HSBC Venture Healthcare Report

I Knew You Were Trouble

Up-cycle frothiness leads to down-cycle ramifications

Mid-Year Report 1H 2025

Lead Author:

Jonathan Norris, Managing Director

jonathan.norris@us.hsbc.com

HSBC Innovation Banking

HSBC Bank USA, N.A. Member FDIC

Lead Author

Jonathan Norris joined HSBC's Innovation Banking Division in April 2023. He manages healthcare venture relationships and works with investors and companies on commercial banking and debt products.

In addition, for more than a decade, Jonathan has written comprehensive reports on the venture healthcare ecosystem, covering venture fundraising, investment, valuations, and exits. These reports have been widely cited in the ecosystem, and he often speaks at major investor and industry conferences. He has more than 26 years of healthcare banking experience.

Jonathan earned a B.S. in business administration from the University of California, Riverside, and a J.D. from Santa Clara University.

Jonathan Norris
Managing Director
Jonathan.Norris@us.hsbc.com
Mobile: 650.885.6981
San Francisco, CA

To learn more about HSBC Innovation Banking and how we can help with commercial banking solutions, venture debt and high-value perspective on the industry, please visit **HSBC**.

HSBC Venture Healthcare Report

HSBC Venture Healthcare Report: 1H 2025 Recap

General Overview

From 2020 through mid-2022, frothiness in the public and private healthcare market led to record highs in deals, investments, M&A and IPOs. However, as the venture healthcare industry moved into a down cycle in 2023, marked by valuation uncertainty and limited exit opportunities, new investment appetite declined and valuation inflection points for new deals became harder to meet. In response, many private companies were forced to secure insider rounds[1]. Although 2024 saw increased investment, this growth was concentrated in a few mega round deals, leaving many venture-backed companies still struggling to secure a new investor-led fundraise. 1H 2025 saw investment rise and deal volume drop, reflecting a market defined by both mega rounds and shut-downs. Only the top 15% of deals were able to raise new capital in 1H 2025, often at step-ups, while many companies reliant on insider rounds have had to pursue consolidation or shut-down. Q1 2025 was dominated by $100M+ financings and set a two-year high for invested capital. However, continued headwinds and uncertainty led to a 20% drop in Q2 investment.

Biopharma

- **First-financing drop-off:** First-financing dollars were strong in Q1 2025, led by four $200M+ deals. However, Q2 saw a significant drop as market uncertainty fueled investor fears. Traditional venture investors have shifted away from smaller deals, instead focusing on large dollar, large syndicate first-financings. The 20 largest deals accounted for 86% of first-financing capital.
- **Oncology first-financings down:** Oncology first-financing dollars, and overall investment fell significantly in 1H 2025, as a crowded clinical oncology landscape and concerns about competition from later-stage China assets have quieted interest.
- **Overall sector highlights:** Investment dropped off pace with a particularly weak Q2. In 1H, 37 $100M+ mega rounds accounted for 57% of all biopharma dollars. Neuro, metabolic and ophthalmology sectors showed strong 1H 2025 fundraising totals.
- **M&A and IPO activity:** M&A continued to land strong up-front median deal values ($763M) and $1B+ total deal value exits, more than half of which were preclinical or phase I companies. IPO activity was in a holding pattern after only four IPOs in Q1 2025.

Dx/Tools

- **First-financing slowdown:** First-financing activity in 1H 2025 is on pace for a four-year low, as many VCs exited early-stage deals amid a difficult exit environment. Notable bright spots in first-financing included increased corporate investor support and a rise in AI-driven technologies within R&D tools and dx analytics, which funded six of the eight largest deals.
- **Overall investment highlights:** Mega rounds continued, providing strong overall investment numbers; but those dollars coalesced around fewer deals. More Series A and B companies were unable to find new investors, leading to consolidations and shutdowns.
- **Subsector overview:** R&D tool investment was up, driven by computational drug-discovery deals. Dx test activity was down overall, but there was notable activity in sepsis detection companies. Dx analytics increased investment in both cardiovascular and platform technologies.
- **M&A and IPO activity:** Private M&A fell to just two venture-backed deals amid acquirer apathy. However, Tempus, which went public in 2024 at a 50% discount has since become a bright spot, with its 1H 2025 market cap doubling its IPO value.

Med Device

- **First-financing struggles:** After a strong Q1, first-financing dropped significantly as investors prioritized later-stage pivotal trials and commercial rounds. Neuro, cardiovascular and dental sectors saw increased first-financing dollars.
- **Overall investment highlights:** At midyear investment is on pace to set an all-time record for med device investment. The strong investment dollars were led by a $650M investment in Neuralink and 27 other $50M+ rounds. Neuro and cardiovascular investment dollars surpassed 2024 annual totals at midyear.
- **AI a key part of top deals:** Six of the top ten med device deals leveraged AI as a core part of their business. These deals totaled $1.3B, or 25% of total med device dollars for 1H 2025.
- **M&A down but 2 IPOs debut:** Similar to 1H 2024, M&A slowed in 1H 2025, but the median upfront deal value ($360M) remained historically strong. Two companies, Kestra and Beta Bionics, completed IPOs. Both had strong market caps at IPO and have largely held on to IPO value. Three IPOs in the last 18 months, in a down-market, have provided much-needed exit optionality for companies and investors.

Healthtech

- **First-financing activity rebounds:** After a steep decline in late 2023 and much of 2024, early-stage deal activity began to rebound in 1H 2025. However, sectors like women's health and clinical trials experienced sharp pullbacks in early-stage funding.
- **Hot start, then normalization:** Investment into AI companies took the majority of investment dollars in 1H 2025, with activity peaking in Q1 due to a surge of mega rounds. In Q2, both deals and dollars moderated, returning to a more normalized growth rate compared to prior years.
- **AI and workflow infrastructure dominate**: AI-enabled provider operations platforms remain at the center of investor focus, highlighting the shift toward clinical tools, data integration, and workflow productivity. This trend reflects a preference for scalable, software-heavy models over capital-intensive care delivery approaches.
- **IPO window reopened narrowly:** Hinge Health cracked the IPO ice with a strong public debut (up 30% from IPO), followed by Omada Health, which traded more modestly post-listing. These two listings revived IPO optimism, but the IPO window remains selective.

Data from PitchBook as of 6/30/25. [1]Insider rounds defined as equity/convertible financings where only insiders participate, typically at smaller amounts. [2]Up round calculated using Pitchbook valuation data: Divide new pre-money valuation by previous round post-money valuation – if greater than one, deal is labeled as an up round. Data sources: PitchBook, company websites, internal analysis.

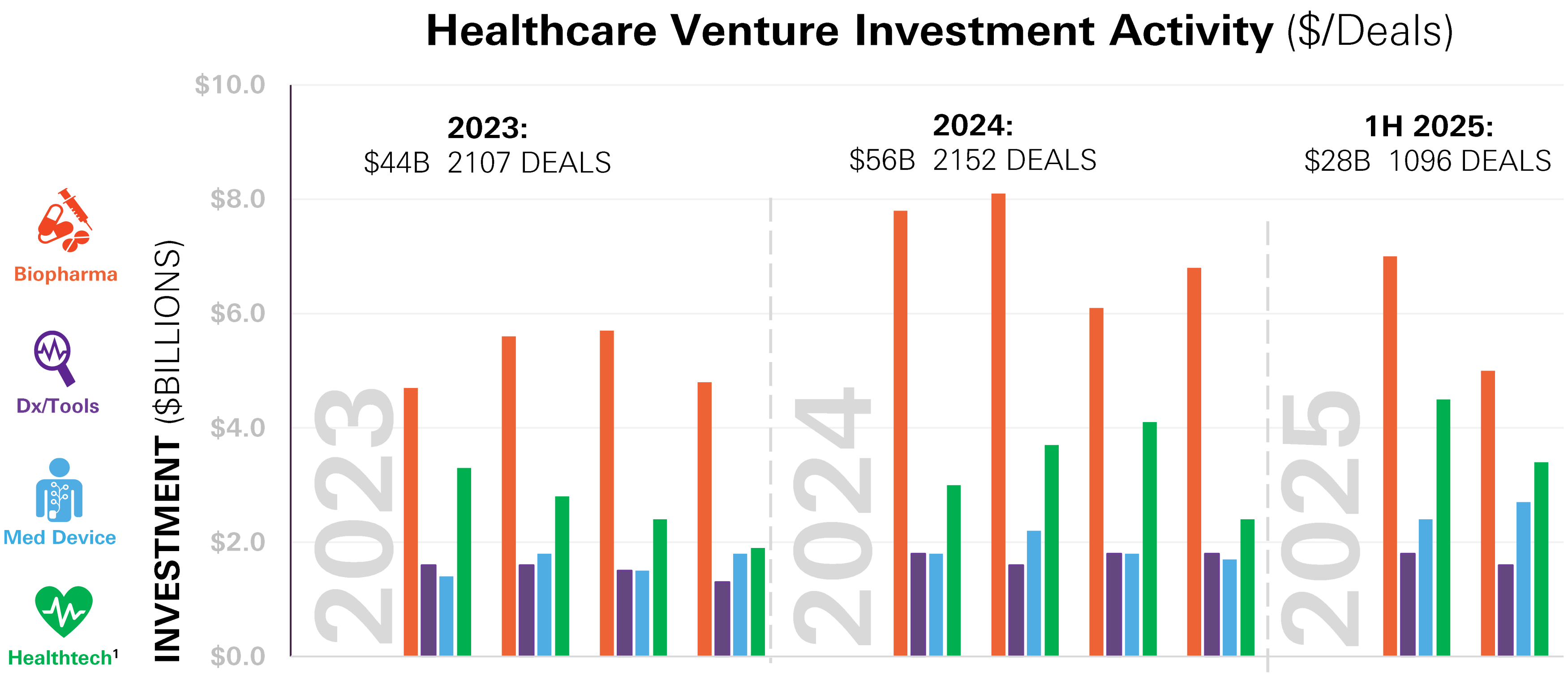
Venture Healthcare Overview

1H 2025

HSBC Innovation Banking

Venture Capital Investment by Healthcare Sector 2023–1H 2025 US & Europe

Two-year high for Q1 investment transitions to Q2 pull-back as uncertainty persists



Quarterly Totals	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
$ Invested	$11.1B	$11.8B	$11.1B	$9.7B	$14.4B	$15.6B	$13.7B	$12.7B	$15.7B	$12.7B
# Deals	591	530	498	488	574	558	446	574	592	504

2024 Investment increased, but trouble remained: Insider rounds[2] prevailed in 2023, dropping investment 30% compared to 2022. In 2024, we noted renewed new investment appetite and increased invested capital. While investment was up, the deal pace was similar to 2023, with a new trend emerging: the $100M+ mega round. Investors clustered together in large syndicates, raising large financings that were often two rounds combined, with strong support around the table if companies needed more cash. There were 154 $100M+ mega rounds in 2024, accounting for just 7% of deals but almost half of all investment dollars.

While mega round financings dominated the headlines, companies already on insider rounds struggled to find a new lead investor. Instead, many of these companies secured another smaller round from existing investors (insider extension), providing a final opportunity to find investment or secure an exit. These insider rounds often came in conjunction with aggressive cost cutting designed to extend burn as long as possible.

2025 starts strong but Q2 investment slows down
Q1 2025 started strong, with the biggest investment quarter of the last two years. Mega round deals led the charge, including 20 deals raising outsized financings of $150M or more (12 in biopharma, 6 in healthtech). These 20 deals accounted for one-third of all Q1 investment dollars.

We entered Q2 2025 with significant economic, geopolitical and healthcare industry uncertainty and caution. Historically, this uncertainty leads to conservative investment, and we saw deals, dollars, and mega rounds drop across three of four sectors. Investment was down 20% compared to Q1 2025, with nearly100 fewer deals quarter over quarter.

Data from PitchBook as of 6/30/25. [1]Healthtech deals that overlap with other healthcare sectors are not counted in the Healthtech totals in this slide – including overlap, Healthtech investment was $12.8B in 2023, $14.7B in 2024 and $8.7B in 1H 2025. [2]Insider rounds defined as equity/convertible financings where only insiders participate, typically at smaller amounts. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Biopharma Early Stage: First-Financing Analysis (Seed/Series A)

1H 2025

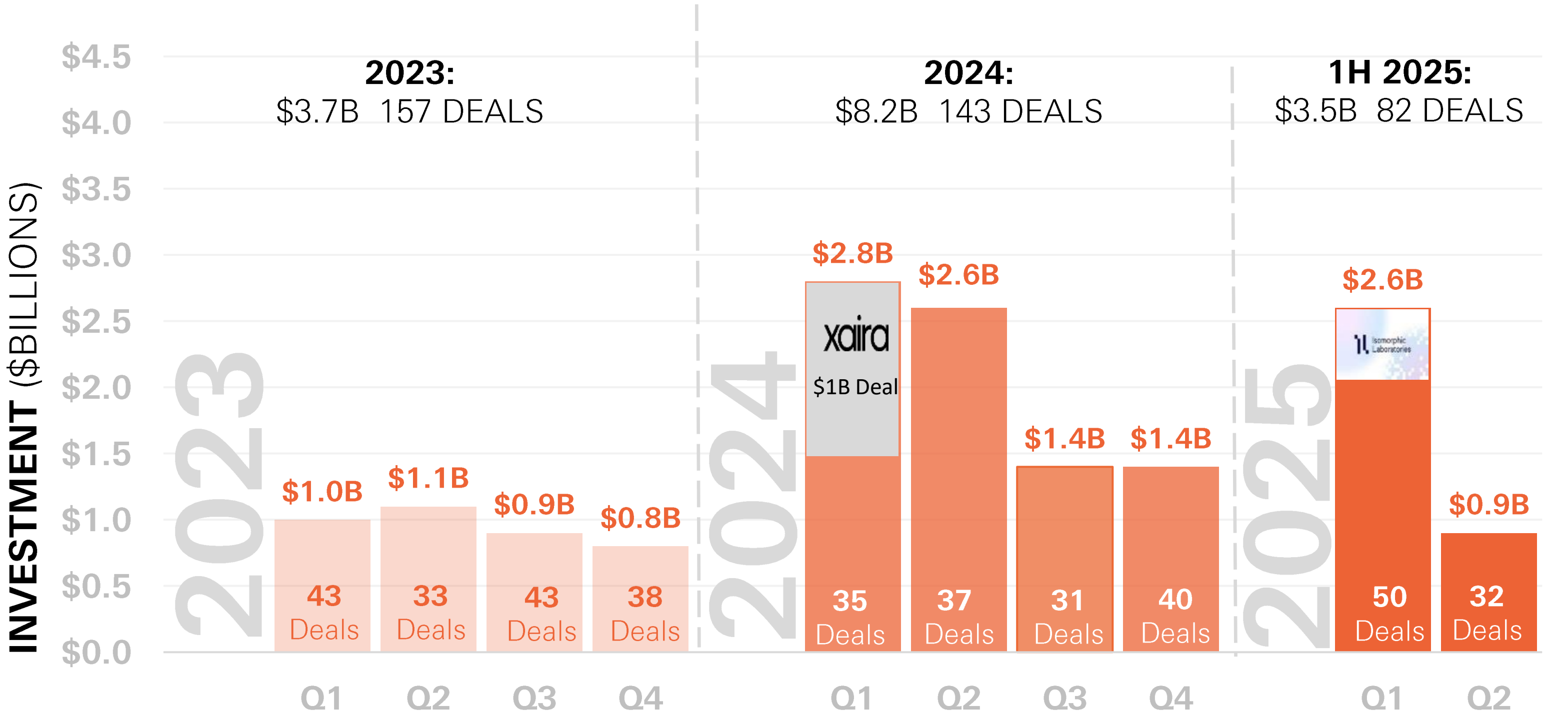
HSBC Innovation Banking

Biopharma First-Financing[1] Analysis

2023–1H 2025 US & Europe

Large Q1 fueled by mega rounds; major pullback in Q2

Biopharma First-Financing Investment Activity ($/Deals)



2024 saw a surge in first-financing mega rounds
In 2024, public market access remained limited, with investors particularly concerned with next round risk. Investors found it difficult to raise new funds for their existing portfolio companies. For new first-financing deals a pack mentality emerged, specifically $100M+ mega rounds backed by a large group of deep-pocketed investors. There were 20 mega round first-financings in 2024, which accounted for 70% of all first-financing investment.

A tale of two quarters (Peaks in Q1, pullback in Q2)
In Q1, first-financing dollars swelled, as strong private M&A and IPOs in January buoyed investor sentiment. Mega rounds continued, with the largest six deals in 1H 2025 all announced in Q1 and totaling $1.9B (including Isomorphic Labs at $579M). The median deal size for those six deals was $200M. Those mega delas accounted for 73% of Q1 first-financing dollars, leaving little capital for others. Traditional biopharma VCs participated in mega rounds but largely stayed away from smaller investments. In Q1, only two deals under $50M were backed by a name brand firm, TRIMTECH (SV Health) and Commit (Novo).

Q2 saw heightened cautiousness in the broader market, influenced by key biopharma concerns including tariffs, grant funding, and changes in the FDA. Cautiousness typically drives conservatism in investing, and Q2 first-financing saw the lowest output in five quarters. While mega rounds declined to just two, there were eight $50M+ financings in Q2, totaling $739M, or 79% of all Q2 first-financing dollars. We noted only three investments under $50M were made by traditional biopharma investors, Draig (SV Health), Stately (Dimension) and Ten Bay (Sante).

NOTE: For early-stage entrepreneurs: We compiled a list of active investors in pre-seed/seed/A ($2-10M) rounds on slide 12

Data from PitchBook as of 6/30/25. Covers private, venture-backed investment. [1]First-financing defined as initial Seed or Series A financing of $2M+. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Biopharma First-Financing[1] by Indication[2]

2023–1H 2025 US & Europe

Oncology investment declined; varied indications for first-financing mega rounds

Platform ($M/Deals)

2023	2024	1H 2025
$1,074 41	$2,040 31	$1,014 20

Oncology ($M/Deals)

2023	2024	1H 2025
$958 51	$1,386 27	$502 17

Metabolic ($M/Deals)

2023	2024	1H 2025
$103 11	$906 7	$565 5

Autoimmune ($M/Deals)

2023	2024	1H 2025
$192 6	$1,005 10	$394 7

Neurology ($M/Deals)

2023	2024	1H 2025
$494 18	$821 16	$406 16

Orphan/Rare ($M/Deals)

2023	2024	1H 2025
$81 5	$383 3	$13 1

Respiratory ($M/Deals)

2023	2024	1H 2025
$245 1	$731 3	$200 1

Ophthalmology ($M/Deals)

2023	2024	1H 2025
$108 1	$255 8	$3 1

Cardiovascular ($M/Deals)

2023	2024	1H 2025
$145 1	$12 2	$300 1

Trendline Shading ($s)
Year over Year (2025 Annualized)

Upward   Flat   Down

Seed deals increase despite mega rounds
Mega rounds dominated the headlines and capital raised, however seed-stage deals rose notably in 1H 2025, reaching 42 deals compared to just 32 in all of 2024. The seed deal growth was dominated by preclinical stage assets. The top indications were platform and oncology, each accounting for 12 seed deals, and neuro which accounted for 7 deals. The median deal size was $5M, with a median pre-money valuation of $9M (9 deals).

