valuation in 2021 are now seeing only a 30% bump. But even these numbers are likely inflated as they only include disclosed deals, which are a shrinking minority of all deals.

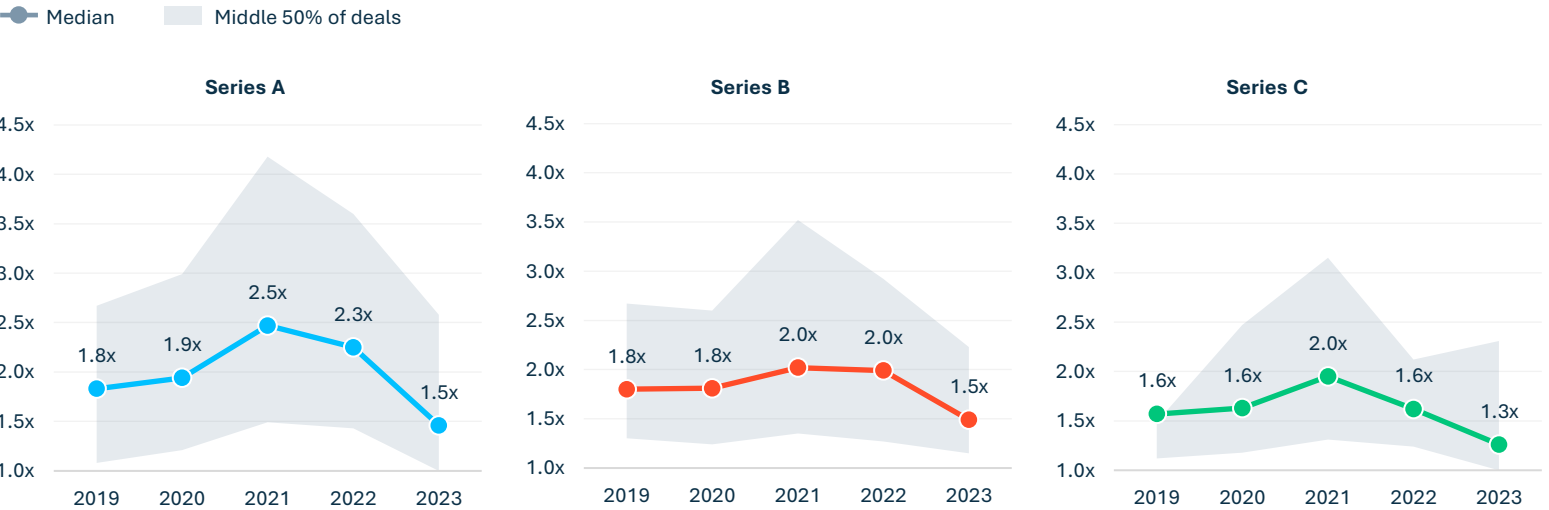
Proportion of Spoon-Fed Deals<sup>1</sup> by Sector  
2021 vs 2023



Distribution of Healthcare VC Deals by Deal Size



Step-Ups for Healthcare VC Deals by Series<sup>2</sup>

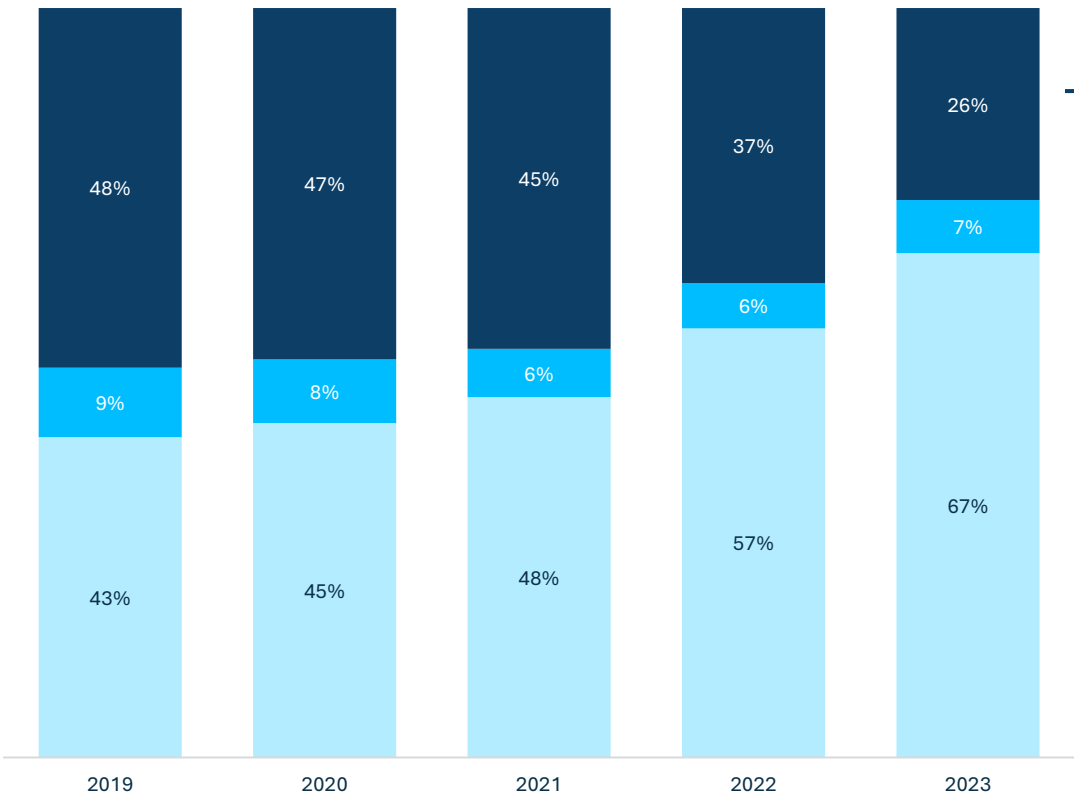


Notes: 1) A spoon-fed deal is defined as a deal that is \$15M or less for later stage company with a pre-money valuation at or above \$20M. 2) Step-ups are the latest pre-money valuation divided by the previous post-money valuation for disclosed deals only.  
Sources: PitchBook and SVB analysis.

# Don't Call It a Down Round: More Valuations Staying Under Wraps

Healthcare VC Deal Counts for Series A and Beyond<sup>1</sup>  
US, EU and UK

Undisclosed deals   Down/flat rounds   Up rounds



Notable 2023 Healthcare Up Rounds  
US, EU and UK

	Step-Up <sup>2</sup>	Stage	Deal Size	Sector
KRIYA THERAPEUTICS	1.32x	Series C	\$430M	Biopharma
NEURALINK	1.52x	Series D	\$323M	Device
CARDURION PHARMA	1.49x	Series A	\$300M	Biopharma
Generate: Biomedicines	1.19x	Series C	\$273M	Biopharma
ORBITAL THERAPEUTICS	1.88x	Series A	\$270M	Biopharma
Aledade	1.05x	Series F	\$260M	Healthtech
ReCode THERAPEUTICS	3.03x	Series B	\$260M	Biopharma
CELLARES	1.81x	Series C	\$255M	Dx/Tools
MapLight	1.13x	Series C	\$225M	Biopharma

Notes: 1) Up rounds defined as deals where the pre-money valuation is higher than the prior deal's post-money valuation. 2) Step-up multiple calculated by dividing the pre-money valuation on the current venture round by the post-money valuation on the preceding venture round.  
Source: PitchBook and SVB proprietary data.