Overall pullback in oncology, platform
The number of 1H 2025 oncology deals is on pace to surpass 2024, but dollars were focused on three big financings, including Callio ($189M), Antares ($177M) and Pheast ($76M). No other first-financing oncology deal was greater than $12M. Platform is in a similar position. Other than Isomorphic Labs ($579M), there were only six companies that raised $20M+, as investors push companies to further development to a lead asset.

Autoimmune, Metabolic continue mega rounds
Autoimmune (Timberlyne and RayThera) and metabolic (Verdiva and NewLimit) each secured two mega round financings, continuing the trend of larger first-financings in these indications. There have been six auto-immune and three metabolic $75+ first-financings in the last 18 months.

Top indications in $50M first-financings
There were 19 $50M first-financing rounds in 1H 2025, compared to 41 in all of 2024. By indication, these included four platform, three deals each in metabolic, oncology, autoimmune, and neuro, and one in both cardiovascular and respiratory. The median pre-money for these $50M+ deals was $76M, up from a median pre-money of $54M in 2024 $50M+ deals.

Data from PitchBook though 6/30/25. Covers private, venture-backed investment. [1]First-financing defined as initial Seed or Series A financing of $2M+. [2]Indication defined as lead asset focus area or focus delineated in the company's website. If preclinical with multiple areas of potential focus, it is defined as Platform. Data sources: PitchBook, company websites, internal analysis.

Thanks to Mind Machine for slide strategy, creative, and design.

Biopharma First-Financing[1] Largest Rounds

1H 2025 US & Europe

Preclinical deals lead large rounds, most deals funded in top biopharma hubs

Largest Investments in 1H 2025

#	Company	Indication Stage	Size of Round ($M)	Deal Date	Location
1	Isomorphic Laboratories	Platform Preclinical	$579	3/31	London, UK
2	Verdiva Bio	Metabolic Phase I	$410	1/9	Guildford, UK
3	Kardigan	Cardiovascular Phase II	$300	1/10	SSF, CA
4	Windward Bio	Respiratory Phase II	$200	1/10	Basel, Switzerland
5	Callio Therapeutics	Oncology Preclinical	$187	3/3	Seattle, WA
6	Timberlyne Therapeutics	Autoimmune Clinicals	$180	1/9	San Diego, CA
7	Antares Therapeutics	Oncology Preclinical	$177	6/10	Boston, MA
8	RayThera	Autoimmune Preclinical	$110	4/4	San Diego, CA
9	Newleos	Neuro Phase I	$94	2/13	Boston, MA
10	ProLynx	Platform Phase II	$91	4/9	SF, CA

#	Company	Indication Stage	Size of Round ($M)	Deal Date	Location
11	Syndeio Biosciences	Neuro Phase II	$90	5/27	Indianapolis, IN
12	Stylus	Platform Preclinical	$85	5/14	Cambridge, MA
13	Pheast	Oncology Phase I	$76	4/10	Palo Alto, CA
14	NewLimit	Metabolic Preclinical	$72	1/7	SF, CA
15	Hillstar Bio	Autoimmune Preclinical	$67	3/25	Boston, MA
16	Helicore	Metabolic Preclinical	$65	1/28	San Mateo, CA
17	Light Horse Therapeutics	Platform Preclinical	$62	1/9	San Diego, CA
18	Vima Therapeutics	Neuro Phase I	$60	5/29	Cambridge, MA
19	Etiome	Platform Preclinical	$50	4/24	Cambridge, MA
20	Tribune Therapeutics	Platform Preclinical	$40	3/26	Stockholm, Sweden

Numbers at a glance (20 largest first-financing deals)
The top 20 deals raised $3.0B, accounting for 86% of all biopharma first-financing dollars.

Stage
Preclinical: 11 deals
Phase I: 4 deals
Phase II: 4 deals

Indication
Platform: 6 deals
Oncology: 3 deals
Neuro: 3 deals
Autoimmune: 3 deals
Metabolic: 3 deals

Location
NorCal: 5 deals
MA: 5 deals
SoCal: 3 deals

Most active investors in largest deals
Novo and Orbimed each invested in four of the top twenty first-financing deals. Omega financed three, while RA Capital, Lily Asia, Arch, Logos and Abingworth each invested in two.

Data from PitchBook though 6/30/25. Covers private, venture-backed investment. [1]First-financing defined as initial Seed or Series A financing of $2M+. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

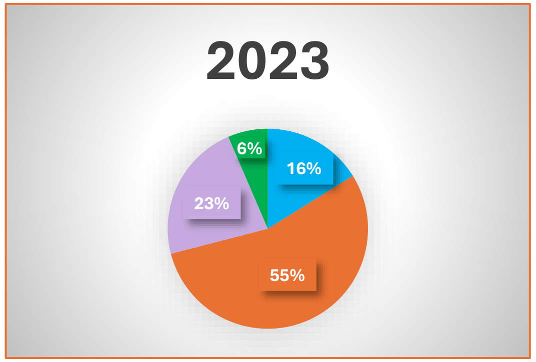
Biopharma First-Financing[1] $50M+ Analysis

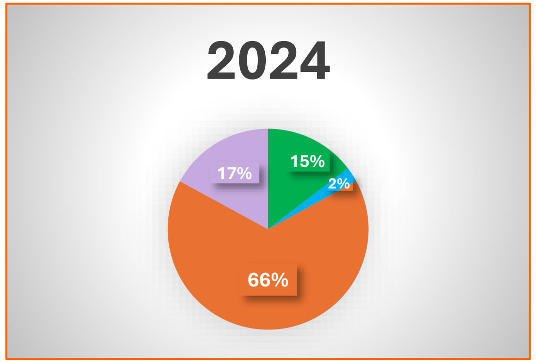
2023-1H 2025 US & Europe

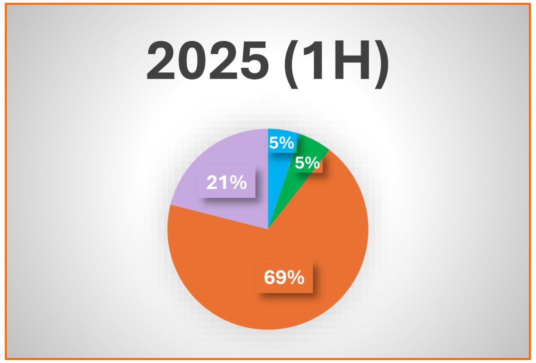
Big First-Financings: Who was the CEO and where was the technology sourced?

Founding CEO Origin $50M+ First-Financings

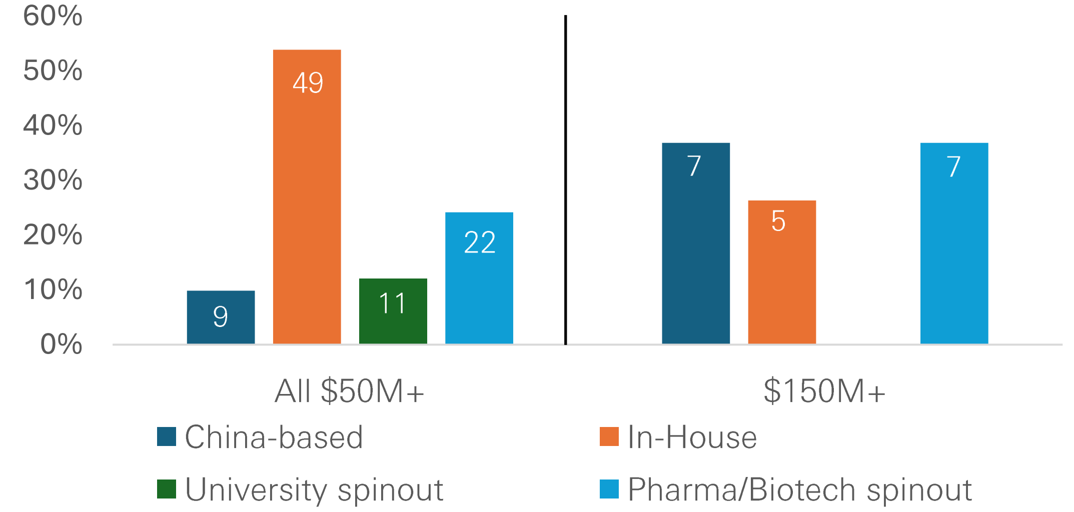
- Big Pharma Exec
- Previous CEO of Venture-Backed Firm
- First-time Founder/CEO
- VC as CEO







Technology Origin $50M+ First-Financings



VCs Investing in $50M+ First-Financing Deals (2023-1H 2025)	
RA Capital	11
GV	10
ARCH Venture Partners, Alexandria Venture Investments	9
OrbiMed, Versant Ventures, Novo Holdings	7
ARCH Venture Partners	6
Flagship Pioneering	5
rtw, Atlas Venture, NVF, NEA, Omega Funds, Sanofi, Third Rock, Venrock	4

Proven venture experience over first-time CEO
Since 2023, there have been 88 $50M+ first financings in biopharma. Our research into founder CEO backgrounds and technology origin reveals clear trends shaping these financings.

VCs consistently emphasize the benefit of strong founding teams with prior experience in venture backed companies (with bonus points for successful M&A outcomes). That preference was highlighted in the data for these large deals. CEOs with previous venture experience accounted for 57 $50M+ first-financings (65%). In contrast, it was rare for a first-time CEO to raise a large first round, with only seven deals overall, and just one each in 2024 and 1H 2025.

China-based assets raised largest rounds
Since 2023, these large $50M+ first-financing rounds have focused on in-house development and pharma/biotech spinouts. However, there has been a steady increase in large first-financing rounds for China asset in-licenses. The were two deals in 2023, three in 2024 and four already in 1H 2025.

For the largest deals ($150M+ financings) the technology origin was evenly split between China-based assets and pharma/biotech spin-outs, with no technology coming out of US/Europe universities. This trend is further supported by the fact that many brand name VCs have active company creation teams that spend significant time conducting due diligence on China assets.

Data from PitchBook though 6/30/25. [1]First-financing defined as initial Seed or Series A financing of $2M+. Deals included in this analysis were first-financings in the US and Europe of $50M+. Data sources: PitchBook, company websites, internal analysis.

Biopharma Active Investors in Smaller First-Financings 2023-1H 2025 US

Which investors have completed multiple $2-10M First-Financing[1] investments?

Active Investors in Smaller Pre-Seed/Seed/A Deals[2]

($2-10M Deals, list not exhaustive)

10X CAPITAL	2048 VENTURES	ASYMMETRY VENTURES	Alumni Ventures	ARCH VENTURE PARTNERS	ATRIA	Axial	BOOM CAPITAL	BREAKOUT VENTURES	CANTOS
Calm Ventures	CIVILIZATION VENTURES	CURE VENTURES	CONSCIENCE	COMPOUND	DCVC Bio	DIMENSION	50 Y	Gaingels	
HAWKTAIL	Hummingbird	INDIE.BIO	KdT Ventures	LUX	Madrona	mission BIOCAPITAL	Nucleate	NFX	
Pear	pillar	PIONEER	playground	RED TREE VENTURE CAPITAL	SANTÉ VENTURES	TWO BEAR CAPITAL	what if ventures	YK Bioventures	

Data from PitchBook though 6/30/25. Covers investors who did at least two private, venture-backed biopharma investment in the United States since 2023. [1]First-financing defined as initial Seed or Series A financing of $2M+. [2]Investors with more than one pre-seed or seed investments since 2023. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Biopharma Investment: All Venture Deals

1H 2025

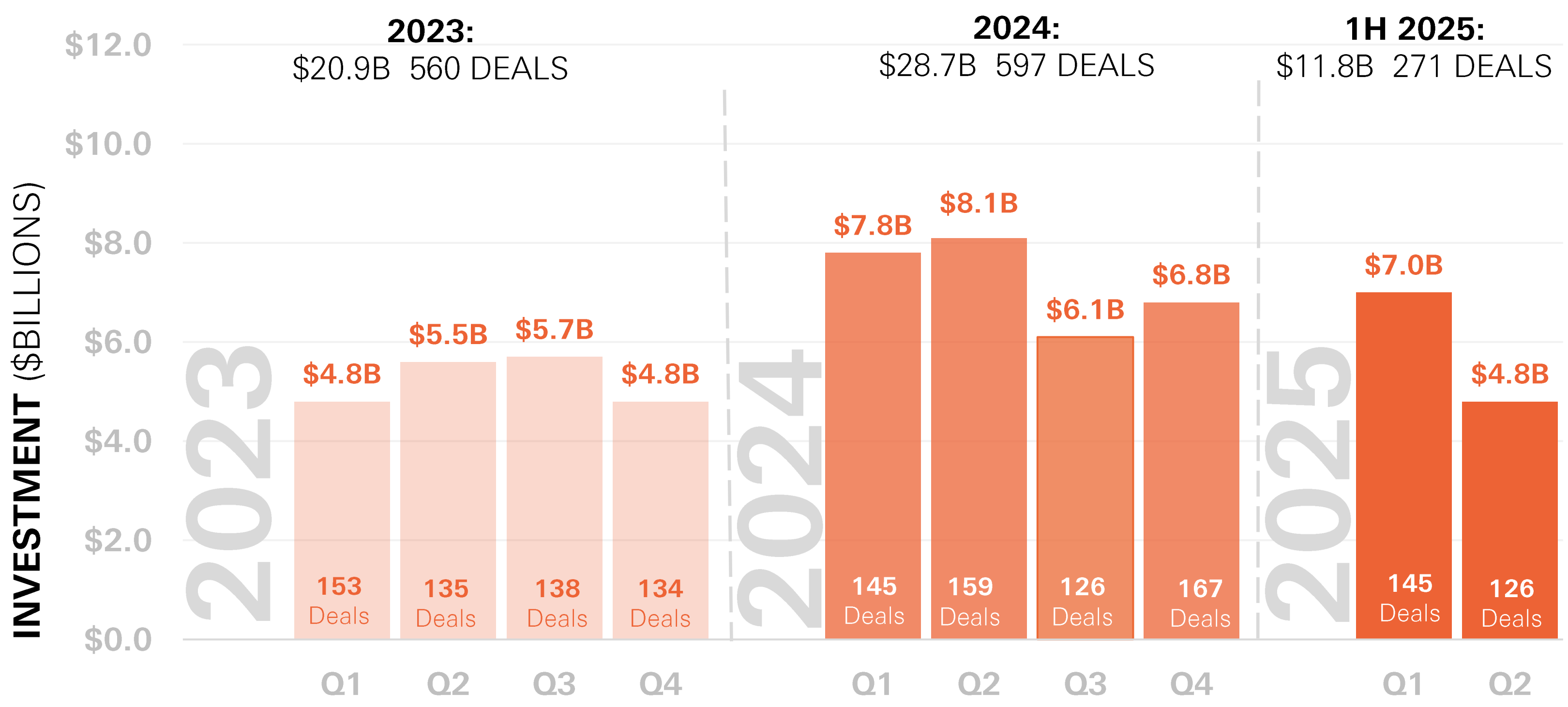
HSBC Innovation Banking

Biopharma Analysis (All Deals)

2023–1H 2025 US & Europe

Strong, then weak investment quarters sets up an uncertain 2H 2025

Biopharma Investment Activity ($/Deals)



Strong 2025 Q1, then a fall-off in Q2

Investment got off to a fast start in Q1 2025, led by 21 $100M+ mega round financings. However, this was slightly below the average mega round pace in 2024 (25 per quarter). Most of the mega rounds closed in January and February, when investor sentiment was strong, leveraging positive M&A and IPO market activity. March dollars were inflated by UK-based Isomorphic's $579M financing.

In Q2, new investment activity showed a significant slowdown, dropping to the lowest quarterly level in the last three years. The number of mega rounds also declined to 16 deals. In conjunction with less activity, we started to see the "rubber hit the road" for private companies on extended insider rounds. These companies significantly cut cash burn, often resulting in layoffs. These layoffs have also extended to public biopharma small and mid cap deals that are still funding clinical trials. The result of fewer deals and new investment has been an increase in private companies that have unfortunately shut down or consolidated, and we anticipate further difficulties in 2H 2025 as well.

2022-2023 Mezz investments biggest worry?

Our biggest watch list in 2H 2025 are companies that raised mezzanine/crossover rounds[1] in 2022 and 2023 (about 45 companies). These deals are backed by venture investors in funds that are nearing the end of their fund life (which may signal limited dry powder), and crossover/hedge investors who are likely reticent to support another private round.

Data from PitchBook as of 6/30/25. Covers private, venture-backed investment. [1]Mezzanine/Crossover rounds refer to a larger round that is anticipated to be the last round before an IPO. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Biopharma Investment by Indication[1]

2023–1H 2025 US & Europe

Oncology dollars drop, while Neuro, Ophthalmology increase

Platform ($M/Deals)

2023	2024	1H 2025
$6,247 116	**$5,783** 111	**$2,654** 47

Oncology ($M/Deals)

2023	2024	1H 2025
$5,525 165	**$7,399** 158	**$2,591** 67

Metabolic ($M/Deals)

2023	2024	1H 2025
$550 32	**$1,976** 28	**$1,072** 12

Autoimmune ($M/Deals)

2023	2024	1H 2025
$1,023 23	**$2,852** 31	**$904** 18

Neurology ($M/Deals)

2023	2024	1H 2025
$2,251 77	**$3,425** 76	**$1,815** 51

Orphan/Rare ($M/Deals)

2023	2024	1H 2025
$732 19	**$813** 14	**$638** 6

Respiratory ($M/Deals)

2023	2024	1H 2025
$599 4	**$1,469** 23	**$222** 5

Ophthalmology ($M/Deals)

2023	2024	1H 2025
$811 17	**$541** 25	**$686** 14

Cardiovascular ($M/Deals)

2023	2024	1H 2025
$763 11	**$498** 8	**$447** 6

Trendline Shading ($s)
Year over Year (2025 Annualized)

Upward **Flat** **Down**

Oncology investment decreases
Oncology was the top indication in 2024, with investment increasing almost $2B over 2023. However, in 1H 2025, oncology investment fell significantly below the 2024 pace. This pullback was also evident in first-financings as well. The decrease may partially reflect caution around finding true first-line therapies, as well as the uncertainty regarding China-based assets that may surprise US and Europe companies by emerging from stealth with substantial clinical data.