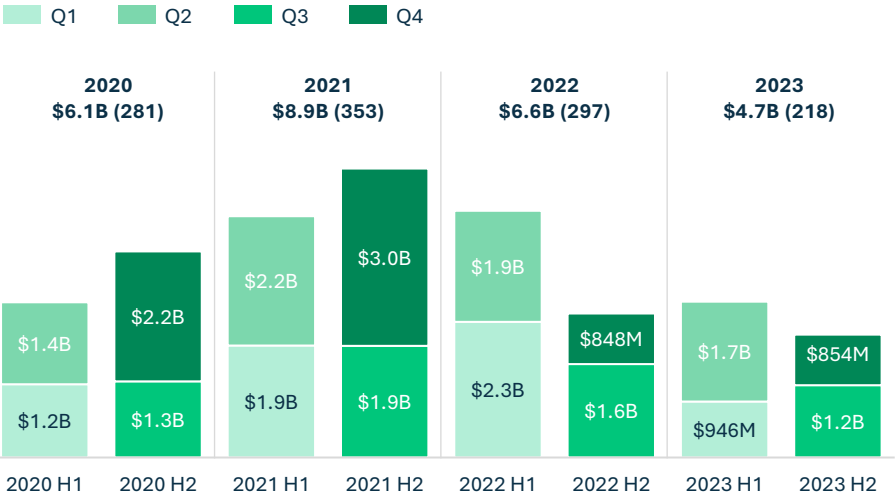
# Investment by Sector

# Biopharma Investment

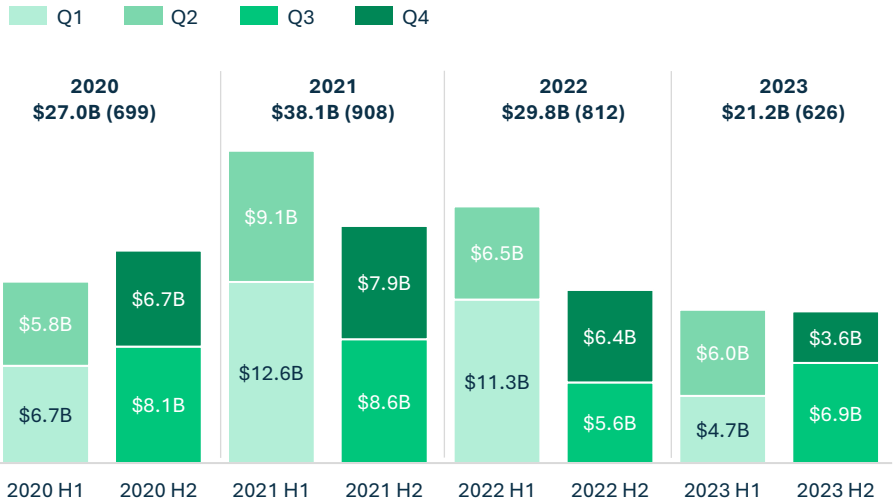
A growing backlog of IPO-hopefuls pressed against a barely-ajar IPO window adds pressure to private valuations. Competition for financing is fierce as investors navigate unclear paths to exits. Pressure is especially acute at the later stages (Series B and beyond), which are down 30% vs. 2022. Early-stage investment, more shielded from macro headwinds, jumped in Q2 and Q3'23. Early-stage investment was strong for companies with AI-enabled drug development — AI's purported ability to cut costs and speed development is lowering the capital barriers for early-stage biopharma companies.

The dramatic slowing of deal pace is giving investors time for diligence. Investors are increasingly focused on sufficient runway to drive companies through meaningful clinical milestones. But the bar has been raised. FDA denials have risen to peak levels in 2023, and R&D expenditure has not slowed. While early-stage platform companies had an easier time raising funds during the market's peak, the pendulum has swung toward less risky investments amid the ensuing pullback. At times, this means that very early, pre-clinical assets are less attractive because of how long they can take to land in the clinic. Bright spots in investment were driven by strong clinical developments: the GLP-1 class, ADCs and the landmark approval of CRISPR developed drug for sickle cell disease, Casgevy.

## Seed/Series A<sup>1</sup> Dollars and (Deals)

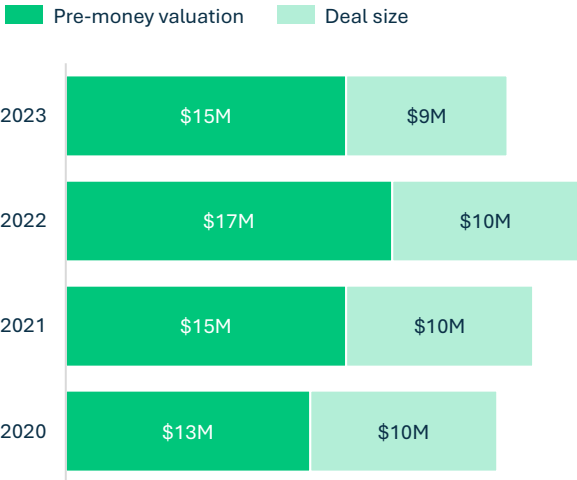


## Total Dollars and (Deals)



Note: 1) Seed/Series A includes first-time investments from institutional or corporate venture investment in the US, EU and UK and any first-round investments equal to or greater than \$2M, regardless of investor. Dates of financing rounds are subject to change based on add-on investments.  
Source: PitchBook and SVB proprietary data.

## Median Seed/Series A Valuations



## Largest 2023 Deals

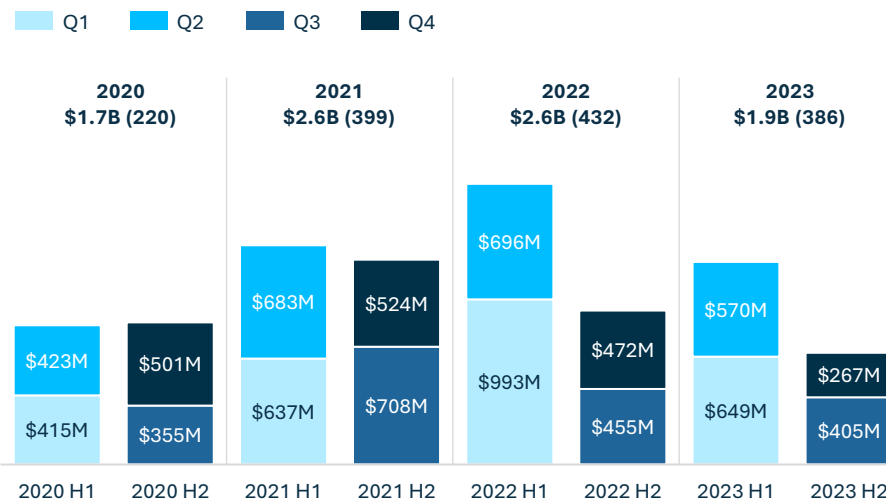
Seed/Series A	Later stage
ReNAgade THERAPEUTICS. \$300M	KRIYA THERAPEUTICS \$430M
AIOLOS BIO \$245M	elevatebio \$401M
MAPS Public Benefit Corporation \$215M	CARDURION PHARMA \$300M
BITTERROOT BIO \$145M	Generate:Biomedicines \$273M
ELL:PSER PHARMA \$137M	ORBITAL THERAPEUTICS \$270M
EyeBio \$100M	ReCode THERAPEUTICS \$260M