Autoimmune, Metabolic continue mega rounds
Both indications saw substantial growth in 2024, with 1H 2025 investment on pace to hit close to $2B, which would be an increase for metabolic but a decrease for autoimmune. Metabolic closed three $100M+ mega rounds and eight additional $50M+ deals, raising a combined $1B. These deals were mostly early-stage, with three preclinical, two phase I (both $100M+ deals), and one each in phase II and phase III.

In autoimmune, there were four $100M+ mega rounds in 1H 2025, including one China-licensed deal (Timberlyne), and two other $50M+ financings. Four of the six were preclinical or phase I, and overall, 10 of 18 autoimmune financings were preclinical.

Neuro and Ophthalmology dollars were strong
Three of the top nine neuro deals were focused in the neuropsychiatric area, including Draig, Syndeio and Beckley. Many of the larger deals were later-stage, with 7 of 13 $50M+ neuro deals in phase II or III.

Ophthalmology dollars already exceed 2024's total at midyear. The majority of these deals had a later-stage clinical focus, with two of three either phase II/III (Aviceda) or phase II (Atsena, SpliceBio). Character was the exception, raising $94M as a preclinical company.

Data from PitchBook though 6/30/25. Covers private, venture-backed investment. [1]Indication defined as lead asset focus area or focus delineated in the company's website. If preclinical with multiple areas of potential focus, it is defined as Platform. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Biopharma Largest Rounds (All Deals)

1H 2025 US & Europe

First-financings continued to drive largest rounds; later-stage see strong step-ups

Largest Investments in 1H 2025

#	Company	Indication Stage	Size of Round/ ($M) Step-up?[1]	Date/ Round	Location
1	Isomorphic Laboratories	Platform Preclinical	$579	3/31 A	London, UK
2	Verdiva Bio	Metabolic Phase I	$410	1/9 A	Guildford, UK
3	PATHOS	Oncology Phase II	$365 (2.1x)	5/15 D	Chicago, IL
4	eikon therapeutics	Oncology Phase III	$351	2/26 D	Hayward, CA
5	Kardigan	Cardiovascular Phase II	$300	1/10 A	SSF, CA
6	AVICEDA THERAPEUTICS	Ophthalmology Phase II/III	$208	1/7 C	Cambridge, MA
7	Windward Bio	Respiratory Phase II	$200	1/10 A	Basel, Switzerland
8	NUMAB	Platform Phase I	200	1/9 C	Horgen, Switzerland
9	abcuro	Autoimmune Phase III	$200 (1.9x)	2/12 C	Newton, MA
10	callio therapeutics	Oncology Preclinical	$187	3/3 A	Seattle, WA
11	TUNE THERAPEUTICS	Platform Preclinical	$182 (2.6x)	1/23 B	Durham, NC
12	TIMBERLYNE THERAPEUTICS	Autoimmune Clinicals	$180	1/9 A	San Diego, CA
13	ANTARES THERAPEUTICS	Oncology Preclinical	$177	6/10 A	Boston, MA
14	NEURON23	Neuro Phase II	$170 (0.4)	6/24 D	SSF, CA
15	AiRNA	Orphan/Rare Preclinical	$155 (1.3x)	4/1 B	Cambridge, MA
16	Enveda BIOSCIENCES	Platform Phase I	$150 (1.2x)	2/26 C	Boulder, CO
17	LATIGO BIO	Neuro Phase I	$150 (2.0x)	3/17 B	Thousand Oaks, CA
18	ATSENA THERAPEUTICS	Ophthalmology Phase II	$150 (1.6x)	4/2 C	Durham, NC
19	JUVENESCENCE	Metabolic Phase I	$150	6/17 B1	Dublin, Ireland
20	azafaros	Orphan/Rare Phase II	$150	5/13 B	Leiden, Netherlands

Valuation[1] Step-Up | Flat Rd | Step-Down

Data from PitchBook though 6/30/25. Covers private, venture-backed investment. [1]Step-up analysis uses PB supplied valuations if available. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Biggest biopharma deals close in Q1

In 1H 2025, the top 20 deals accounted for only 3% of all deals but captured 39% of biopharma venture dollars. This is a significant increase compared to 2023 (23% of all dollars) and 2024 (24%). The largest deals closed early in 2025, with nine of the top ten deals financed in Q1.

Mega round first-financing continues; strong step-ups for later-round deals

Seven first-financing deals made the top 20 biopharma deals in 1H 2025, continuing the trend seen in 2024 (nine of the top 20). In comparison, only three first-financing deals made the top 20 in 2023.

Later-stage rounds saw significant step-ups. Of the eight deals with valuation information, seven were step-ups in valuation, with a strong median step-up of 1.9x. Only one down-round was noted among the top 20 deals, though there were nine down-rounds for $35M+ financings in 1H 2025.

Numbers at a glance (largest 20 deals)

Stage

Phase II	6 deals
Preclinical:	5 deals
Phase I:	5 deals

Indication

Oncology:	4 deals
Platform	4 deals
Autoimmune:	2 deals
Metabolic:	2 deals

Location

MA:	4 deals
NorCal:	3 deals

Biopharma Most Active Investors[1]

1H 2025 US & Europe

VC and corporate investment hold steady, growth activity down versus 1H 2024

ALL DEALS

	VC[3]		Corporate[3]		Growth[2]
9	novo holdings	8	Lilly	5	Cormorant Asset Management
6	OrbiMed	7	sanofi	4	Logos Capital, Blue Owl Capital Corporation, Jeito
4	NEA, EQT, Omega Funds	4	Alexandria Venture Investments	3	RA Capital, Marshall Wace, Deep Track Capital
3	Catalio Capital Management, Forbion Ventures, HBM Healthcare Investments, Foresite Capital, Goldman Sachs, SV	3	abbvie, Pfizer Ventures, Regeneron Ventures	3 (tie)	Invus, rtw, BVF Partners L.P.
3 (tie)	pappas capital, Norwest, Bain Capital Life Sciences	2	GV	3 (tie)	abrdn

Data from PitchBook as of 6/30/25. Covers private, venture-backed investment. [1]Most Active Investors only include investment into a new portfolio company, not follow-on financings. [2]Growth Investors defined as investment firms that typically invest in later-stage companies that either are revenue scaling, or the round is anticipated to be the last before an IPO. [3]Note that families of funds are combined for this slide, as are corporate and corporate venture with the same parent. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Biopharma Largest Post-Money Values[1]

1H 2025 US & Europe

Crossovers retreat from venture deals, Corporate and VC investment increased

Largest Post-Money Valuations in 1H 2025

Indication	Company	Date	Deal Size ($M)	Round	Post $ ($M)/ Step-up?[2]	Stage	Notable/Lead New Investor(s)
Platform	Isomorphic Laboratories	3/31	$579	A	$1,790	Preclinical	Corporate, VC
Oncology	PATHOS	5/15	$365	D	$1,600 (2.1x)	Phase II	undisclosed
Metabolic	NewLimit	5/6	$130	B	$825 (4.3x)	Preclinical	Angel, VC
Autoimmune	abcuro	2/12	$200	C	$700 (1.9x)	Phase III	Asset Manager, VC
Cardiovascular	Kardigan	1/10	$300	A	$646	Phase II	Asset Manager. Corporate, VC, Xover
Platform	Enveda Biosciences	2/26	$150	C	$640 (1.2x)	Phase I	Asset Manager, Corporate, Growth, VC
Neuro	Neurona Therapeutics	3/28	$102	F	$597 (1.2x)	Phase II	PE, VC, Xover
Neuro	Pharmazz	5/22	$40	A	$588	Commercial	Corporate
Neuro	Latigo Bio	3/17	$150	B	$530 (2.0x)	Phase I	Corporate, Unknown

Valuation[3] Step-Up Flat Rd Step-Down

Crossover pullback in 1H 2025
Crossover investment in private biopharma companies had remained strong in this downcycle, with five of the top eight deals in 2023 and four of eight in 2024 adding new crossover investors in 2023. However, in 1H 2025, only two of the top eight deals included new crossovers. Many crossovers now face a crossroads, with too many private investments that have yet to IPO and many public companies struggling with low market caps. It is not surprising to see this retraction; the question is who will fill that gap? Corporates and traditional VC seem to be the answer in 1H 2025 (both were new investors in six of the eight deals on this list).

Does exit activity match high-valued private financings?
Since 2023, there were 45 private venture-backed financings with disclosed post-money valuation of $500M+. Were these high valued private financings were being matched by exits? We analyzed exit activity since 2023 for companies who IPO'd with a market cap of $500M+ or were acquired for an upfront private M&A value of $500M+.

The numbers show a close match, with 46 exits over the same period. There were 21 M&A of $500M+ in private VC-backed M&A since 2023 (3 in 2023, 12 in 2024 and 6 in 1H 2025) and 25 IPOs with a market cap of $500M+ (8 in 2023, 13 in 2024 and 3 in 1H 2025).

Data from PitchBook as of 6/30/25. Covers private, venture-backed investment. [1]Financing data based on information available from PitchBook, including post-money values and step-up, flat and down round calculations. [2]Step-Ups calculated using Pitchbook valuation data for previous and new financing as follows: Divide new pre-money valuation by previous round post-money valuation. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Biopharma Investment: Private Licensing Analysis

1H 2025

HSBC Innovation Banking

Biopharma Private Company Licensing Analysis

2023–1H 2025

Private Licensing focused on preclinical assets, median $40M+ upfront

Clinical Stage Private Licensing Deals Median Values

	2023				2024				1H 2025			
Total Deals	146				168				75			
Stage	**Discovery/ Preclinical:** 110	**Ph I:** 18	**Ph II:** 11	**Ph III:** 7	**Discovery/ Preclinical:** 139	**Ph I:** 9	**Ph II:** 11	**Ph III:** 9	**Discovery/ Preclinical:** 59	**Ph I:** 5	**Ph II:** 5	**Ph III:** 6
Deals with Disclosed Dollars	65				101				37			
Upfront (Median)	$42M				$40M				$46M			
$100M+ Upfront Deals	4				3				5			
Total Potential Deal $ (Median)	$580M				$536M				$628M			
$1.0B+ Total Potential Deal $	17				28				11			

Firms with 3+ private company license deals per year (disclosed)	2023		2024		1H 2025	
	6	Novo Nordisk	**9**	Lilly	**4**	Lilly, Novo Nordisk
	5	Bristol Myers Squibb	**7**	Novo Nordisk	**3**	AbbVie, Bausch + Lomb, Pfizer
	3	AbbVie, Amgen	**6**	Novartis		
			5	Roche, Johnson&Johnson		
			4	Bristol Myers Squibb, GSK		
			3	AbbVie, AstraZeneca, Sanofi, Gilead, Merck		

License deal activity remains consistent
The ability to pursue non-dilutive capital has never been more important, as finding a new lead investor has become increasingly difficult in recent years. Pharma appears ready to help. License deal activity has remained consistent since 2023, with $6.8B in upfront deal value paid to private companies since 2023.

Focus on early stage, strong median values
Discovery/Preclinical stage assets account for 75-80% of license deal volume, with greater emphasis on discovery than preclinical. In discovery and preclinical deals with disclosed deal terms (76 deals, about 50% of license volume) the median upfront deal value remained consistent, ranging from $40-46M over each of the past three years. Of these 76 deals, oncology was the leading indication with 33 deals, followed by neuro (12) and autoimmune (7).

Billion-dollar license deal breakdown
There were 56 $1B+ total value license deals (including milestones) disclosed over the past three years. The leading indications were oncology (26 deals), neuro (10 deals), and 3 each in metabolic, cardiovascular and inflammation. The median upfront deal value in $1B total value license deals was $52M.

[1]Biopharma license deals defined as private company publicly announced closed license deals as of 6/26/25. Data source: DealForma, internal analysis.

Biopharma Investment: Private M&A and IPO Analysis

1H 2025

HSBC Innovation Banking

Biopharma Private VC-Backed M&A[1] Analysis

2019–1H 2025

Private M&A remains strong as total deal value swells; continued early-stage focus

M&A Median Values[1]

Date	2019	2020	2021	2022	2023	2024	1H 2025
Deals	15	20	15	9	6	17	8
Upfront ($M)	$250	$315	$370	$320	$305	$800	$763
Milestone TBE ($M)	$375	$138	$350	$100	$500	-	$870
Total Deal ($M)	$600	$608	$525	$405	$828	$1,100	$1,525
$1B+ Total Deal Value Exits	4 (33%)	7 (35%)	5 (33%)	3 (33%)	3 (50%)	10 (59%)	8 (100%)
# of Preclinical & Phase I deals[2]	10 (67%)	13 (65%)	9 (60%)	6 (67%)	5 (83%)	11 (65%)	6 (75%)

NOTABLE M&A 1H 2025

$1B+ Total Deal Value M&A

Scorpion	Lilly
Dren Bio	Sanofi
SiteOne Therapeutics	Lilly
IDRx	GSK
Anthos Therapeutics	Novartis
Capstan Therapeutics	AbbVie
Araris	Taiho Pharma
EsoBiotec	AstraZeneca

$1B+ deals gain traction, upfronts rise
In 2023, biopharma M&A activity was mainly focused on venture-backed companies in the public market that had opportunistically completed an IPO. Although private M&A activity remained limited, the deals that did occur showed an increase in the percentage of $1B+ total deal values. In 2024 and 1H 2025, larger total deal sizes continued, as well as a substantial increase in upfront median deal sizes.

Time to exit fast, but $s invested swells
The sector maintains the shortest median times to exit across all healthcare sectors. In 1H 2025, the median time from first institutional round to announced exit dropped to 4.3 years, with the 25th percentile at 3.6 years and the 75th percentile at 6.1 years. In 2023 the median was 5.2 years and in 2024 it was 4.4 years.

However, in parallel with bigger deal sizes, median venture dollars invested by these exits have been on the rise, from $72M in 2023 to $132M in 2024 and further jumping to $212M in 1H 2025.

Early-stage deals dominate private M&A
Even as exit values rise, the stage of exit for private deals has remained decidedly toward early-stage. Preclinical and phase I exits have accounted for more than 50% of private M&A every year since 2018. In 1H 2025, this trend intensified, with 75% of private M&A exits (six of eight) occurring at preclinical or phase I stage.

[1]Biopharma M&A defined as private, venture-backed M&A with an upfront payment of at least $75M, calculated on a best-efforts basis. [2]Stage defined as either preclinical or the last completed clinical round prior to M&A. Data sources: PitchBook, public news articles and conversations with investors and companies. Thanks to Mind Machine for slide strategy, creative, and design.

Biopharma Private VC-Backed IPO[1] Analysis

2019–1H 2025

IPO activity difficult, but those that did get out are doing ok; Class of 2024 has struggled

IPO ACTIVITY 2018–2024

Date	2019	2020	2021	2022	2023	2024	2025
VC-Backed IPOs	50	83	96	19	11	18	4

BIOPHARMA IPOs 1H 2025

Date	Company	Indication	Stage	Time to IPO[2]	Step-up to IPO[3]	IPO Dollars Raised ($M)	IPO Post Money ($M)	Performance to IPO Price (12/31)
1/31	Metsera	Metabolic	Phase II	0.4	Unknown	$275	$1,890	+64%
1/31	Maze Therapeutics	Renal	Phase I	5.9	1.0x	$115	$700	-28%
2/6	Sionna	Genetic	Phase I	6.0	1.2x	$191	$765	+18%
2/13	Aardvark Therapeutics	Metabolic	Phase III	5.3	0.8x	$94	$342	-13%

2024 IPOs substantially down in 2025
The performance of 2024 IPOs has declined further in 1H 2025. At the end of 2024, the median post-IPO performance for the class of 2024 IPOs was -33%. This downward trend continued into 1H 2025, with 16 of 18 companies trading down and a median performance dropping to -76% at midyear.

A difficult mezzanine and public market
To be clear, the IPO market is tough. There are a bunch of companies (likely 30+) that could go public if market sentiment mirrored what it was in Q1 2024. The ability to go public is further complicated by a significant number of biopharma IPOs from 2020 -2023 that are trading below cash value.

Instead of investing in private pre-IPO rounds, we see VCs investing in PIPEs (private investments in public entities) for venture-backed companies that have IPO'd in recent years. PIPEs offer VCs near-term unconstrained liquidity, but this trend is diverting VC money away from mid-stage private companies, making it harder to raise new funds.

Time to exit fast, neutral valuations
Time to IPO, similar to M&A, remains the quickest of all healthcare sectors, although it did increase from 4.2 years in 2024 to 5.5 years in 1H 2025. Median valuation at IPO was flat, and median performance is slightly up at midyear.

[1]Biopharma IPOs defined as private, venture-backed deals with an IPO raise of at least $25M. [2]Time to IPO calculated as years between first venture financing or spin-out and date of IPO. [3]Step Up/Down to IPO calculated as follows: divide last private round post-money valuation with IPO pre-money valuation. Data sources: PitchBook, public news articles and conversations with investors and companies. Thanks to Mind Machine for slide strategy, creative, and design.

Dx/Tools Early-Stage: First-Financing Analysis (Seed/Series A)

1H 2025

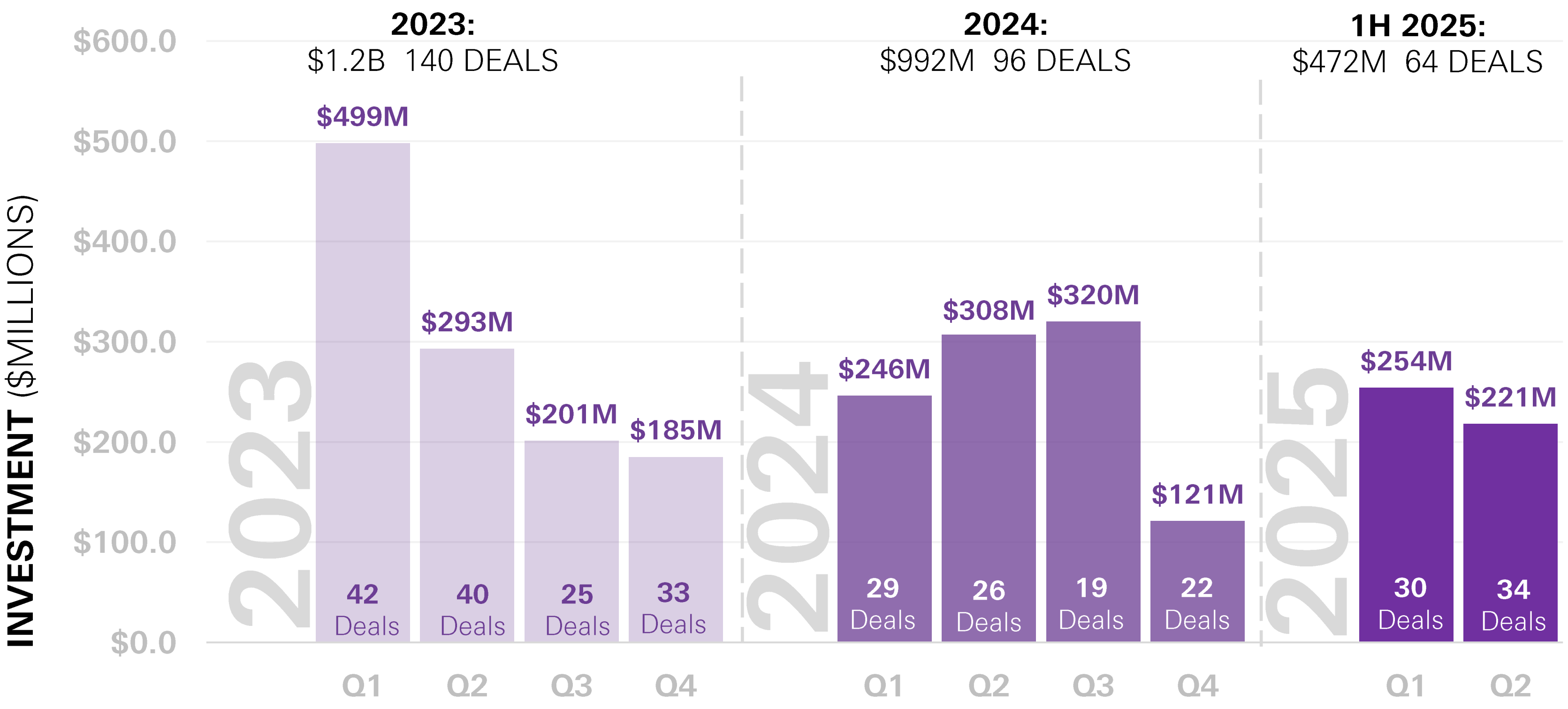
HSBC Innovation Banking

Dx/Tools First-Financing[1] Analysis

2023–1H 2025 US & Europe

AI-enabled technologies lead reduced first-financing dx/tools activity in 1H 2025

Dx/Tools First-Financing Investment Activity ($/Deals)



Data from PitchBook as of 6/30/25. Covers private, venture-backed investment. [1]First-financing defined as initial Seed or Series A financing of $2M+. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

First-financing difficulties continue

First-financing activity in 2024 fell to a four-year low, and the challenge for funding continued in 1H 2025. Companies continue to struggle with reconciling frothy valuations from 2021-22, a (mostly) closed public market, and acquirers' demand for significant revenue and path to profitability before considering M&A. As a result, many venture investors have withdrawn from the early-stage market, preferring to join large syndicates in later-stage financings to support commercialization, or sometimes shifting focus to other sectors altogether.

AI dominance in biggest deals

Venture capital's strong focus on AI has led to AI-enabled technologies dominating the largest first-financing Dx/Tools deals. Six of the top eight deals leverage AI as a core focus, including four R&D tools and two dx analytics deals.

IPO bright spots emerge in a challenged market

Tempus, the sole Dx/Tools venture-backed IPO of 2024, went public at a 50% discount to its last private round. Despite experiencing multiple ups and downs over the last year, Tempus' market cap was $11B at the end of 1H 2025, surpassing its last private post money ($10.3B in October 2022). In addition, Caris, a PE-backed Dx/Tools company, IPO'd in June 2025 with an IPO post money value of $5.8B. Caris has traded up slightly since its IPO. We do not analyze PE-only deals in this report but this IPO does provide positive momentum for the overall Dx/Tools sector.

Corporate investment supports early venture

Corporates came back in force to support first-financing dx/tools deals in 2024, a trend that continued into 1H 2025. Notable corporates participating in 1H 2025 include Nvidia, LabCorp, and Memorial Hermann.

Dx/Tools First-Financing[1] by Subsector

2023–1H 2025 US & Europe

Comp bio drives R&D tools; European companies raise capital in dx analytics

R&D Tools ($M/Deals)

2023	2024	1H 2025
$661 76	$550 53	$269 35

Dx Analytics ($M/Deals)

2023	2024	1H 2025
$288 29	$187 22	$117 13

Dx Test ($M/Deals)

2023	2024	1H 2025
$230 35	$258 11	$88 16

Trendline Shading ($s)
Year over Year (2025 Annualized)

Upward | Flat | Down

Largest Rounds in 1H 2025

		Indication	Size of Round ($M)	Deal Date	Location
1	Achira	R&D Tool Drug Discovery	$33	2/21	NY, NY
2	See All	Dx Analytics Surgical Imaging	$33	5/27	Nashua, NH
3	uncountable.	R&D Tool Lab Management	$27	6/17	SF, CA
4	teal health	Dx Test Women's Health	$23	1/16	SF, CA
5	enplusone BIOSCIENCES	R&D Tool Manufacturing	$22	2/19	Watertown, MA

		Indication	Size of Round ($M)	Deal Date	Location
6	Avandra	Dx Analytics Precision Medicine	$18	2/17	Newport Beach, CA
7	SYNDEX.BIO	R&D Tool Drug Discovery	$16	3/14	Santa Monica, CA
8	TAMARIND BIO	R&D Tool Drug Discovery	$14	5/15	SF, CA
9	SUPERBRANCHE	Dx Test Oncology	$13	2/4	Strasbourg, France
10	deeplook MEDICAL	Dx Analytics Radiology	$12	4/4	New Haven, CT

Computational bio focus continued in R&D Tools

R&D tools first-financing investment has remained consistent at $500M since 2021. In 2024, radiopharmaceuticals and comp bio drug discovery companies dominated first-financing investment. Although radiopharmaceutical investment dropped in 1H 2025, comp bio companies focusing on both drug discovery and process technologies continued to secure investor interest.

Dx Test investment drops

Dx test investment has remained consistent at around $200M annually over the past five years, with the exception of a spike to $500M in 2022. However, in 1H 2025, dollars trended downward, with only two deals over $10M: Teal Health in women's health and Superbranche in oncology.

Dx Analytics

Investment in this subsector has declined in recent years from highs of $400-500M in 2021 and 2022. The critical focus for these companies is to find the right revenue model and risk share to execute deals. Overall investment was slightly up in 1H 2025 and was concentrated in Europe, with 9 of the 13 deals.

	2023	2024	1H 2025
Median first-financing deal size:	$4.8M	$5.0M	$5.6M
Median pre-money:	$12.8M	$15.0M	$12.0M

1H 2025 Numbers (10 largest first-financing deals)

Subsector		**Location**	
R&D Tools	5 deals	NorCal	5 Deals
Dx Analytics	3 deals	SoCal	2 Deals
Dx Analytics	1 deal	MA	2 Deals

Data from PitchBook though 6/30/25. Covers private, venture-backed investment. [1]First-financing defined as initial Seed or Series A financing of $2M+. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Dx/Tools Investment: All Venture Deals

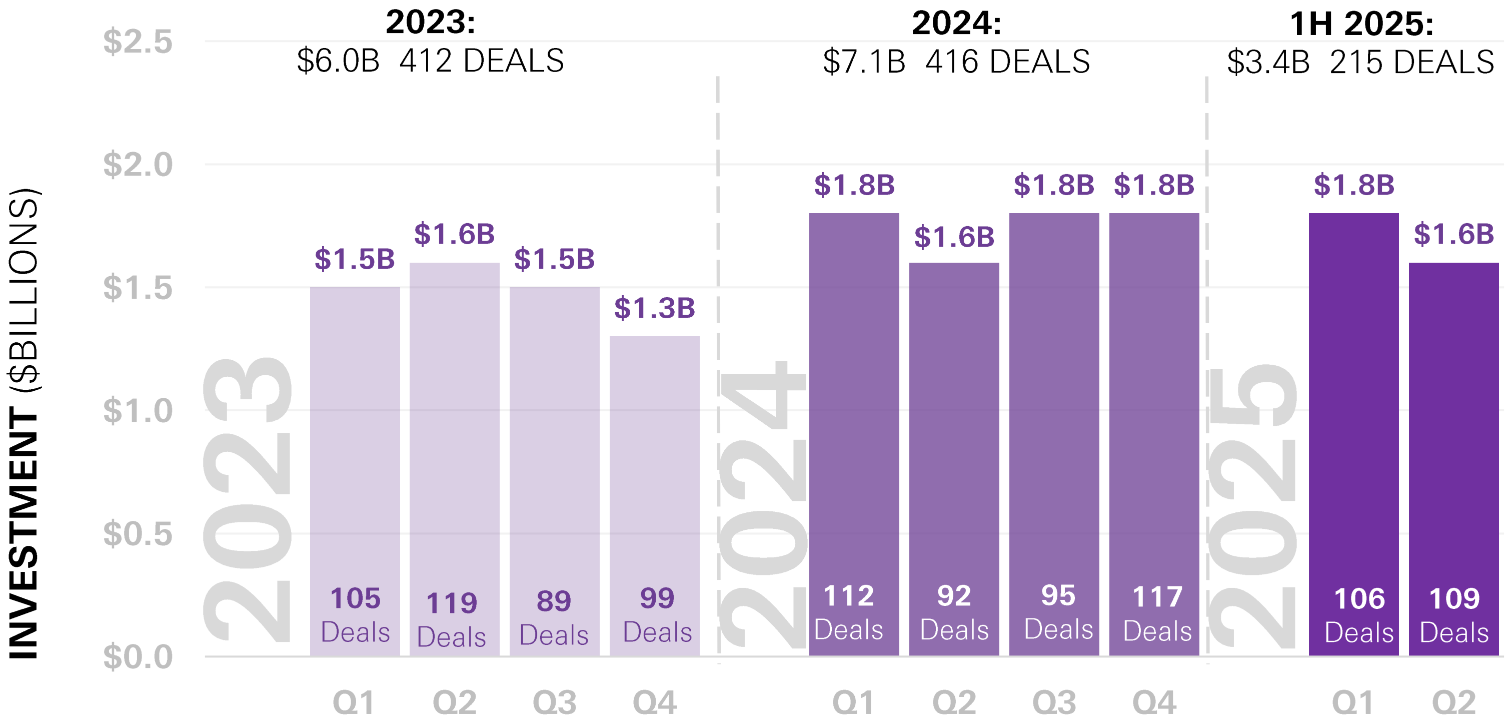
1H 2025

HSBC Innovation Banking

Dx/Tools Analysis (All Deals)

Top deals secured large fundings, as a diverse set of Corporates remain active

Dx/Tools Investment Activity ($/Deals)



Dx/Tools Investment far off 2020-2022 pace
Sector investment is well below the up-cycle pace of $10-15B per year seen from 2020-2022. That investment was driven by a highly attractive IPO market and strong private M&A. Notable M&A during that time period included GRAIL, Thrive Earlier Detection, ArcherDx, Omniome, Decipher Biosciences, Mesa and Personal Genome Diagnostics. However, poor post IPO performance has re-set valuations, and acquirers have stopped paying up for burgeoning technology without significant revenue. Instead, acquirers are pushing private deals to scale revenue and demonstrate a path to profitability to hit the exit zone.

1H 2025 large rounds persisted, hitting 2024 pace
Despite a poor exit environment, 15 $50M+ rounds propelled 1H 2025 to closely match 2024 investment pace. The largest 10% of dx/tools deals accounted for 44% of the invested dollars, a similar mark to 2024.

Series B are few and far between
Only seven Series B new investor rounds were completed in 1H 2025. Of these, five were R&D tools companies, and one each for dx test and dx analytics. On a positive note, four of the seven with valuation information showed step-ups in value. However, Series A companies currently on insider rounds have struggled to raise, with many forced to consolidate or shut down.

Diverse Corporates support later-stage deals
Corporates continue to join larger, later-stage rounds, investing in four of the largest eight deals. Investment came from big pharma companies BMS, Merck and Lilly, tools and diagnostics companies including BioRad and Lab Corp, and device player Boston Scientific. Health care systems and tech companies were also represented.

Data from PitchBook as of 6/30/25. Covers private, venture-backed investment. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Dx/Tools VC Investment by Subsector

2023–1H 2025 US & Europe

Dx Analytics investment trends up, R&D Tools stabilize and Dx Test declines

R&D Tools ($M/Deals)

2023	2024	1H 2025
$3,118 194	$3,840 220	$1,863 113

Dx Analytics ($M/Deals)

2023	2024	1H 2025
$1,468 98	$1,276 101	$755 43

Dx Test ($M/Deals)

2023	2024	1H 2025
$1,362 120	$1,978 95	$797 59

Trendline Shading ($s)
Year over Year (2025 Annualized)

Upward Flat Down

Largest Rounds in 1H 2025

	Company	Indication	Size of Round/ ($M) Step-up?[1]	Date/ Round	Location
1	colossal	R&D Tool Gene Editing	$200 (6.4x)	1/15 C	Austin, TX
2	BigHat Biosciences	R&D Tool Drug Discovery	$124 (4.2x)	4/28 B	San Mateo, CA
3	Insilico Medicine	R&D Tool Drug Discovery	$123	6/16 E	Boston, MA
4	Geneoscopy	Dx Test GI	$105 (2.1x)	1/8 C	Saint Louis, MO
5	BAYLOR GENETICS	Dx Test Platform	$102	3/31 A	Houston, TX
6	Heartflow	Dx Analytics Cardiovascular	$98	4/11 Late Stage	Mountain View, CA
7	anumana	Dx Analytics Cardiovascular	$95 (1.5x)	4/24 C	Cambridge, MA
8	Antheia	R&D Tool Pharma Ingredients	$85	6/3 C	Menlo Park, CA
9	Stellaromics	R&D Tool Drug Discovery	$80 (1.3x)	2/11 B	Natick, MA
10	MAGNOLIA MEDICAL TECHNOLOGIES	Dx Test Sepsis	$68 (1.2x)	1/15 E	Seattle, WA

Valuation[1] Step-Up Flat Rd Step-Down

R&D Tools investment stable, with some up-rounds
Investment in R&D tools remained stable, although still well below the $5-7B pace from 2020-2022. Comp bio drug discovery technologies continued to generate investor interest, both in large, later-stage and smaller first-financing deals. In contrast, radiopharma manufacturing and supply, which accounted for some of the largest deals in 2024, saw a noticeable decline in 1H 2025.

There were 29 R&D tools deals that raised $20M+ in 1H 2025. Of the 12 deals with available valuation data, there were 11 up-rounds, one flat round and no down-rounds.

Dx Test investment down, sepsis test interest up
During COVID-influenced times (2020-2021) dx test investment swelled to $3-4B per year. This investment increase was driven in part by COVID testing needs but also supported by generalist investors' enthusiasm for precision medicine and liquid biopsy. However, since then, investment has dropped.

In 1H 2025, dx test investment was muted. However, sepsis detection rose as a bright spot, with Magnolia Medical and Deepull ($50M Series C), joining Cytovale, which closed a $100M Series D in October 2024. Platform technologies also secured larger financing rounds, including Baylor Genetics and Owlstone Medical ($29M Series E).

Dx Analytics dollars pick up, led by cardiovascular
Dx analytics, a subsector combining precision medicine, AI/ML and SaaS to guide physician treatment decisions, saw increased funding. The upward performance of Tempus post 2024 IPO may have created later-stage buzz to this subsector. The top two deals in 1H 2025 were cardiovascular-focused (Heartflow and Anumana), but many of these companies are platform-technology enabled. Of the top 14 new-investor led deals, 8 had valuation information available, with 6 up-rounds, one flat and one down-round.

Data from PitchBook though 6/30/35. Covers private, venture-backed investment. [1]Step-up analysis uses PB supplied valuations if available. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Dx/Tools Most Active Investors[1]

1H 2025 US & Europe

Angel, OUS VCs dominate the list; only one growth investor did more than one deal

ALL DEALS

Angel/VC		Corporate[3]/Gov.		Growth[2]	
4	Gaingels	6	labcorp	2	BUENAVISTA Equity Partners
3	AIX Ventures	2	BRUKER		
2	CARB-X, cdp, Columbus Venture Partners, global brain, Founders Fund, GoHub Ventures, Grids, Supernova Invest				
2	HCVC, Insight Partners, khosla ventures, treeovc, MBX, 1NIDO3IRDS, Xcellerant Ventures				

Data from PitchBook as of 6/30/25. Covers private, venture-backed investment. [1]Most Active Investors only include investment into a new portfolio company, not follow-on financings. [2]Growth Investors defined as investment firms that typically invest in later-stage companies that either are revenue scaling, or the round is anticipated to be the last before an IPO. [3]Note that families of funds are combined for this slide, as are corporate and corporate venture with the same parent. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Dx/Tools Largest Post-Money Values[1]

1H 2025 US & Europe

Up-rounds with VC and Corporate participation exemplify highest valued deals

Largest Post-Money Valuations in 1H 2025

Subsector	Company	Date	Deal Size ($M)	Round	Post $ ($M)/ Step-up?[2]	Focus	Notable/Lead New Investor(s)
R&D Tool	colossal	1/15	$200	C	$10,200 (6.3x)	Gene Editing/ Development	PE, VC
Dx Analytics	anumana	4/24	$95	C	$580 (1.5x)	Cardiovascular/ Commercial	Corporate
R&D Tool	Chai Discovery	1/8	$60	A1	$570 (3.4x)	Drug Discovery/ Commercial	Corporate, VC
R&D Tool	Phlow	2/14	$31	C	$441 (1.9x)	Pharma Ingredients/ commercial	Angel, Corporate, Family Office
Dx Test	Geneoscopy	1/8	$105	C	$440 (2.1x)	GI Oncology/ Commercial	Asset Manager, Corporate, Family Office, PE
Dx Analytics	VIDEA HEALTH	1/28	$40	B	$400 (3.6x)	Dental/ Commercial	Growth, VC
Dx Test	BAYLOR GENETICS	3/31	$102	A	$326	Genetic Tests/ Commercial	VC
R&D Tools	BigHat Biosciences	4/28	$124	B	$304 (2.9x)	Antibody Design/ Commercial	Corporate, Family Office, VC

Valuation[3] Step-Up Flat Rd Step-Down

Up-rounds abound for top deals; VCs active
Seven of the top eight valued deals were highlighted by large commercial stage deals. Among the seven deals with available valuation information, the median step-up reached a robust 2.9x. Of note, the three highest step-ups all included traditional VCs as new investors, a positive sign from financial investors focused on near term returns. There is renewed optimism for an improved exit environment, despite limited IPO optionality (one IPO) and smaller private M&A with a median upfront deal value of just $100M.