# Healthtech Investment

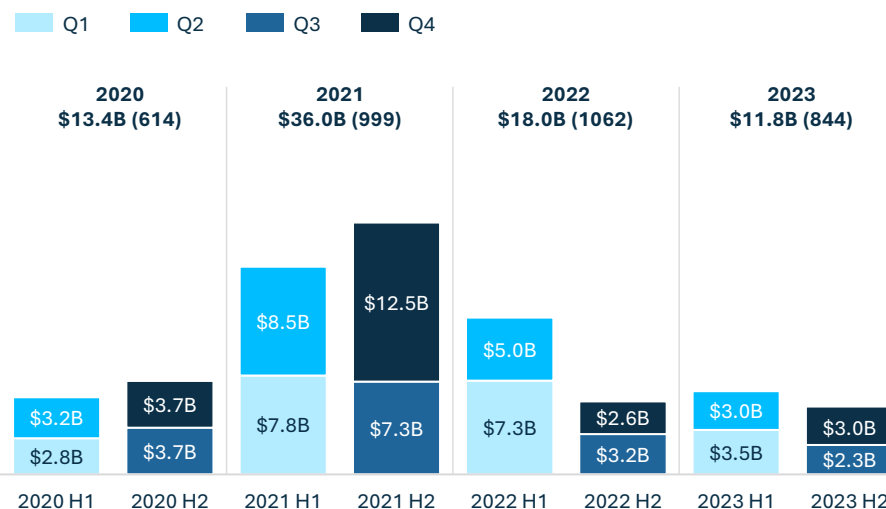
If it looks like a bubble, it may pop like one, too. The pandemic ushered in a massive wave of investment, as all eyes turned to digital healthcare, including the eyes of traditional tech investors. At the peak of the VC boom in H2 2021, healthtech companies raised \$20B. Two years later, that has dropped roughly 75% to \$5B. One gauge of the decline is the drop in seed and Series A valuations. While many sectors have seen stability in early-stage valuations, bolstered by an influx in investor interest, healthtech's earliest-stage deals have seen the opposite trend with valuations dropping 33% in the last year. It may take time for this sector to reset as many healthtech companies that raised at large valuations in 2021 are grappling with limited options to avoid a down round. Companies face more scrutinous investors and are working against heightened demand for strong-unit economics and paths to profitability.

One bright spot within healthtech is value-based care (VBC). Companies in this space provide VBC directly, or enable providers to adopt VBC models. Healthtech companies are facing such challenges that the measure of success is changing. For late-stage companies, even strong metrics may result in a flat round. One example is Aledade, which secured a Series F deal of \$260M at a 1.05x step-up.

## Seed/Series A<sup>1</sup> Dollars and (Deals)



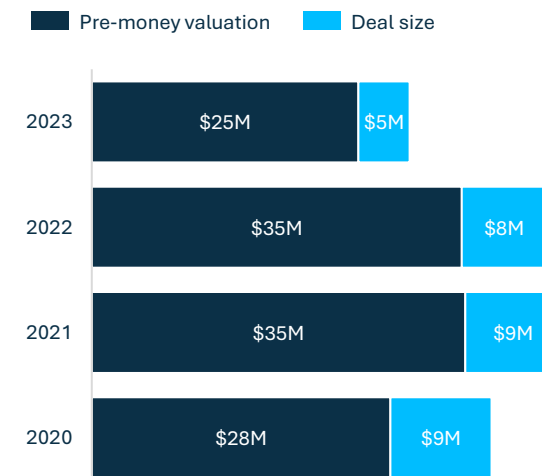
## Total Dollars and (Deals)



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Source: PitchBook and SVB proprietary data.

## Median Seed/Series A Valuations



## Largest 2023 Deals

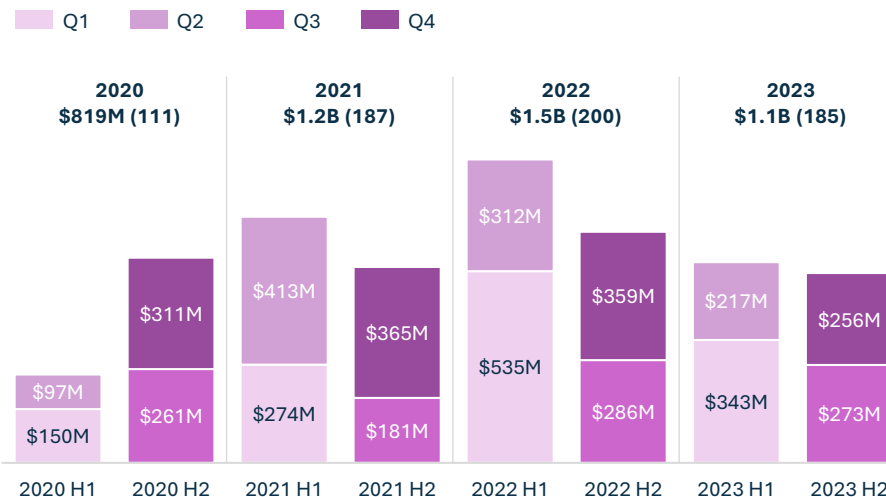
Seed/Series A		Later stage	
	\$203M		\$1.3B
	\$139M		\$375M
	\$60M		\$315M
	\$57M		\$260M
	\$50M		\$166M
	\$31M		\$125M

# Dx/Tools Investment

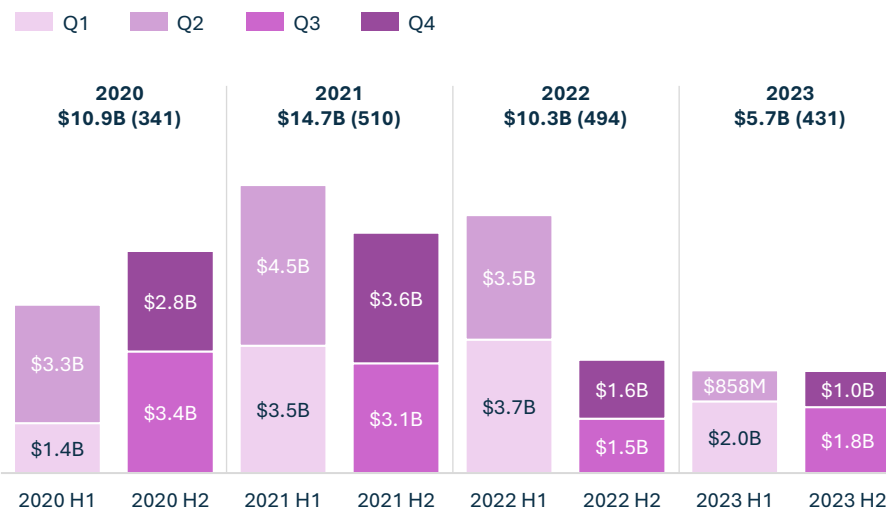
The VC headwinds that emerged in 2022 only intensified in 2023. However, fundamental market drivers for dx/tools companies remained strong, with encouraging clinical data reigniting the promise of personalized medicine and advanced therapeutic modalities. Seed/Series A activity remained resilient, dropping from the market's peak but remaining well-above pre-pandemic levels. This data reinforces market anecdotes that Series A deal activity revolves around top-tier profiles with a mixture of veteran management teams and compelling stories at a "2023 market price."

While dx tests and R&D tools saw nearly 50% losses in YoY investment dollars, dx analytics saw the smallest drop of 34%. Dx analytics companies with AI-driven drug discovery platforms were a bright spot, as they meaningfully accelerate time to clinic and cut costs across the drug development pipeline – a concern that's top of mind now as capital efficiency is imperative. They also partner with oftentimes deep-pocketed pharma players. We expect for AI-driven drug discovery companies to maintain high valuations and robust growth. Another bright spot is personalized medicine (including personalized clinical decision support), namely Artera for cancer treatment, Viome for metabolic health, Heartflow for coronary artery disease and RapidAI for strokes.

## Seed/Series A<sup>1</sup> Dollars and (Deals)



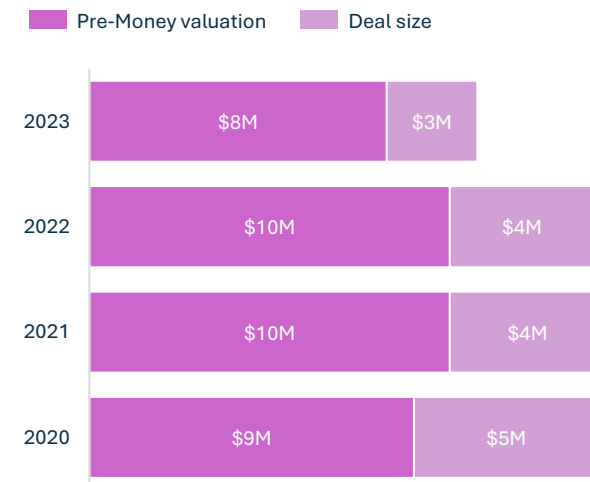
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Source: PitchBook and SVB proprietary data.

## Median Seed/Series A Valuations



## Largest 2023 Deals

Seed/Series A		Later stage	
ARTERA	\$90M	CELLARES	\$255M
Precede Biosciences	\$57M	HeartFlow	\$215M
Magnet Biomedicine	\$51M	ASIMOV	\$175M
NEW BIOLOGIX	\$50M	colossalO	\$150M
EvolutionaryScale <sup>2</sup>	\$40M	Harbinger Health	\$140M
vivodyne	\$38M	ascend gene & cell therapies	\$131M
delvebio	\$36M	Iambic	\$103M



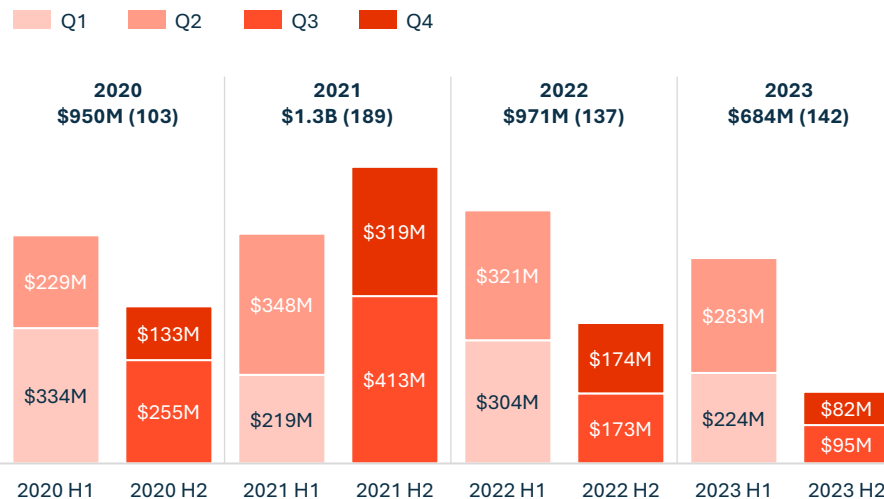
# Device Investment

While other sectors benefited from the spotlight on health innovation during the pandemic, device companies experienced a setback. When COVID-19 hit, elective procedures were largely paused, and supply chain congestion/backlogs impacted multiple manufacturers and devices. That has created a knock-on effect impacting revenue for device companies, which rely heavily on outpatient procedures. The space is still recovering.

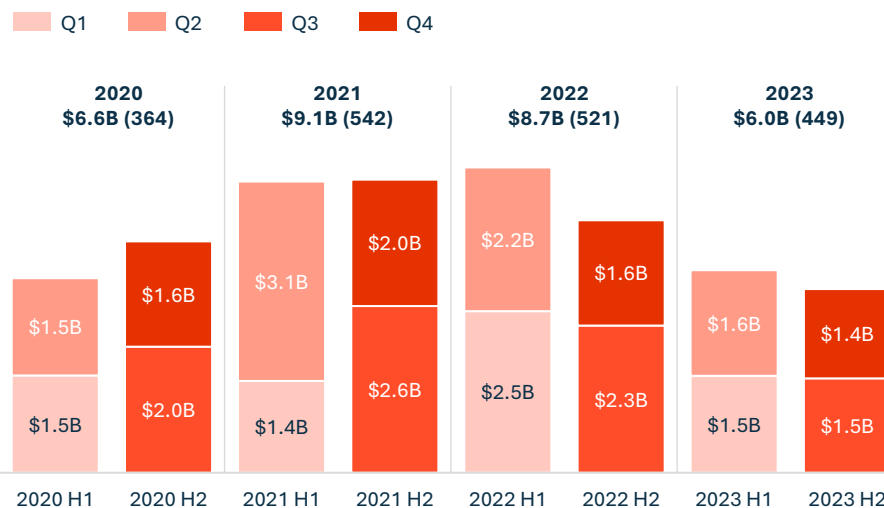
Investors appear to be shifting attention from new early-stage deals toward portfolio preservation to help existing companies ensure they have enough cash to hit meaningful clinical milestones. Investor appetite for early-stage technology with long roads to commercialization /payer reimbursement may be lowered, as we are in arguably the most difficult fundraising time and R&D costs aren't lowering. In our mid-year update, we noted device companies are facing increased challenges selling devices to hospitals. This remains true as providers face mounting cost pressures, driving device companies to pivot from "value" to "willingness to pay," as their technology must have clearer paths to monetization.

Brain-computer interface devices made waves this year, with Elon Musk's Neuralink raising a \$323M Series D funding round lead by Founders Fund, Peter Thiel's venture capital firm. Neuralink will use the cash to bring its device into the clinic.