Corporates remain active in top valued deals
Corporate investors joined five of the top eight valued deals in 1H 2025, building on 2023 (four deals) and 2024 (three deals).

Lookback: 2023-2024 top valued deals at inflection points
There were 20 dx/tools deals between 2023-2024 that closed rounds with post-money valuations of $400M+. Of those, 10 were R&D tools, and five each were dx analytics and dx test. Only one company (Colossal) has raised additional capital. Some have completed private secondary deals, and multiple companies are rumored to be on the path to IPO. This group's ability to raise another round or achieve an exit will be critical to the success of the high value financings seen in 1H 2025. Just one VC-backed M&A since 2023 had a $400M+ upfront, Forge Biologics, which sold for $620M in 2023.

Data from PitchBook as of 6/30/25. Covers private, venture-backed investment. [1]Financing data based on information available from PitchBook, including post-money values and step-up, flat and down round calculations. [2]Step-Ups calculated using Pitchbook valuation data for previous and new financing as follows: Divide new pre-money valuation by previous round post-money valuation. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Dx/Tools Investment: Private M&A Analysis

1H 2025

HSBC Innovation Banking

Dx/Tools Private VC-Backed M&A[1] by Indication

2019–1H 2025

1H 2025 M&A slowdown; Strong Tempus IPO performance good sign for followers

M&A MEDIAN VALUES

Date	2019	2020	2021	2022	2023	2024	2025
Deals	6	11	25	5	6	4	2
Upfront ($M)	$68	$350	$225	$100	$117	$97	$238
Milestone TBE ($M)	$-	$-	$-	$-	$13	$-	$377
Total Deal ($M)	$83	$350	$270	$100	$129	$97	$614

NOTABLE M&A 1H 2025

STILLA → BIO-RAD

EVERGREEN THERAGNOSTICS → LANTHEUS

2024 M&A activity remains slow
M&A activity over the past three years has continued to lag, both in volume and deal value. Both have remained significantly below the levels seen in 2020–2021.

2025 logs a single VC-backed private M&A
We saw two M&A over $50M upfront in 1H 2025, R&D tool digital PCR company Stilla and radiopharmaceuticals CDMO Evergreen. Upfront deal value was up from the last three years, and both exits were acquired in under seven years from the first venture round. However, acquirers largely remain on the sidelines for now, even for companies that are scaling revenue.

Tools IPOs (one VC, one PE) provides promise
There have been two IPOs in the last 18 months in dx/tools (one VC, one PE deal). Annual revenue run rates were roughly $400-700M. The 2024 VC-backed tools IPO, Tempus, has doubled its market cap since IPO. Caris, the PE backed deal, went public in June 2025 with a market cap of $5.8B and has done well post IPO. These IPOs provide some momentum for 2H 2025.

Multiple IPOs in 2H 2025?
There is considerable anecdotal discussion of three of four dx/tools companies with substantial, growing revenue to test the IPO market. We hope for financial market stability in 2H 2025 to allow those deals to go public, which would also enable exit optionality for other private revenue-scaling dx/tools deals.

[1] Dx/Tools M&A defined as private, venture-backed M&A with an upfront payment of at least $50M. Data sources: PitchBook, public news articles and conversations with investors and companies. Thanks to Mind Machine for slide strategy, creative, and design.

Deep Dive: Computational Biology Analysis

1H 2025

HSBC Innovation Banking

Comp Biology: Landscape

1H 2025, US and Europe

Four main comp bio subcategories

Logos arranged in ascending order based on increasing deal size

AI Drug Discovery (AID)

Later Stage

eikon therapeutics, Neuron23, Parabilis Medicines, NewLimit, BigHat Biosciences, Insilico Medicine, character, Circle Pharma, Cartography Biosciences, arbor biotech, Actio Biosciences, Ampersand biomedicines, HAYA Therapeutics, Atomwise, Bioptimus, Fore, Anivive, sensorium therapeutics, ensocell therapeutics, VRG Therapeutics, Acelot, Alivexis, arpeggio

First-Financing

Achira, Arctic Therapeutics, decibel, JUNEVITY, Ignota Labs, OLIO, Brink Therapeutics, CircNova, InVirtuoLabs, ZYMVOL, graph, AMPLY Discovery

First-Financing: $112M Raised, 12 Deals

All deals: $1.9B Raised, 35 Deals

Insight Platforms & Infrastructure (IPI)

Later Stage

enveda, orbis medicines, Stellaromics, Chai Discovery, vivodyne, Latent Labs, TAHOE, Portal, inductivebio, Matterworks, parallelbio, overture, CELLTRIO, PERSIST, ARACELI BIOSCIENCES, DASH, ARSENALE BIOYARDS, INFINITY BIO (The antibody reactome company), BIOPHY, Ribbon Bio, MODULO, biostate.AI, pluto bio

First-Financing

Isomorphic Laboratories, ANTARES Therapeutics, ETIOME, uncountable, TAMARIND BIO, stately bio, TERRAIN BIO, AUTOIVF Biotech, Aspect Analytics, Kiin Bio, Differential Bio

First-Financing: $883M Raised, 11 Deals

All deals: $1.6B Raised, 34 Deals

Diagnostics (Dx)

Later Stage

Galatea Bio (Precision Health at Scale for All), SeqOne, ClearNote Health, Pictorlabs, ATARAXIS, HederaDx, PRECISE Dx, the signs, DXCOVER, ChromaCode, NANOVERY

First-Financing

descendantsDNA, illumicell AI

First-Financing: $5.4M Raised, 2 Deals

All deals: $164M Raised, 13 Deals

Clinical Response Predication (CRP)

Later Stage

PATHOS, KRYPTOS Biotechnologies, Inc., Metabolon, SIMBIOSYS, LINUSBIO

First-Financing

Kardigan, INGENIX, Numenos

First-Financing: $317M Raised, 3 Deals

All deals: $710M Raised, 8 Deals

In 1H 2025, we identified and analyzed 90 computational biology (comp bio) companies. These companies raised a total of nearly $4.4B across 90 financing rounds.

For this analysis, to qualify as a comp bio company, firms must apply computational tools to acquire novel chemical or biological insights in therapeutics, R&D Tools, and Dx sectors only; have a leadership member with computational expertise; and raise over $2M in a financing round.

Companies were classified into four subcategories, based on their products and use of computation:

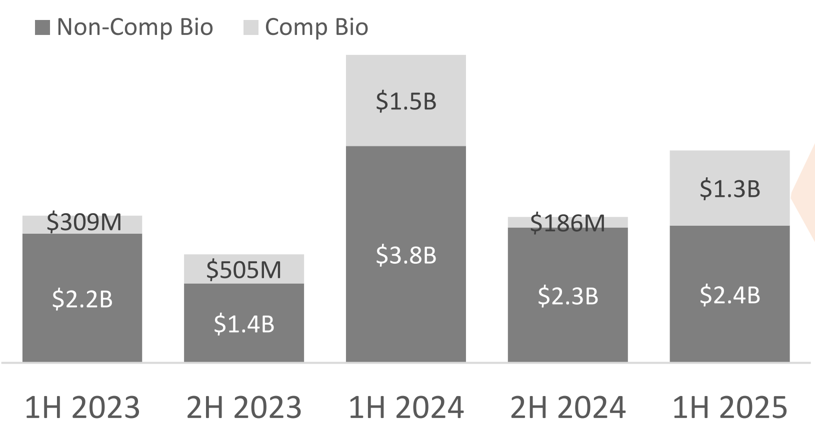
- **AID**: Optimization and discovery of novel targets, molecules, chemicals, and delivery systems.
- **IPI**: Bio/chem characterization, development of data banks, computational infrastructure, and bio-manufacturing.
- **Dx**: Diagnostics and long-term monitoring of biological markers.
- **CRP**: Personalized medicine, clinical decision support software, and drug response prediction.

Data from PitchBook as of 6/30/25, including deals of $2M+. Covers private, venture-backed investment. Data Sources: PitchBook, company websites, internal analysis.

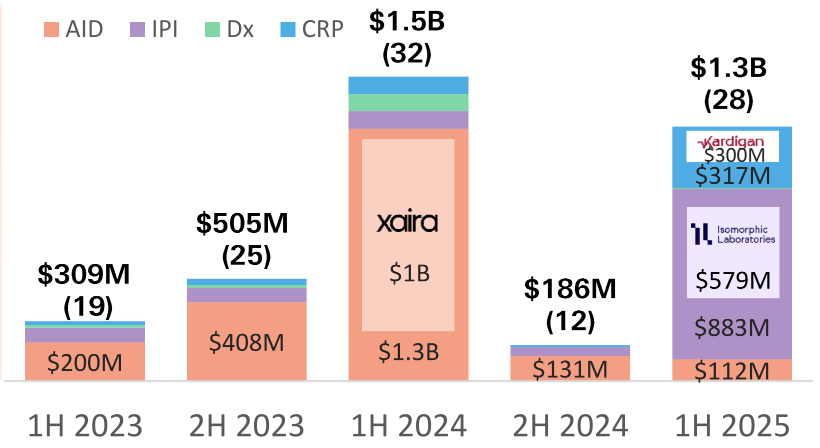
Comp Bio First-Financing Analysis

2023-1H 2025, US and Europe

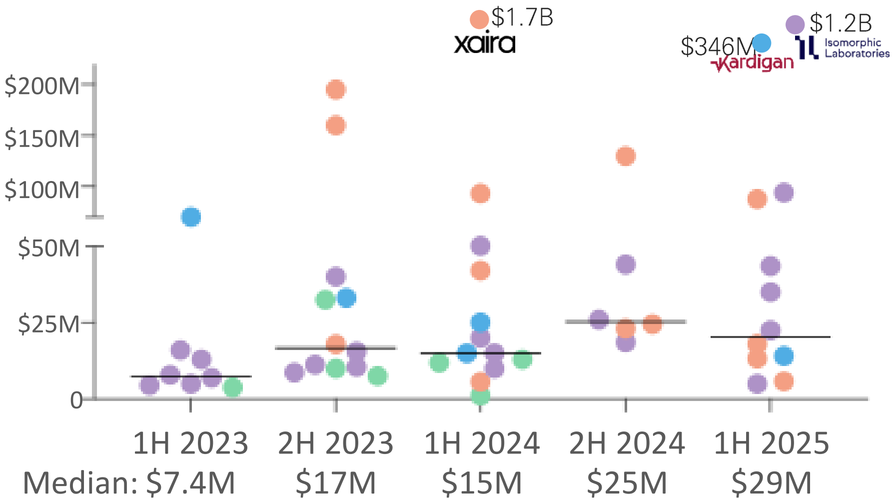
Dollar Raised Comp vs. Non-Comp Bio



Dollars Raised Comp Bio by Subcategory (Deals)



First Financing Pre-Money Valuations[1]



First-Financing Top Post-Money Valuations[1]

Company	Deal Size	Valuation	Sector	Stage
Isomorphic Laboratories	$579M	$1,800M	Biopharma / Platform	Preclinical
Kardigan	$300M	$646M	Biopharma / Cardiovascular	Phase II
ETIOME	$50M	$144M	Biopharma / Platform	Preclinical
TAMARIND BIO	$14M	$57M	R&D Tool / Protein design	Commercial
stately bio	$12M	$47M	Biopharma / Platform	Preclinical
AUTOIVF BIOTECH	$9M	$31M	R&D Tool / In vitro fertilization	Pre-commercial

First-Financing funding recovers after H2 2024 low
First-financing comp bio activity rebounded in 1H 2025. Total dollars raised reached $1.3B across 28 deals, up nearly 6x from $186M across 12 deals in 2H 2024. The surge was driven by a handful of mega rounds: the top three financings (Isomorphic Labs, Kardigan, and Antares Therapeutics) accounted for 75% of total dollars raised. However, the median round size in 1H 2025 was $8.1M, reflecting a mix of a few mega-deals and many smaller financings.

IPI leads first-financing investments, CRP gains share
IPI overtook AID as the leading subcategory and accounted for nearly 68% of dollars raised, largely driven by Isomorphic Labs' $579M round. IPI companies also set the highest first-financing post-money valuations in 1H 2025, with Isomorphic Labs ($1.8B), Etiome ($144M), Tamarind Bio ($57M), Stately Bio ($47M) and AutoIVF ($31M).

CRP rose as the second largest subsector, reaching a high of $317M and capturing 24% of first financing dollars, primarily due to Kardigan's $300M financing. Although AID only accounted for 9% of first financing dollars, the sector remained active with 12 first-financing deals, more than IPI (11) and CRP (3) in 1H 2025.

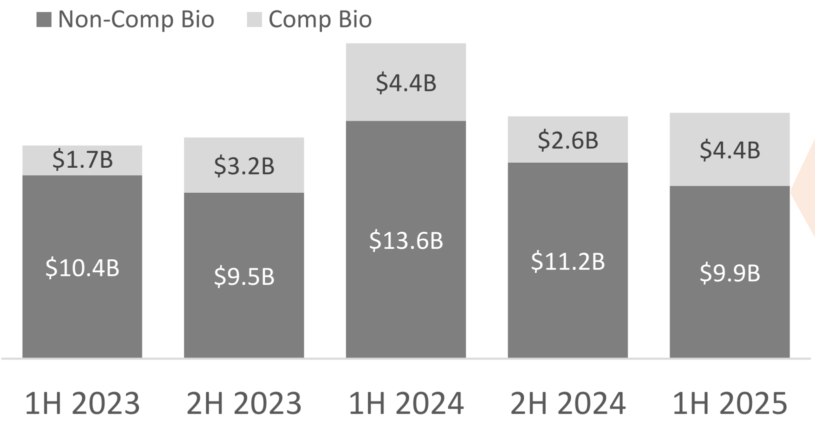
Mega rounds driven by Nobel Laureates and scientific leaders
The largest rounds remained concentrated in companies with experienced scientific founders. Isomorphic Labs' $579M round was led by Nobel laureate and DeepMind co-founder Demis Hassabis. This mirrors the Xaira effect of 1H 2024, where Nobel laureate David Baker (co-founder of 21 companies including Icosavax, which was acquired by AstraZeneca for $1.1B) helped secure a $1B round. Kardigan's co-founders include CU-Boulder Professor Leslie Leinwand, who also co-founded MyoKardia, Inc (acquired by BMS for $13.1 B), highlighting investor preference for scientific expertise.

Data from PitchBook as of 6/30/25, including deals of $2M+. [1]Companies shown include only ones with reported new-round valuation on PitchBook as of 6/30/2025. Data Sources: PitchBook, company websites, internal analysis.

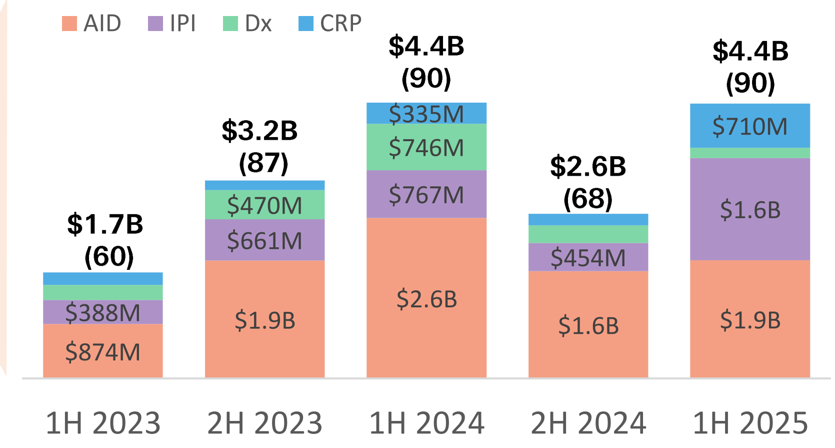
Comp Bio Analysis (All Deals)

2023-1H 2025, US and Europe

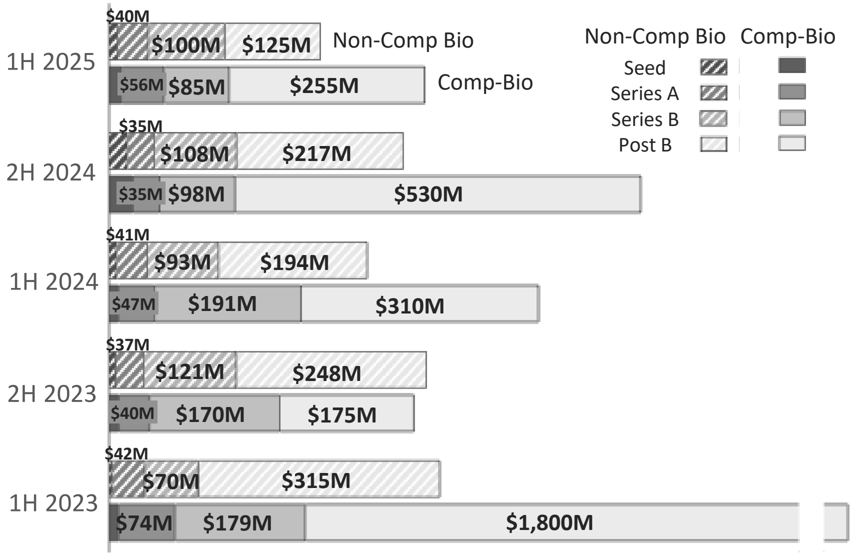
Dollar Raised Comp vs. Non-Comp Bio



Comp Bio Dollars Raised by Half (All Deals)



Comp Bio Median Pre-Money[1] Valuation by Round



Top Comp Bio Investors[2]

1H 2024		2H 2024		1H 2025	
Investor	**Deals**	**Investor**	**Deals**	**Investor**	**Deals**
Lilly | ARCH Venture Partners	2	Lilly	3	DIMENSION	8
Sofinnova Partners | 5AM Ventures	2	ARCH Venture Partners	3	Lilly	4
Alexandria Venture Investments	2	LifeX Ventures	3	Civilization Ventures	3
RA Capital khosla ventures	2	RA Capital	3	Alexandria Venture Investments	3
WRF Capital	2	WRF Capital	3	AIX Ventures	3

Comp bio companies showed renewed activity, raising $4.4B across 90 deals in 1H 2025 and matching the 1H 2024 peak. The surge spanned all subcategories, with AID leading by dollars raised at $1.9B. IPI and CRP followed at $1.6B and $710M, respectively, both up more than 3x from their 2H 2024 totals. Dx was the only subcategory to decline, with $164M raised versus $283M in 2H 2024. Comp bio companies continued to outperform in median pre-money valuations, especially in later-stage rounds, where 1H 2025 post-Series B medians reached $255M versus $125M for non-comp bio companies.