## Seed/Series A<sup>1</sup> Dollars and (Deals)

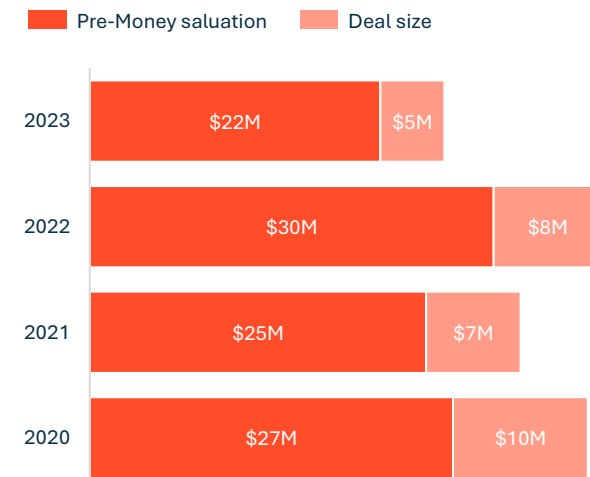


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Source: PitchBook and SVB proprietary data.

## Median Seed/Series A Valuations



## Largest 2023 Deals

Seed/Series A		Later stage	
COMPANION SPINE	\$60M	NEURALINK	\$323M
EVIDENT VASCULAR	\$35M	CMR SURGICAL	\$165M
Theradaptive	\$32M	Distalmotion	\$150M
AVS	\$29M	SETPOINT MEDICAL	\$145M
Axena HEALTH	\$27M	Cognito Therapeutics	\$129M
Mozarc medical	\$22M	Beta Bionics	\$100M



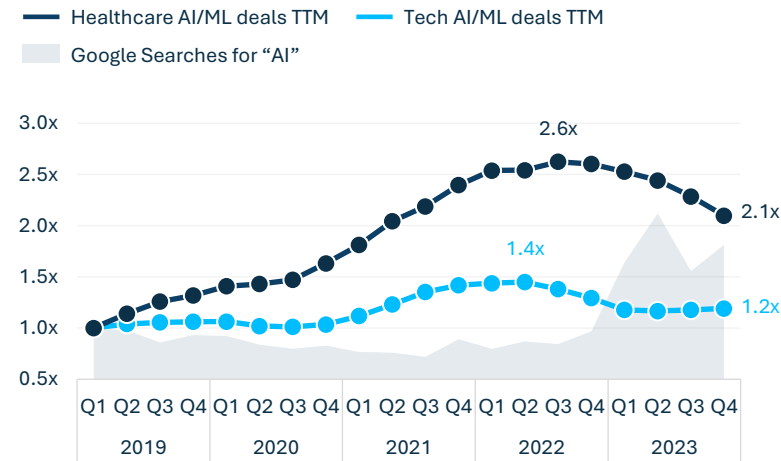
# Spotlight: AI in Healthcare

# The Chatbot Will See You Now

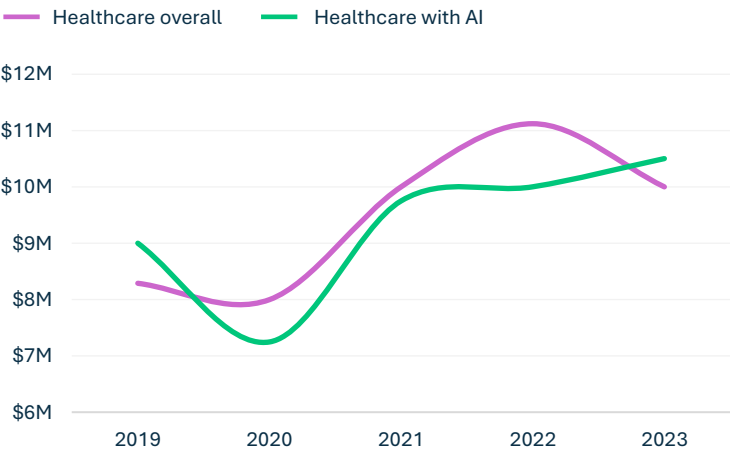
The generative AI revolution is touching every corner of the innovation economy, setting off debates as much about the ethics and controls applied to this powerful technology as the capabilities itself. Perhaps no arena represents the promises and risks of AI so acutely as healthcare. Researchers hope that large language models (LLMs) such as OpenAI’s ChatGPT and Google’s Bard will greatly accelerate the search for cures to our most devastating diseases. And the stakes couldn’t be higher.

Doctors are already using AI to monitor patients’ vital signs at home, capture notes during appointments and to predict patient outcomes. Enabling these capabilities is a growing contingent of healthcare and life sciences companies delivering AI solutions to optimize the medical field. VC deals for healthcare AI have jumped 2.1x since 2019, a rate nearly double the increase for AI in tech overall. About 15% of healthcare companies receiving VC funding in the last year have incorporated AI and machine-learning technology into their products. Seed-stage valuations now favor healthcare companies using AI over those that don’t. But this technology is far from bulletproof. Studies have shown racial bias in predictions and called into question the accuracy and efficacy of diagnostic models. In response, new federal standards are being considered. One proposal calls for “nutrition labels” to measure the validity and fairness of AI models.

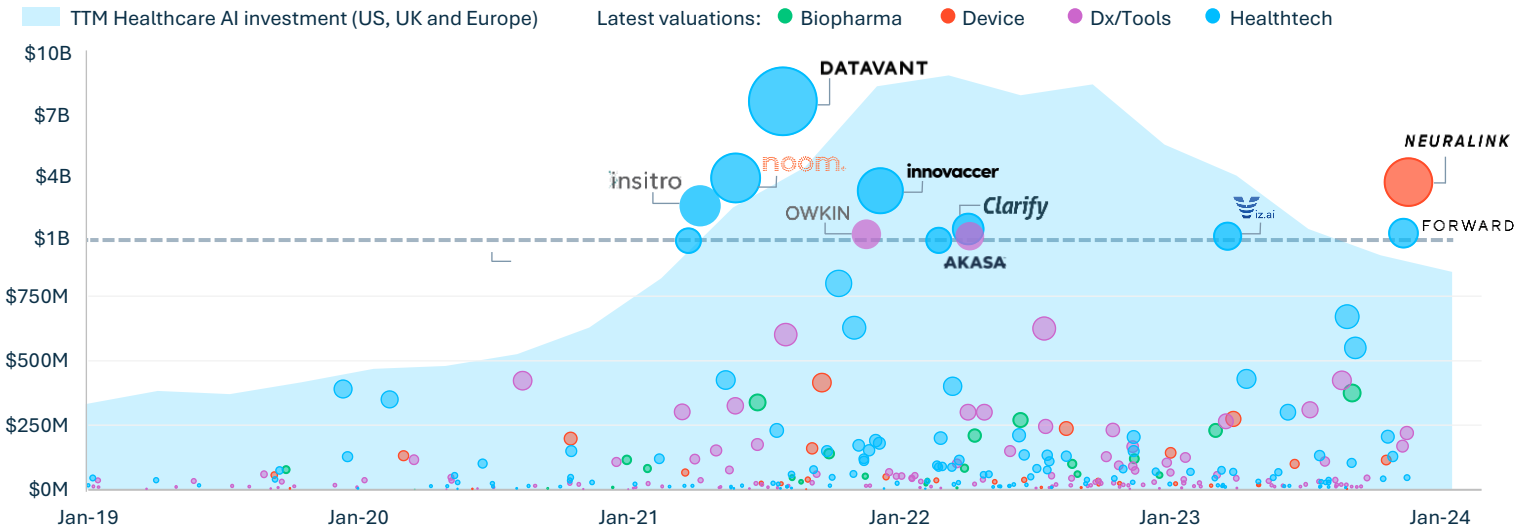
Index: Growth in AI VC Deals in US Tech v. US Healthcare Companies<sup>1</sup>



Median Seed-Stage Valuations for Healthcare Companies With and Without AI



VC Investment in Healthcare AI Companies and Latest Valuations



















Note: 1) AI includes companies tagged with tech vertical of "AI/ML" in pitchbook. ML is machine learning.  
Sources: PitchBook and SVB analysis.

# Healthcare Companies Deploying AI by Function and Valuation












US, EU AND UK | 2017-2023

The list of AI-enabled healthcare companies is getting longer each month as new use cases emerge and prove viability. Companies are deploying neural networks and large language models across every sector of the healthcare value chain. The biggest area seeing investment is within a space we define as alternative care. Companies such as Livongo, Forward and Lark are using AI to monitor health metrics and optimize patient outcomes. Other companies are using AI to optimize clinical trials, develop better imaging technology or create provider tools such as notetaking chatbots. But the technology is still early and it carries risks. Missing from the list is Olive.AI, which was valued at \$4B in 2021 and was seen as one of the most promising AI companies until its abrupt collapse and bankruptcy in November.

## Healthtech

<div>    Alternative Care, \$24.9B</div>	<div>    Clinical Trial Enablement, \$8.9B</div> <div>  Healthcare Navigation, \$1.5B</div> <div>  Wellness and Education, \$1.2B</div>
<div>    Provider Operations, \$16.8B</div>	

## Dx/Tools

<div>     Patient analytics and testing, \$7.5B</div>	
<div>      Drug Discovery/R&amp;D, \$4.7B</div>	

## Device

<div>  Neurology, \$3.6B</div>	<div>   Non-invasive Monitoring, \$0.8B</div>
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## Biopharma

<div>   Platform, \$4.9B</div>	<div>   Oncology, \$0.7B</div> <div>  Rare Disease, \$0.7B</div>
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# Healthcare Exits: M&A and IPO Trends

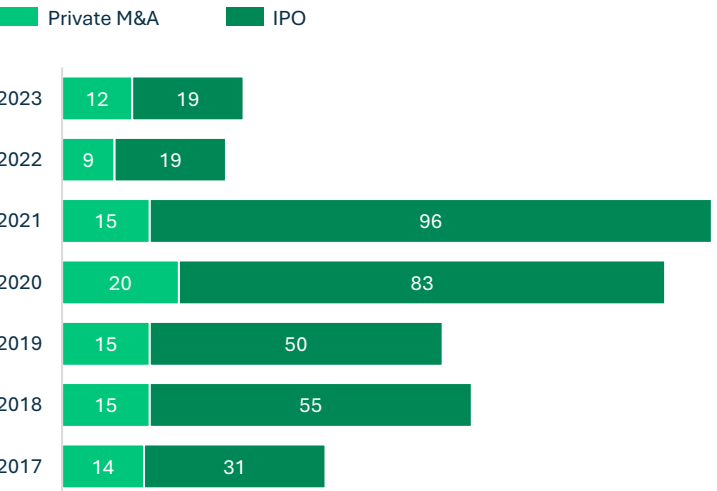
# Biopharma Exits

By some measures, late-stage biopharma companies are fairing better than other healthcare sectors. While exits remain muted compared to historic norms, companies with strong clinical results are finding a path to public markets. There were 19 IPOs in 2023, more than all other healthcare sectors combined. IPOs continue to be reserved for the highest-caliber companies with more robust clinical milestones. The vast majority (84%) of IPO's this year were Phase II and beyond, up from 68% in 2021. Notably, there were no pre-clinical IPOs this year, while there were 25 in 2021 (26% of total IPO activity). Including M&A activity, the \$30B in disclosed value for exits in 2023 is on par with 2022 as of this writing and could exceed it if any closed deals are delayed in their reporting.




The M&A market for publics has been red-hot this year, as pharmas (with war chests of cash) continue to focus on top publics with promising data. This year has seen 29 deals with a median deal size of \$1.4B (65%+ were over \$1B). 2022 saw just 25 deals and only 40% over \$1B.

Some investors see increased regulatory scrutiny as a risk factor for exits. Several high profile tech deals have been scuttled by regulators in the last few months over anti-trust concerns and issues of competition. In December, the FTC sued to block Sanofi's \$755M licensing deal with Maze Therapeutics. The prospect of a more arduous approval prospect could deter certain M&A deals and further limit the options for exit-ready companies.

## Biopharma Private M&A Deals & IPOs

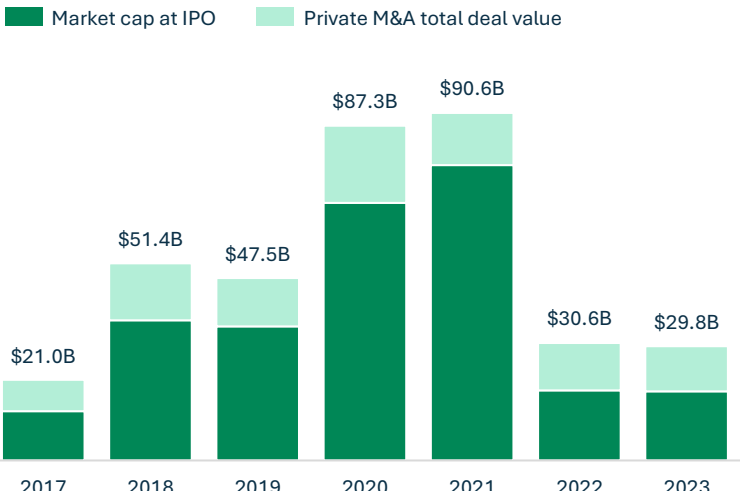


## 2023 Largest US IPOs by IPO Market Cap

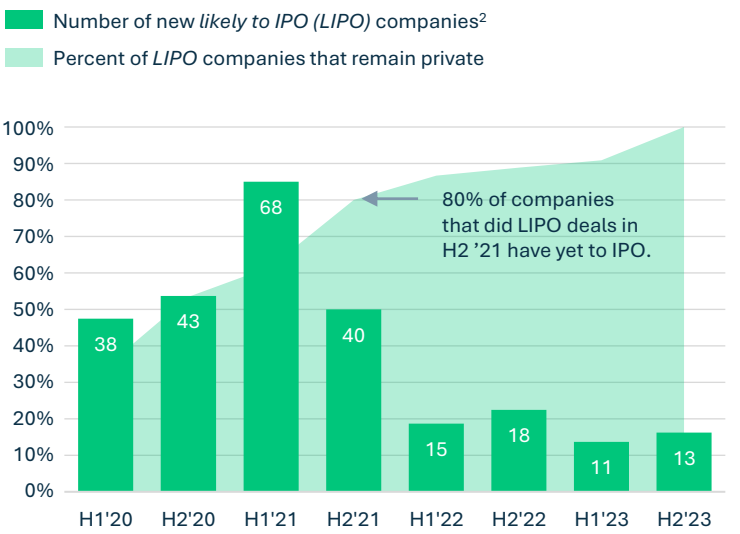
	 Neumora	 ACELYRIN	 RayzeBio <sup>1</sup>
SVB Indication	Neurology	Platform	Oncology
Stage at IPO	Phase III	Phase III	Phase III
IPO Price (\$) (Date)	17 (9/15/23)	18 (5/5/23)	18 (9/15/23)
Market Cap at IPO (\$)	2.6B	1.7B	1.2B
Price (\$) 12/31/23	17.05	7.46	62.17
Price +/-	0%	-59%	245%
Market Cap (\$) 12/31/23	2.6B	726M	3.8B

Notes: 1) On 12/26/2023 Bristol Myers Squibb announced a definitive merger agreement to acquire RayzeBio for \$62.50 per share in cash, for a total equity value of approximately \$4.1 billion. 2) The likely to IPO (LIPO) list tracks the top 15 crossover-funded private mezzanine deals (\$40M+) as a proxy for IPO sentiment and pipeline.  
Sources: PitchBook and SVB analysis.