Predictive modeling expands, enabling digital twin platforms

CRP hit a record $710M in 1H 2025, though Kardigan's $300M deal accounts for 42% of CRP's total. Predictive modeling was also a driver of growth. Companies are moving beyond descriptive analytics, leveraging machine learning and statistical algorithms to forecast patient outcomes, identify disease biomarkers, and support personalized care. Companies such as Metabolon are advancing early cancer detection, while Pathos uses predictive modeling to identify patient subgroups most likely to benefit their targeted oncology therapies. In parallel, digital twin platforms are gaining traction, building on predictive modeling. Firms like SymBioSys, Ingenix and Unlearn ($50M Series C 1H 2024) leverage these tools to simulate patient outcomes, optimize trials and deliver personalized interventions.

Investor engagement remains strong

Investor activity remained concentrated and active. Dimension led with eight deals, while Lilly followed with four, and AIX Ventures, Civilization Ventures, and Alexandria Venture Investments each participated with three. Their continued backing reflects confidence in the innovation pipeline of comp bio companies, especially as IPI and CRP see rapid growth.

Data from PitchBook as of 6/30/25, including deals of $2M+. [1]Companies shown include only ones with reported new-round valuation on PitchBook as of 6/30/2025. [2]Top Investors only include first investment into a portfolio company, not follow-on financings. Data Sources: PitchBook, company websites, internal analysis.

Comp Bio Top Valuations and Exits

2024-1H 2025, US and Europe

Top 1H 2025 Comp Bio Post-Money Valuations[1]

AID IPI DX CRP

Company	Deal Size (M)	Post-Money Valuation (M)	Round	Sector	Indication	Life Stage
Isomorphic Laboratories	$579	$1.,800	Series A	Biopharma	Platform	Preclinical
PATHOS	$365	$1,600	Series D	Biopharma	Oncology	Phase II
NewLimit	$130	$825	Series B	Biopharma	Metabolic	Preclinical
Kardigan	$300	$646	Series A	Biopharma	Cardiovascular	Phase II
enveda	$150	$640	Series C	Biopharma	Platform	Phase I
Chai Discovery	$60	$570	Series A1	R&D Tool	Protein design	Commercial

Comp Bio Exits in 2024-2025

M&A deals

Year	Company	Acquirer	Sector	Indication	Life Stage	Time to Exit (Years)	Total Invested (M)	Upfront (M)	Deal Size (M)
2025	SCORPION	Lilly	Biopharma	Oncology	Phase II	4.2	$410	Undisclosed	$2,500
2024	celsius	abbvie	Biopharma	Gastrointestinal	Phase I	6.1	$148	$150	$250

IPOs

Year	Company	Sector	Indication	Life Stage	Time to Exit (Years)	IPO $ Raised (M)	IPO Post Money (M)	Current Market Cap (M)
2025	ALTO Neuroscience	Biopharma	Neurology	Phase II	4.2	$148	$428	$60
2024	Metagenomi	Biopharma	Platform	Preclinical	4.5	$94	$563	$56
2024	BIOAGE	Biopharma	Metabolic	Phase II	7.3	$198	$615	$150
2024	TEMPUS	R&D Tool	Precision Oncology	Commercial	9	$411	$6,100	$11,000

Data from PitchBook as of 6/30/25, including deals of $2M+. [1]Companies shown include only ones with reported new-round valuation on PitchBook as of 6/30/2025. Data Sources: PitchBook, company websites, internal analysis.

Top valuations span across indications and life stages
In 1H 2025, 6 comp bio companies achieved post-money valuations of $500M+, led by Isomorphic Labs ($1.8B) and Pathos ($1.6B). These companies cover a range of indications including biopharma platforms, oncology, metabolic and cardiovascular diseases, demonstrating the sector's breadth. Notably, Chai Discovery is the only commercially available R&D tool company among them, while the rest are biopharma companies at stages ranging from preclinical to phase II.

Exits accelerate as M&A and IPO activity picks up
The past 18 months saw increased comp bio exits through M&As and IPOs. Major pharma acquirers like Lilly and AbbVie targeted comp bio companies with lead discovery tools and clinical pipelines. The average time to exit for comp bio M&A was 5.2 years, slightly longer than non-comp bio's 4.4 years in 2024, with deals occurring after early to mid stage clinical data. While non comp bio continues to see more preclinical exits (six deals from 2024-1H 2025), mid-stage comp bio M&A activity is encouraging for the sector.

Four comp bio IPOs were completed since 2024, three of which were biopharma companies. While public market performance has been challenging (all three biopharma IPOs trading below their IPO market cap), the sole R&D Tool IPO, Tempus, surged strongly. It went public at a 50% discount from its last private round but has since reached an $11B market cap.

Scalable platforms drive high-value companies and exits
The highest valued comp bio companies in 1H 2025 share a focus with the recent exits. Companies like Isomorphic Labs, Enveda, Alto Neuroscience and Metagenomi are built on scalable screening and analytics platforms, enabling them to pursue multiple therapeutic areas, rapidly expand pipelines and secure discovery partnerships. Many of the highest-valued companies remain at early clinical stages however, while most exits happened after key clinical milestones.

Med Device Early-Stage: First-Financing Analysis (Seed/Series A)

1H 2025

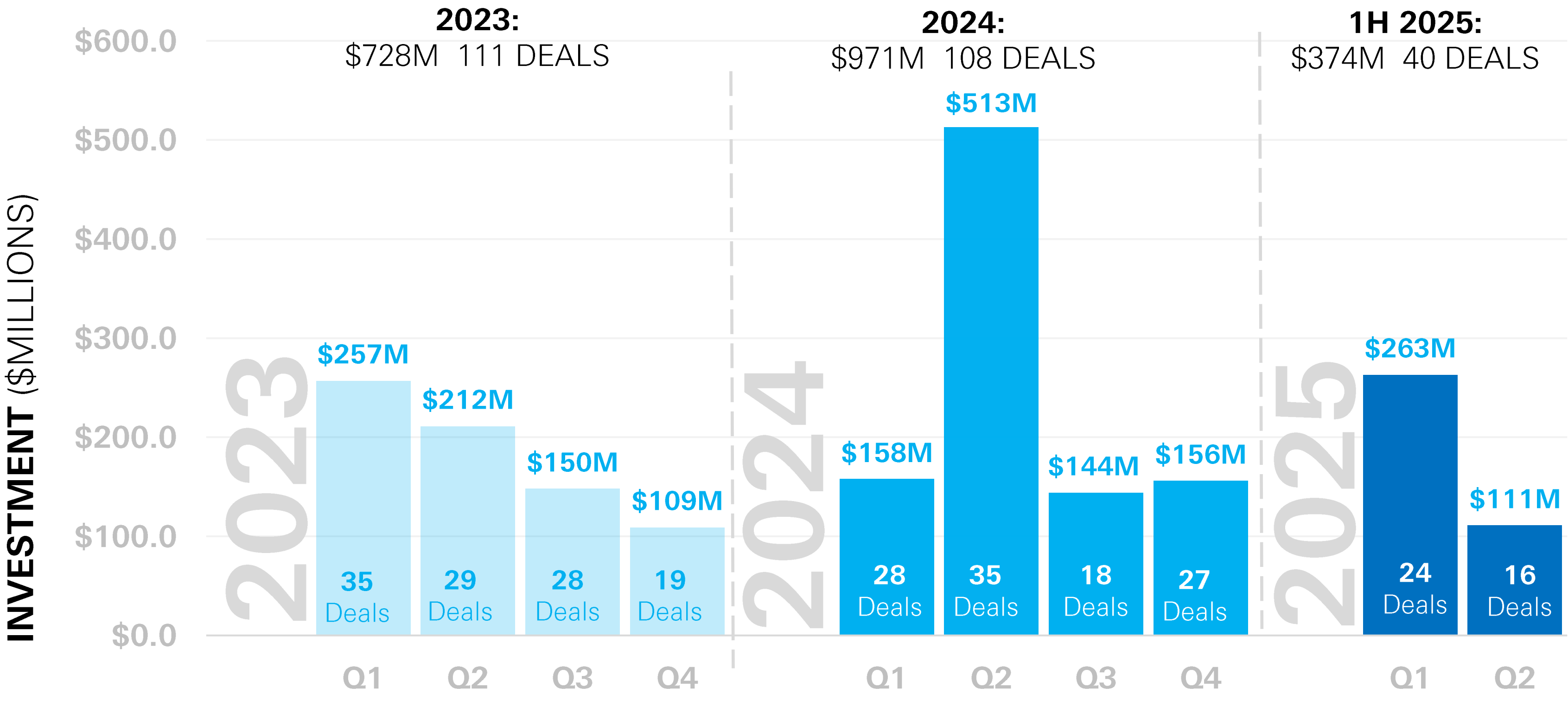
HSBC Innovation Banking

Med Device First-Financing[1] Analysis

2023–1H 2025 US & Europe

Strong Q1 2025 investment transitions to troubling lows in deals and dollars in Q2

Med Device First-Financing Investment Activity ($/Deals)



2024 investment up, but 2H trend was troubling
First-financing investment in 2024 was stable but inconsistent, with a record-setting high in Q2 investment dollars. However, annualized pace for 2H 2024 investment trailed the prior three years by 20-40%.

2025 investment showed big decline in Q2
Q1 investment started strong, marking the second biggest quarter in the last four years and featuring eight double digit million first-financings. In late Q1, however, we began to see the early-stage device sector affected by mounting caution, driven by tariffs, FDA layoffs, grant uncertainty and a general market unease.

Surprisingly, overall device investment remained strong in Q2, but not from first-financing deals. First-financings struggled, staggering to the second lowest investment quarter in the last ten, and the lowest deal total.
Aside from a $40M first-financing for Field Medical in Q2, no other first-financing deal exceeded $8M. Instead, med device investors focused new capital on later-stage companies funding pivotal trials or ramping commercially-cleared products.

Early-stage investment reduction also reflects the current venture downturn, as many traditional investors face challenges delivering the returns demanded by LPs to enable a new fundraise. Thus, investors are hyper-focused on driving existing investments to exit, either allocating investable capital away from new deals to support existing portfolio or investing in later-stage investment with less technology risk and a (hopefully) nearer term exit.

Data from PitchBook as of 6/30/25. Covers private, venture-backed investment. [1]First-financing defined as initial Seed or Series A financing of $2M+. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Med Device First-Financing[1] by Indication[2] 2023–1H 2025 US & Europe

AI enabled technologies showcase a surge in neuro investment

Trendline Shading
Year over year ($s)
(2025 Annualized)

- Upward
- Flat
- Down

Neurology ($M/Deals)

2023	2024	1H 2025
$55 9	$89 13	$87 6

Imaging ($M/Deals)

2023	2024	1H 2025
$131 21	$88 11	$3 1

Uro/Gyn ($M/Deals)

2023	2024	1H 2025
$46 6	$155 7	$7 2

Orthopedic ($M/Deals)

2023	2024	1H 2025
$98 11	$105 15	$16 5

NIM ($M/Deals)

2023	2024	1H 2025
$54 14	$126 12	$33 4

Cardiovascular ($M/Deals)

2023	2024	1H 2025
$20 4	$15 1	$73 4

Vascular ($M/Deals)

2023	2024	1H 2025
$39 5	$32 7	$12 3

Dental ($M/Deals)

2023	2024	1H 2025
$10 2	$11 3	$47 4

Surgical ($M/Deals)

2023	2024	1H 2025
$92 14	$142 13	$79 8

Largest Rounds in 1H 2025

	Company	Indication Focus	Size of Round ($M)	Deal Date	Location
1	Echo Neurotechnologies	Neuro Brain/Computer	$50	1/31	SF, CA
2	Field Medical	Cardiovascular Pulsed Ablation	$40	4/21	Encinitas, CA
3	VARDIS	Dental Tooth Protection	$35	2/11	Zug, Switzerland
4	LIVSMED	Surgical Articulating arm	$26	1/12	San Diego, CA
5	subsense	Neuro Brain/Computer	$17	2/18	Corvina, CA
6	EBAMed External Beam Ablation	Cardiovascular Beam Ablation	$17	1/24	Geneva, Switzerland

Cardiovascular, Neuro and Dental see upside
Cardiovascular deals, which have found difficulty securing first-financing dollars, saw a noticeable jump to $73M in 1H 2025, with Field Medical, EBAMed, Circle Safe and Approxima closing new rounds.

Neuro continued its two-year surge, already nearly matching full year 2024 first-financing investment at midyear. Brain/computer interface technologies, driven by AI-enablement, remained a central theme, with Echo and Subsense raising the largest two neuro first-financings.

The Dental category continued to gain interest as better, less-invasive dental products and treatments captured investor attention. Notable examples include advanced solutions for treating tooth decay (Vvardis) and preventing wisdom tooth growth (TriAgenics).

Investment slowdown for early-stage imaging
Imaging first-financing fell significantly, to just one deal in 1H 2025, even as later-stage imaging investment was up to $500M+.

Numbers at a glance (six largest first-financing deals):

Indication

Neuro	2 deals
Cardiovascular	2 deals

Location

SoCal	3 deals
Switzerland	2 deals

Data from PitchBook though 6/30/25. Covers private, venture-backed investment. [1]First-financing defined as initial Seed or Series A financing of $2M+. [2]Indication defined as the central focus of the company. If NIM or Imaging company, that indication bucket supersedes the underlying focus. [3]Originally announced in prior years. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Med Device First-Financing[1] Analysis

2024–1H 2025 US & Europe

Who invested in First-Financing deals in the US since 2024?

2024

Historically Known

- xontogeny
- OHC OSANG HEALTHCARE
- LIGHTSTONE VENTURES
- INTUITIVE Ventures
- NEA
- LABORIE
- TVM Life Science CAPITAL
- MVM
- HATTERAS VENTURE PARTNERS
- treoventures
- SONDER CAPITAL
- Cormorant Asset Management
- REX HEALTH VENTURES
- Portal Innovations

Less Known

- EVERY WHERE
- KLI CAPITAL
- FemHealth Ventures
- ATMA CAPITAL
- NEXTGEN
- rev1 ventures
- PUMA VENTURE CAPITAL
- streamlined ventures
- TRANSFORM VC
- Avestria
- RH Capital A RHIA VENTURES FUND
- SPINEART
- SUN PHARMA
- AVANOS
- tao capital partners
- Nurse Capital

2025

Historically Known

- andreessen horowitz
- BOLD CAPITAL PARTNERS
- CATALYST HEALTH VENTURES
- Maverick Ventures
- Wavemaker THREE-SIXTY HEALTH
- GOOD GROWTH CAPITAL
- orbimed
- SOSV
- SHANGBAY CAPITAL
- MAYO CLINIC Business Development
- treoventures
- WARF VENTURES Invest-Develop-Partner
- Ben Franklin Technology PArtners

Less Known

- GOLDEN FALCON CAPITAL
- freeflow
- engage VENTURE PARTNERS
- CAMFORD
- ANORAK VENTURES
- redalpine
- THORNAPPLE RIVER CAPITAL
- BOLDVENTURES
- DREAM VENTURES
- BlueLake Ventures
- ACCOMPLICE
- VIPC VIRGINIA INNOVATION PARTNERSHIP CORPORATION VIRGINIA VENTURE PARTNERS
- Highpoint Ventures

Data from PitchBook as of 6/30/25. Covers private, venture-backed investment. [1]First-financing defined as initial Seed or Series A financing of $2M+. Data sources: PitchBook, company websites, internal analysis.