## Biopharma Exit Values by Year



## Biopharma IPO Backlog



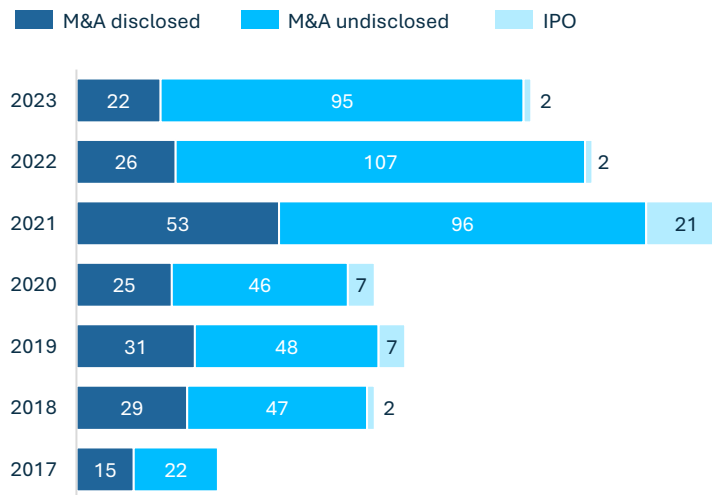
# Healthtech Exits

Acquisitions are accelerating for healthtech companies with few disclosed deals reflecting the strained environment that many of these once highly valued companies now find themselves in. At least 117 VC-backed healthtech companies were acquired in 2023, but only about 19% of the deals disclosed the price, which may suggest many of the deals favored buyers. These undisclosed deals had a knock-on effect on the tally of total exit value, which fell to its lowest reported total in at least six years.

Healthtech companies have faced tough challenges during the VC downturn. The space received immense interest from investors during the pandemic when telehealth, virtual care and other digital health products surged in popularity. Crossover and so-called “tourist” investors entered the sectors in droves, driving sky-high valuations that have been tough for companies to grow into as interest in this sector waned after the pandemic.

Despite those challenges, there are bright spots to be found. VBA Software, a payments platform for providers, was acquired for \$260M by the PE firm Spectrum Equity. The company has raised just \$3M of VC. In another profitable return for investors, the healthcare e-commerce site MDsave was acquired for \$150M, five times more than the \$27M it raised from VCs.

## Healthtech Private M&A Deals & IPOs

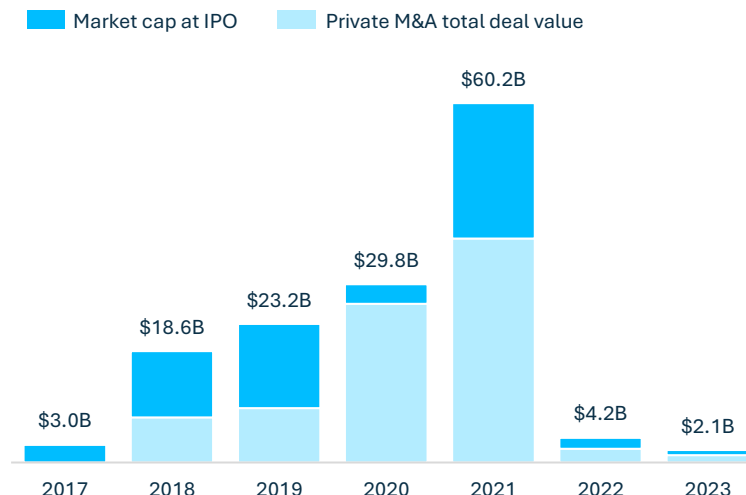


## Healthtech M&A by Indication 2017-2023

Indication	M&A Deals	Total Deal Value	\$B+ Exits	Median Years to Exit
Provider Operations	318	\$30.2B	5	5.4
Alternative Care	138	\$16.9B	6	4.7
Wellness & Education	85	\$3.0B	1	4.1
Clinical Trial Enablement	53	\$3.1B	1	5.3
Medication Management	37	\$3.9B	1	5.8
Healthcare Navigation	33	\$1.9B	1	4.0

Sources: PitchBook and SVB analysis.

## Healthtech Exit Values by Year



## Healthtech M&A Deals H2 2023

Target	Acquired by	Deal Size	Total Raised	Indication
VBA Software	SPECTRUM EQUITY	\$220M	\$3M	Provider Operations
MD save	tendo	\$150M	\$27M	Healthcare Navigation
PATHOLOGY WATCH	SONIC HEALTHCARE	\$130M	\$74M	Provider Operations
mediox	OptimizeRx	\$95M	\$250K	Provider Operations
InstantScripts	Wesfarmers	\$94M	-----	Alternative Care
Populi	DEFINITIVE HEALTHCARE	\$52M	\$6M	Provider Operations

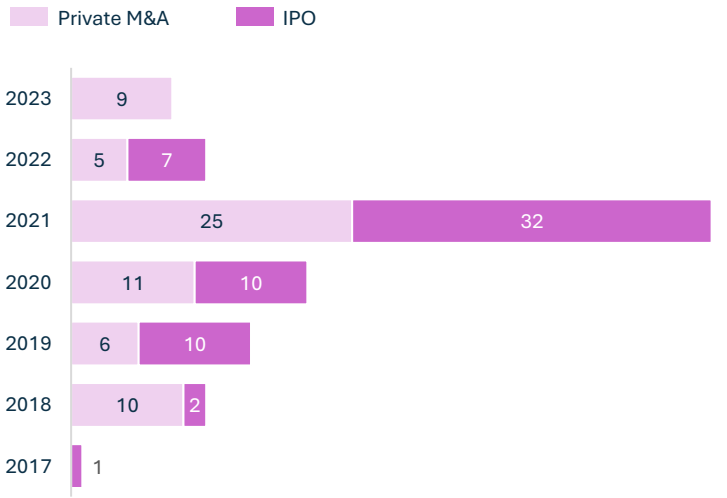
# Dx/Tools Exits

Similar to healthtech, the diagnostic tools sector is also facing a tougher environment post-COVID. Demand spiked for disease testing and diagnostics capabilities during the pandemic. In 2021, a staggering 32 dx/tools companies went public through IPOs, an amount more than all other years since 2017 combined. That number slowed to a modest seven in 2022, and zero in 2023, marking the first year with no global venture-backed IPOs since 2016.

While M&A activity picked up slightly this year, there were few successful outcomes for founders. Only \$1.1B in acquisitions was disclosed, the lowest amount since 2017 and a fraction of the \$42B in exit value that was realized in 2021.