Med Device Investment: All Venture Deals

1H 2025

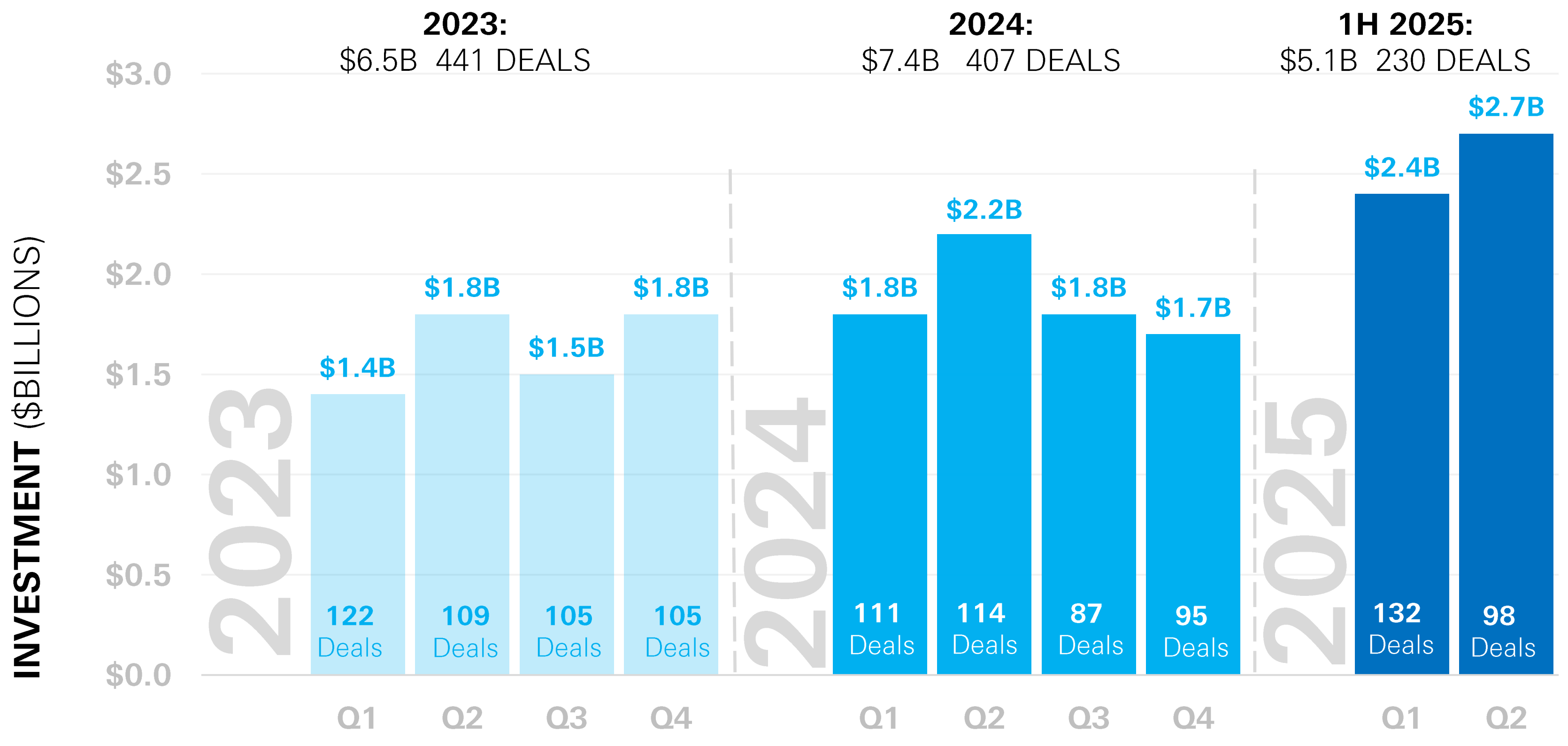
HSBC Innovation Banking

Med Device Analysis (All Deals)

2023–1H 2025 US & Europe

Strong 1H 2025 investment led by Neuralink's $650M, 27 other $50M+ financings

Med Device Investment Activity ($/Deals)



1H 2025 on pace to set a record for investment
At $5.1B in 1H 2025, med device investment is on pace to set a record for the sector. Q1 2025 device investment was particularly strong, with investment setting a three-year high in both deals and dollars. There were six $100M+ mega rounds in Q1, though no outsized deals as no financings raised over $120M. Three of the six mega rounds supported commercialization of 510(k) cleared products; two funded PMA pivotal trials and one supported an early-stage PMA pathway company.

Q2 deal pace falters, but Neuralink closes record deal
Q2 saw deal volume drop by 25%, but still set an investment high, aided by a record-setting $650M round for Neuralink. Q2 dollars were especially top heavy, with the largest four device deals raising $1.1B, or 41% of all med device dollars invested in Q2.

$50M rounds continue to increase
There were 26 $50M financings in med device in 2023, which grew to 45 deals in 2024. In 1H 2025, there were already 28 $50M+ equity rounds. This growth coincides with a decline in early-stage investments. Many larger rounds were led by traditional venture investors, who in this part of the down-cycle look to mitigate technology risk and find a faster path to an exit. The bigger deals mainly funded PMA trials or 510(k) commercialization rounds.

Series B remains difficult, but has picked up
Series B financing, though still challenging, picked up in 2024 (72 deals), and continued in 1H 2025 with 24 deals (about 10% of 2025 deals) raising $800M. However, at the same time, we have also witnessed Series A companies already on insider rounds shut down or consolidate after being unable to find a new lead investor.

Data from PitchBook as of 6/30/25. Covers private, venture-backed investment. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Med Device Investment by Indication[1]

2023–1H 2025 US & Europe

Neuro, Cardio and Imaging dollars up, joined by Ophthalmology, Drug Delivery

Neurology ($M/Deals)

2023	2024	1H 2025
$1,313 44	$1,207 49	$1,377 31

NIM ($M/Deals)

2023	2024	1H 2025
$647 64	$1,171 53	$550 31

Orthopedic ($M/Deals)

2023	2024	1H 2025
$622 46	$808 53	$350 27

Imaging ($M/Deals)

2023	2024	1H 2025
$836 61	$531 40	$580 20

Cardiovascular ($M/Deals)

2023	2024	1H 2025
$521 28	$678 27	$715 22

Drug Delivery ($M/Deals)

2023	2024	1H 2025
$232 18	$51 7	$212 8

Surgical ($M/Deals)

2023	2024	1H 2025
$884 48	$863 51	$539 29

Ophthalmology ($M/Deals)

2023	2024	1H 2025
$256 17	$152 13	$163 12

Dental ($M/Deals)

2023	2024	1H 2025
$157 10	$152 7	$111 8

Trendline Shading ($s)
Year over Year (2025 Annualized)

Upward Flat Down

Neuro investment fueled by AI
Neuro investment surpassed full year 2024 totals at midyear, setting a five-year high. Neuralink's huge round was certainly a big factor, although even without that investment, neuro would still be on pace to set a record. AI-aided brain/computer interface technologies dominated, with Neuralink, Science, Echo, Robeaute, and Subsense highlighting seven 1H 2025 brain/computer deals that raised a collective $856M. Neurostim technologies also added new financings, with some raising commercialization ramping rounds like MicroTransponder (stroke recovery), Magnus Medical (depression) and Cala (essential tremor) while others raised go-to-market capital, like SetPoint (autoimmune).

Cardiovascular and imaging dollars increase
There were six $50M+ cardiovascular deals in 1H 2025 with four of the six Series E or later rounds. Two funded early clinicals for PMA pathway technologies (Supira, Corvia), three funded pivotal trials (Alleviant, 4C and Cardiac Dimensions) and one commercialized a cleared product (Atraverse).

Imaging closed 13 deals of at least $10M, led by mega rounds for Lumicell and Prenuvo. Platform technologies were the primary focus for imaging companies, followed by oncology.

Ophthalmology, Drug Delivery gain 2025 investment
Ophthalmology investment ticked back up after a decline in 2024, with a number of small contact lens deals and one large financing combining both contact lens and sustained drug delivery (SpyGlass Pharma, $75M) .

Drug delivery deals increased investment in 1H 2025, well ahead of full-year 2024 and approaching full-year 2023 dollars. Most of the deals involved patch technologies or improved delivery mechanisms for already approved drugs.

Data from PitchBook though 6/30/25. Covers private, venture-backed investment. [1]Indication defined as the central focus of the company. If NIM or Imaging company, that indication bucket supersedes the underlying focus. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Med Device Venture Investments

1H 2025 US & Europe

Neuralink and Science brain/computer technologies highlight AI dominated deals

Largest Rounds in 1H 2025

#	Company	Indication Focus	Size of Round/ ($M) Step-up?[1]	Date/ Round	Location
1	NEURALINK	Neuro Brain/Computer	$650 (2.4x)	5/27 E	Fremont, CA
2	LUMICELL	Imaging Oncology	$198	5/6 E	Newton, MA
3	OrganOx	Surgical Organ Transplant	$160	5/8 Late Stage	Oxford, UK
4	CMR SURGICAL	Surgical Robotics	$131	4/2 D2	Cambridge, UK
5	CeQur	Drug Delivery Metabolic	$120	1/7 D	Luzern, Switzerland
6	FIRE1	NIM Heart Failure	$120	1/7 B	Dublin, Ireland
7	prenuvo	Imaging MRI Body Scan	$120	2/13 B	Los Angeles, CA
8	Supira MEDICAL	Cardiovascular Ventricular Assist	$120	3/26 E	Los Gatos, CA
9	SETPOINT MEDICAL	Neuro Neurostim	$115 (1.4x)	3/27 D	Valencia, CA
10	Science	Neuro Brain/Computer	$104	4/11 Late Stage	Alameda, CA

Valuation[1] Step-Up | Flat Rd | Step-Down

More clinical-stage financing for larger deals in 1H

In 2024, seven of the 10 largest med device deals were for commercial stage companies, funding five 510(k) cleared deals and one each for commercial stage PMA and De Novo companies.

In 1H 2025, the top 10 deals were split evenly between commercialization and development/clinical trials. Interestingly, contrary to the trends in 2023 and 2024, there were more PMA/De Novo commercialization deals (three) than 510(k) cleared financings (two). On the development side, Neuralink and Science were both in early clinical trials, while Fire1, SetPoint and Supira were funding upcoming pivotal trials or ongoing pivotal trials into commercialization.

AI-based technology deals take center-stage

Six of the top 10 deals relied on AI-based technology as a core part of their businesses, including Neuralink, Lumicell, CMR, Fire1, Prenuvo, and Science.

Numbers at a glance (10 largest deals)

Indication

Neuro	3 deals
Imaging	2 deals
Surgical	2 deals

Location

California	5 deals
OUS	4 deals

Data from PitchBook though 6/30/25. Covers private, venture-backed investment. [1]Step-up analysis uses PB supplied valuations if available. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Med Device Most Active Investors[1]

1H 2025 US & Europe

Broader group of corporates, less VC/Growth with multiple deals in 1H 2025

ALL DEALS

Angel/VC		Corporate[3]/Gov.		Growth[2]	
3	PANAKÈS PARTNERS; Gilde HEALTHCARE	2	accelmed; invierte CDTI; ENEA TECH BIOMEDICAL	2	Ally Bridge Group; SANDS CAPITAL
2	SHANGBAY CAPITAL; Denniston Family Office; HealthQuest CAPITAL; Longitude CAPITAL	1 (tie)	Boston Scientific; ELEVAGE MEDICAL TECHNOLOGIES; INTUITIVE Ventures; Johnson & Johnson; REX HEALTH VENTURES; SAMSUNG		
2 (tie)	RIMONCI 睿盟希资本; VB	1 (tie)	MAYO CLINIC; TERUMO; ZEISS		

Data from PitchBook as of 6/30/25. Covers private, venture-backed investment. [1]Most Active Investors only include investment into a new portfolio company, not follow-on financings. [2]Growth Investors defined as investment firms that typically invest in later-stage companies that either are revenue scaling, or the round is anticipated to be the last before an IPO. [3]Note that families of funds are combined for this slide, as are corporate and corporate venture with the same parent. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Med Device Largest Post-Money[1] Values

1H 2025 US & Europe

More clinical than commercial stage in later-round, older set of companies

Largest Post-Money Valuation in 1H 2025

Indication	Company	Date	Deal Size ($M)	Round	Post $ ($M)/ Step-up?[1,2]	Stage	Notable/Lead New Investor(s)
Neuro Brain/Computer	NEURALINK	5/27	$650	E	$9,000 (2.4x)	Clinical Trials PMA	Asset Manager, Corporate, Hedge, PE/Growth, VC
Surgical Robotics Platform	CMR SURGICAL	4/2	$131	D2	$3,000	Commercial De Novo	Corporate, Growth, VC
Surgical Articulating arm	LIVSMED	1/12	$26	F	$480	Commercial 510(k)	Asset Manager, Corporate, Government, VC
Neuro Neurostim	SETPOINT MEDICAL	3/27	$115	D	$480 (1.4x)	Pivotal Trial PMA	Growth
NIM Platform	VitalConnect	2/19	$100	G	$463	Commercial 510(k)	PE/Growth
Cardiovascular pVAD	Supira MEDICAL	3/26	$120	E	$420	Clinical Trials PMA	Sovereign, VC
NIM Metabolic	biolinq	4/22	$100	C	$395 (2.1x)	Pivotal Trial	Asset Manager
Ophthalmology I/O Lens	SPYGLASS PHARMA	6/2	$75	D	$355 (1.5x)	Phase III Clinical Trial	Growth, VC

Valuation[2]: Step-Up | Flat Rd | Step-Down

Later-round, older deals dominate
Most of the highest-valued financings in 1H 2025 were later-stage rounds. The earliest round among the top eight deals was a Series C round, with four deals Series E or later.

These companies have been around for a while. SpyGlass and Biolinq closed their first institutional rounds 6 years ago, other deals were even later. Neuralink raised its first round 8 years ago, CMR (9 years), LivsMed (10 years), Supira (13 years), VitalConnect (14 years), and SetPoint (18 years).

More clinical stage than commercial
In 2024, commercial-stage rounds commanded the highest valuations, with seven of eight securing revenue ramping rounds. In 1H 2025, however, there were more clinical stage than commercial.

Review of 2023 large post-money deals
Interestingly, two of the companies on the 1H 2025 list (Neuralink and Supira) were also on the list for the largest post-money valuation in 2023, both raising up-rounds in 2023.

Two financings from the top valuation list in 2023 have since exited. Relievant was sold for $850M upfront (2.4x the 2023 post-money value), and Beta Bionics went public in 2025 at a pre-money value similar to its 2023 private post-money of $500M. At midyear 2025, Beta Bionics' market cap was $586M.

Data from PitchBook as of 6/30/25. Covers private, venture-backed investment. [1]Financing data based on information available from PitchBook, including post-money values and step-up, flat and down round calculations. [2]Step-Ups calculated using Pitchbook valuation data for previous and new financing as follows: Divide new pre-money valuation by previous round post-money valuation. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Med Device Investment: Private Exit Analysis

1H 2025

HSBC Innovation Banking

Med Device Private VC-Backed M&A[1] by Indication

2019–1H 2025

Strong M&A in 2H 2024 leads to disappointing 1H 2025; 2 Med Device IPOs

M&A MEDIAN DEAL VALUES

Date	2019	2020	2021	2022	2023	2024	2025
Deals	17	16	23	10	9	14	3
Upfront ($M)	$120	$132	$250	$138	$400	$288	$360
Milestone TBE ($M)	$35	$100	---	$130	$120	$63	$180
Total Deal ($M)	$220	$223	$300	$255	$600	$338	$540

NOTABLE M&A 1H 2025

SoniVie	→	Boston Scientific
endostream	→	Kaneka
Bolt Medical	→	Boston Scientific

IPOs[2] 2024-1H 2025

Date	Company	Indication	Stage	Time to IPO[2] (yrs)	Step-up to IPO[3]	IPO Dollars Raised ($M)	IPO Post Money ($M)	Performance to IPO Price (12/31)
10/11/24	ceribell	NIM/Neuro	Commercial	6.4	1.3x	$180	$578	+10%
1/30/25	Beta Bionics	NIM/Metabolic	Commercial	9.1	unknown	$204	$728	-10%
3/8/25	kestra	NIM/Cardiovascular	Commercial	10.7	unknown	$202	$842	-2%

2025 M&A disappoints at midyear

Similar to what we encountered in 1H 2024, there were only three private M&A deals in 1H 2025. Upfront and total deal values were slightly ahead of 2024 numbers. The median time to exit from the first institutional round improved to 7 years (with a low of 5.3 years and a high of 9.3 years), a significant reduction from the 11.9 year median seen in 2024. With many companies closing in on pivotal trial data in 2H 2025, we hope to see M&A scale like it did in 2H 2024, when nine M&A deals were announced in Q3.

Two IPOs highlight 1H 2025

After the Q4 2024 IPO of Ceribell, two additional med device IPOs followed in 1H 2025. Beta Bionics and Kestra Medical both went public in Q1 2025, each raising more capital and with larger IPO post-money values than Ceribell. All three companies had annual revenue run rates in excess of $50M. While both 1H 2025 IPOs were trading down by a small margin, it is a great boon to the industry to see strong revenue stories in med device access the public market during a tough financing cycle. One of the central questions remains whether the NIM category, with more predictable revenue, is the exception to a closed IPO window or the catalyst to open it up to other med device categories.

[1]Med Device M&A defined as private, venture-backed M&A with an upfront payment of at least $50M, calculated on a best-efforts basis. [2]IPOs defined as private venture-backed IPOs that raise at least $25M in an IPO. Data sources: PitchBook, public news articles and conversations with investors and companies.

Analysis of VC-Backed PMA Approvals

2020–1H 2025

The road to exit for a PMA device company is long, but when achieved, valuable

37 venture backed PMA approvals: 2020–1H 2025

Timeline

Metric	Value (median)
First VC Round to PMA Approval	9.8 Years
PMA Trial Start to Trial Completion	3.6 Years
PMA Trial Start to FDA Approval (no BDD[1])	4.8 Years
PMA Trial Start to FDA Approval (with BDD[1])	4.0 Years
Dollars Raised to PMA Approval	$85M
Median First VC Round Date from Cohort	12/4/2013

M&A Outcomes

Metric	Value (median)
M&A Exits	7
Upfront Price: All-in price:	$250M $425M
Acquired Pre-PMA Approval	4
Dollars Raised prior to Acquisition	$96M
Time to M&A from First Venture Funding	8.8 Years

Buyers

PHILIPS, INARI MEDICAL, Laborie FOR DIGNITY. FOR LIFE., Otsuka, Boston Scientific, BAUSCH + LOMB, Edwards

IPO Outcomes

Metric	Value (median)
IPO Exits	5
Pre-PMA Approval IPOs	1
Mkt Cap at IPO	$842M
Dollars Raised Prior to IPO	$246M
Time from First VC Round to IPO	12.9 Years
Current Market Cap Greater than IPO Market Cap	3 (1 acq'd)

VC-backed PMA Approvals
Of the 169 PMA approvals granted by the FDA between 1/1/2020 and 6/30/2025, 37 (22%) received venture funding to support the PMA process. There were 15 cardiovascular PMAs in this cohort, followed by GI with six. Trial data showed a median enrollment of 223 subjects for these approvals.

Where are they now?
Of the 37 venture-backed companies, 12 achieved exits, with seven M&A and five IPOs. Twenty-four remain venture funded, with 20 raising additional venture rounds since 2023, 14 of which raised in the past 12 months.

Breakthroughs provide shorter path
Ten of the 37 companies received Breakthrough Device Designation (BDD). BDD submissions shortened the duration from PMA trial start to approval by ~10 months. The median trial duration for BDDs was shorter by about seven months (3.4 years compared to 4.0) and the time from submission to approval was about two and a half months shorter (1.0 year compared to 1.2).