Leading diagnostics corporates in the lab equipment space have seen sales slow as their customers reel in expenses following an increase in spending during the pandemic. Agilent Technologies and Thermo Fisher laid off workers and closed facilities this year. Still, corporate buyers are using the tougher conditions to scoop up bargains in the M&A market. Among the noteworthy deals, Quest Diagnostics bought the tumor detection company Haystack Oncology for \$392M, and GE HealthCare bought the AI-enabled disease detection platform Caption Health for \$150M, twice what it raised in VC, while Philips bought the image analysis firm DiA for \$100M, over four times its capital raise.

## Dx/Tools Private M&A Deals & IPOs

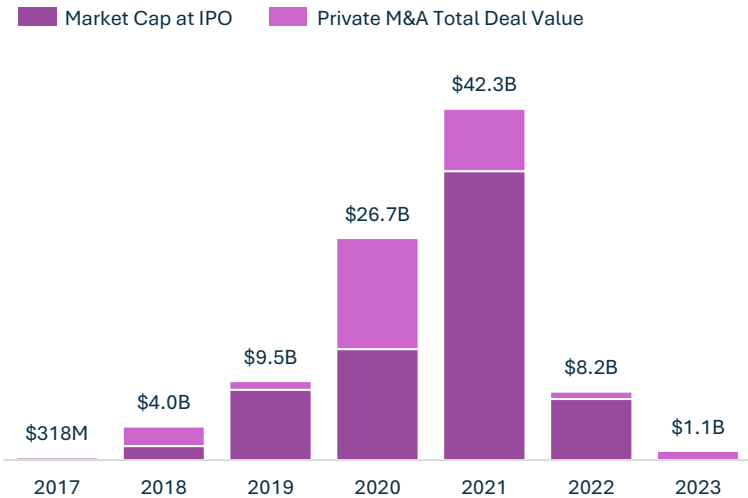


## Dx/Tools M&A by Indication

2017-2023

Indication	M&A Deals	Total Deal Value	\$B+ Exits	Median Years to Exit
Dx Tests	20	\$16.0B	2	6.2
R&D Tools	31	\$8.2B	1	5.6
Dx Analytics	13	\$1.9B	0	6.4

## Dx/Tools Exit Values by Year



## DX/Tools M&A Deals

FY 2023

Target	Acquired by	Deal Size	Total Raised	Indication
HAYSTACK ONCOLOGY	Quest Diagnostics	\$392M	\$62M	Dx Analytics
Lunaphore	biotechne	\$186M	\$82M	Dx Analytics
Caption Health	GE HealthCare	\$150M	\$70M	D&D Tools
DIA IMAGING ANALYSIS	PHILIPS	\$100M	\$22M	Dx Analytics



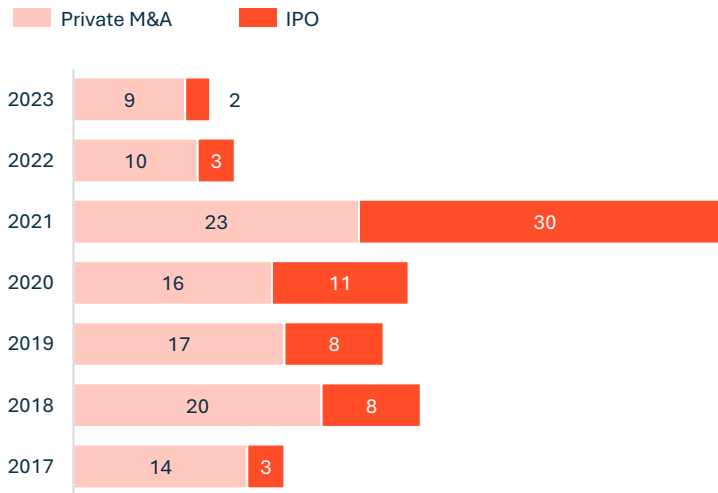
# Device Exits

As investors take more time for due diligence, one of the sectors feeling that drawdown the most is devices. Medical devices tend to be tied most to elective procedures, which slowed during the pandemic. This delayed the development of many device companies and has had a knock-on effect in exit markets, which have slowed to levels not seen since 2017.

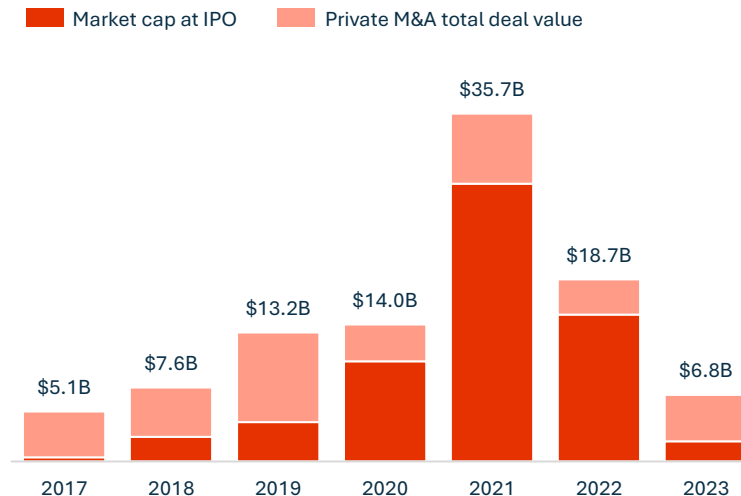
In 2023, the disclosed value of M&A deals and IPOs for device companies was \$6.8B, a 63% drop from 2022. Amid the slowdown, there were bright spots. Dermatology company Kerecis, which uses fish skin to treat burns, was acquired by Coloplast for \$1.3B, one of the largest M&A exits for a device company in the last seven years. Neurology startup Relieva was acquired by Boston Scientific for \$850M. The company had raised \$272M for its Intracept® Procedure to alleviate back pain.

A notable absence on the top deals table is surgical devices. This category has accounted for the most M&A deals of the last seven years, but these companies also take the longest to develop. As deals have slowed, it's likely that investors are being especially cautious evaluating surgical device startups, which may be better capitalized for a long wait and less willing to take an unfavorable exit.

## Device Private M&A Deals & IPOs



## Device Exit Values by Year



## Device M&A by Indication

2017-2023

Indication	# M&A	Total Deal Value (\$B)	# \$B+ Exits	Median Years to Exit
Surgical	11	7.8	1	8.5
Cardiovascular	16	5.8	0	4.4
Vascular	17	5.4	1	6.3
Orthopedic	17	3.3	0	8.2
Uro/Gyn	8	3.1	0	8.6
Non-Invasive Monitoring	7	2.6	1	7.6
Dermatology	1	1.3	1	9.8

## Device M&A Deals

H2 2023

Target	Acquired by	Deal Size	Total Raised	Indication
kerecis	Coloplast	\$1.3B	\$146M	Dermatology
relieva	Boston Scientific	\$850M	\$272M	Neurology
Palette	Teleflex	\$600M	\$220M	Platform
UROTRONIC	Laborie	\$600M	\$61M	Uro/Gyn
LimFlow	INARI	\$415M	\$132M	Vascular
LAMINAR	Johnson & Johnson	\$400M	\$67M	Cardiovascular

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