More to come!
The data shown in this table only includes companies that have already received PMA approval. Several additional PMA path companies have achieved strong M&A outcomes over the past few years (Laminar, SoniVie, V-Wave and Jenavalve) but have not yet received PMA approval.

Venture backed company defined as a company who raised over $2M in venture funding. First VC Round defined as first round from institutional venture investors over $2M. [1]10 of the 37 companies in cohort received Breakthrough Device Designation (BDD). Data sources: PitchBook, FDA.gov, public news articles and conversations with investors and companies.

Healthtech Early-Stage: First-Financing Analysis (Seed/Series A)

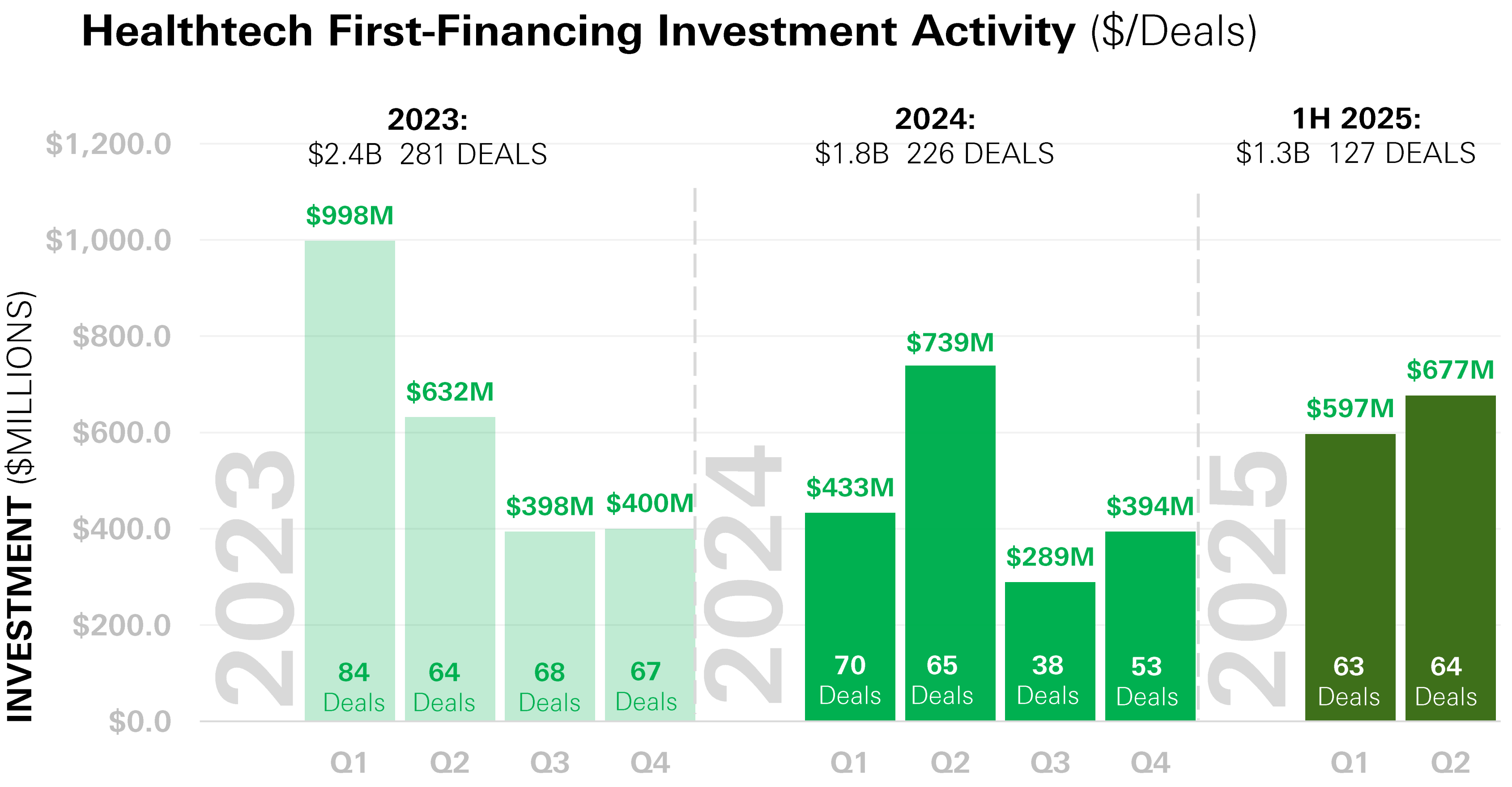
1H 2025

HSBC Innovation Banking

Healthtech First-Financing[1] Analysis

2023–1H 2025 US & Europe

More dollars funded fewer deals; Workflow automation leveraging AI a key focus



2025 first-financing finds a rhythm

More dollars are flowing into fewer deals as the fundraising market tightens, with investors becoming increasingly selective. In 1H 2025, the average and median deal sizes reached $6.0M and $10.5M, respectively, both up from below $5.0M and $8.2M in 2023 and 2024.

Investors are finding a rhythm in their early-stage deal activity. Both Q1 and Q2 had similar deal counts, average round sizes ($10M), and average pre-money valuations ($25M) based on disclosed data. This year is on track to exceed both 2023 and 2024 total first-financing investment with an expected 44% year-over-year increase in invested capital. While total deal activity is expected to exceed 2024's, it may still fall short of 2023 levels.

The recent exit activity (Hinge, Omada, and others), could drive an uptick in activity in 2H 2025, as more capital becomes available and newly closed funds seek their first deals. However, investor attention will remain on macroeconomic factors, including rates, global equities, and GDP growth.

Investors are finding more deals outside top markets

More than 70% of 1H 2025 first-financing deals were located outside of the top U.S. innovation markets (SF, Boston, and NYC). Only 29% of deals occurred within these Big 3 markets; although they still accounted for 37% of all invested capital in the first half of 2025. Other cities with strong first-financing activity in 2025 include Nashville (5), Phoenix (5), Austin (4), Denver (4), and Raleigh-Durham (4).

Healthtech defined as companies or product/solutions that help in delivering care, helping doctors or other forms of medical solution deliver care, or helping the broader ecosystem deliver care. Data from PitchBook as of 6/30/25. Covers private, venture-backed investment and companies may overlap with other healthcare sectors. [1]First-financing defined as initial Seed or Series A financing of $2M+. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Healthtech First-Financings[1] by Subsector

2023–1H 2025 US & Europe

Workflow investment dominates; Pediatrics finds its moment

Top First-Financing Subsectors

PO/Workflow ($M/Deals)

2023	2024	1H 2025
$766 87	**$557** 80	**$523** 54

PO/Clin Support ($M/Deals)

2023	2024	1H 2025
$249 46	**$186** 25	**$128** 17

Wellness/Ed. ($M/Deals)

2023	2024	1H 2025
$169 28	**$149** 28	**$133** 13

AC/Specialty Care ($M/Deals)

2023	2024	1H 2025
$266 36	**$211** 15	**$106** 9

AC/Primary Care ($M/Deals)

2023	2024	1H 2025
$105 12	**$41** 7	**$48** 3

AC/Mental & Behavioral ($M/Deals)

2023	2024	1H 2025
$250 23	**$168** 28	**$156** 9

AC/Women's Health ($M/Deals)

2023	2024	1H 2025
$78 12	**$88** 5	**$15** 3

Medication Mgmt ($M/Deals)

2023	2024	1H 2025
$49 8	**$55** 7	**$45** 4

HC Navigation ($M/Deals)

2023	2024	1H 2025
$68 9	**$69** 9	**$81** 7

Clinical Trial/Discovery ($M/Deals)

2023	2024	1H 2025
$92 4	**$112** 7	**$7** 1

Clinical Trial/Workflow ($M/Deals)

2023	2024	1H 2025
$311 13	**$213** 13	**$17** 4

Trendline Shading ($s)
Year over Year (2025 Annualized)

Upward Flat Down

Workflow solutions maintain dominance
Workflow solutions continued to lead overall investment activity, nearly equaling 2024's investment dollars within just 1H 2025. Deal activity in this subsector is on pace to grow by 35%. With AI representing 64% of all U.S. investment activity (according to Pitchbook), it's not surprising that the low-hanging fruit for value-driven AI tools is in automating and improving administrative and provider workflows. The largest and most notable deal in this subsector was Collate's $30M Seed round, led by Redpoint.

Pediatric care delivery seeing its moment
Despite a decline in deal volume for specialty care, primary care, and mental health, overall first-financing investment in these subsectors is on pace to increase by nearly 50% year-over-year. With uncertainties in the overall macro environment, investors are becoming more selective in the deals they support but are showing greater conviction by investing more capital into fewer companies. Pediatrics stands out within these subsectors. Three of the four largest deals were pediatric companies: Bluebird Kids Health ($31.5M), Spark Pediatrics ($15M), and First Place Pediatrics ($14M). Founders and investors see significant opportunity to close care gaps for children, especially those on Medicaid, through improved care management and delivery models.

Healthcare navigation tools become more focused
Early-stage investments in healthcare navigation tools have surged in 2025, exceeding the total investment seen in all of 2023 and 2024 with just the first six months of the year. These deals are more specific in their offerings, providing patients with tools to navigate home care, plastic surgery, dental care, and even financial aid. There is a continued growth trend in care navigation tools for specialty care, building on the deal activity seen in 2023 and 2024, particularly in cancer care navigation. Notable deals include Bliss ($17M), World Class Health ($18M), and Vector Health ($9M).

Healthtech defined as companies or product/solutions that help in delivering care, helping doctors or other forms of medical solution deliver care, or helping the broader ecosystem deliver care. Data from PitchBook though 6/30/25. Covers private, venture-backed investment. [1]First-financing defined as initial Seed or Series A financing of $2M+. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Healthtech Investment: All Venture Deals

1H 2025

HSBC Innovation Banking

Healthtech VC Investment (All Deals)

2023–1H 2025 US & Europe

Large mega rounds increase as mid-size deals decline

Healthtech Investment Activity ($/Deals)

Surge in January front-loads capital deployment
A surge in larger mega rounds ($200M+) early in the year, led by Truveta ($320M), Innovaccer ($275M), Amboss ($257M), and Function Health ($200M) fueled a breakout start to the year. However, that initial surge quickly normalized, and in February monthly investment averaged roughly $1B/month with only seven $100M+ deals through June.

More large $200M+ mega rounds but mid-size deals pull back
1H 2025 saw eight large mega rounds ($200M+), already surpassing the full-year totals from both 2023 and 2024. Seven of these eight rounds were provider operations and wellness and education companies, reflecting continued conviction in AI-driven platforms with large addressable markets.

In contrast, mega rounds between $100M-200M dropped to just 5 deals, down from 13 in 2023 and 19 in 2024. This suggests a potential barbell effect: capital is concentrated among breakout leaders and earlier-stage companies, while middle-stage companies that have not reached pre-IPO scale receive less investor interest. This also reflects a thesis-driven capital environment, with investors focused on clear winners or promising early bets in specialized care or AI-use cases in the clinic, while companies in between may face valuation pushback or 'wait-and-see' dynamics.

Strategics anchor 2025's largest healthtech rounds
Strategics continue to shape the upper end of the market, with major corporate players across big pharma (Regeneron), tools (Illumina, Danaher), and health care systems (Kaiser, Banner Health) backing several of the year's largest Healthtech deals.

Healthtech defined as companies or product/solutions that help in delivering care, helping doctors or other forms of medical solution deliver care, or helping the broader ecosystem deliver care. Data from PitchBook as of 6/30/25. Covers private, venture-backed investment and companies may overlap with other healthcare sectors. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Healthtech by Subsector

2023–1H 2025 US & Europe

AI platforms attract capital while care delivery models recalibrate

Top Subsectors

PO/Workflow ($M/Deals)

2023	2024	1H 2025
$3,572 230	$4,967 297	$3,933 159

PO/Clin Support ($M/Deals)

2023	2024	1H 2025
$1,974 143	$1,485 102	$832 55

Wellness/Ed. ($M/Deals)

2023	2024	1H 2025
$653 86	$1,263 93	$1,162 42

AC/Specialty Care ($M/Deals)

2023	2024	1H 2025
$1,694 85	$1,141 68	$658 43

AC/Primary Care ($M/Deals)

2023	2024	1H 2025
$1.071 38	$979 37	$548 14

AC/Mental & Behavioral ($M/Deals)

2023	2024	1H 2025
$1,009 87	$1,483 86	$452 30

AC/Women's Health ($M/Deals)

2023	2024	1H 2025
$570 30	$904 29	$146 17

Medication Mgmt ($M/Deals)

2023	2024	1H 2025
$576 30	$778 25	$151 14

HC Navigation ($M/Deals)

2023	2024	1H 2025
$258 22	$695 35	$441 20

Clinical Trial/Discovery ($M/Deals)

2023	2024	1H 2025
$533 24	$181 15	$75 6

Clinical Trial/Workflow ($M/Deals)

2023	2024	1H 2025
$790 43	$639 53	$234 18

Trendline Shading ($s)
Year over Year (2025 Annualized)

Upward Flat Down

Healthtech defined as companies or product/solutions that help in delivering care, helping doctors or other forms of medical solution deliver care, or helping the broader ecosystem deliver care. Data from PitchBook though 6/30/25. Covers private, venture-backed investment. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Workflow and AI platforms outpace alternative care models

In 1H 2025, investor focus continued to shift decisively toward provider operations, which received $4.8B across 214 deals and is on track for a huge growth year. Investor enthusiasm concentrated around AI-driven platforms like Innovaccer ($250M), Truveta ($320M), Abridge ($250M), and Hippocratic AI ($141M), which are applying machine learning to workflow automation, clinical data integration, and ambient documentation. These companies are viewed as high-leverage infrastructure plays with scalable economics, large TAMs, and strong enterprise traction.

Meanwhile, leading alternative care companies such as Function Health ($200M) and Cera ($150M) also secured sizeable rounds, but these were exceptions in a cooling category. Investors are increasingly wary of models reliant on labor costs, intensive service delivery, and exposure to evolving telehealth reimbursement and Medicare Advantage policies.

Recalibration in women's and mental/behavioral health

Mental and behavioral health saw a drop off in deal activity and investment, driven by a noticeable decline in later-stage capital, with only two deals over $50M in 1H 2025 compared to eight in 2024, and Series C and later deals falling sharply from 11 in 2024 to just two. After several years of surging investor interest in comprehensive women's health platforms, 1H 2025 marks a pullback in large-scale funding, with only three deals exceeding $25M (compared to 11 in 2024).

The absence of large rounds highlights investor caution regarding platform and margin scalability, given the greater capital and time required for services-oriented models to gain traction. It may also signal a pause ahead of strategic exits and consolidation.

Wellness and medical education see sustained momentum

Wellness and education continued its strong trajectory from 2024 in 1H 2025, with growing interest in medical education, personalized health tools and diagnostics. Of note, two of the largest deals were in medical education, Amboss ($257M) and VuMedii ($80M), potentially reflecting the growing interest among next-generation care providers in integrating technology into medical education.

Healthtech Largest Financings

1H 2025 US & Europe

Increasing concentration of investment in top deals

Largest Rounds in 1H 2025

#	Company	Subsector	Size of Round/ ($M) Step-up?[1]	Date/ Round	Location
1	ABRIDGE	Provider Ops Workflow	$354 (1.8x)	6/12 E	Pittsburgh, PA
2	TRUVETA	Provider Ops Workflow	$320	1/9 C	Bellevue, WA
3	innovaccer[2]	Provider Ops Workflow	$275 (1.2x)	1/9 F	SF, CA
4	NEKO	Wellness & Education Education & Wellness	$260	1/23 B	Stockholm, Sweden
5	AMBOSS	Wellness & Education Medical Education	$257	3/25 Late Stage	Berlin, Germany
6	ABRIDGE[2]	Provider Ops Workflow	$250 (2.9x)	2/17 D	Pittsburgh, PA
7	Function	Alternative Care Primary Care	$200 (12.0x)	5/8 B	Austin, TX
8	commure	Provider Ops Workflow	$200	6/19 Late Stage	Mountain View, CA
9	Cera	Alternative Care Primary Care	$150	1/12 C1	London, UK
10	Hippocratic AI	Provider Ops Workflow	$141 (3.1x)	1/9 B	Palo Alto, CA
11	evergreen nephrology	Alternative Care Specialty Care	$130	1/7 A	Nashville, TN
12	Tennr	Provider Ops Workflow	$101 (2.5x)	6/18 C	NY, NY
13	NAARI	Alternative Care Women's Health	$100	6/21 A	Scottsdale, AZ
14	HeartFlow	Provider Ops Clinical Decision Support	$98	4/11 F1	Mountain View, CA
15	anumana	Provider Ops Clinical Decision Support	$95 (1.5x)	4/24 C	Cambridge, MA
16	cohere HEALTH	Provider Ops Workflow	$90	5/14 C	Boston, MA
17	AKIDO	Provider Ops Workflow	$84 (3.0x)	5/16 B	West Hollywood, CA
18	aescape	Wellness & Education Health & Wellness	$81	3/4 A1	NY, NY
19	studycast	Provider Ops Workflow	$80	1/16 Late Stage	Raleigh, NC
20	VuMedi	Wellness & Education Medical Education	$80 (19.8x)	5/22 B	Oakland, CA

Valuation[1] Step-Up | Flat Rd | Step-Down

Numbers at a glance (20 largest deals)

Top 10 deals raised $2.4B, accounting for 30% of total investment, up from $2.0B in 2024 (15% of total investment) and $2.1B in 2023 (20% of total investment). This represents a clear trend toward greater capital concentration in larger, later-stage deals, now more closely aligned with other subsectors (Bio: 25%, Dx/Tools: 32%, Device: 36%). This shift likely reflects investor preferences to fund companies with nearer term exit opportunities, aiming to return capital to LPs, a requirement ahead of VC fundraising in this down cycle.

Within the top 20 deals, the workflow subsector led with 10 deals. Wellness & Education saw an increase in large financings, with four large deals, two of which were in medical education.

Sector
- Provider Ops: 12 deals
- Alternative Care: 4 deals
- Wellness/Education: 4 deals

Subsector
- Workflow: 10 deals
- Clinical Decision Support: 2 deals
- Primary Care: 2 deals

Location
- NY/Northeast: 6 deals
- NorCal: 5 deals
- UK/Europe: 3 deals

Healthtech defined as companies or product/solutions that help in delivering care, helping doctors or other forms of medical solution deliver care, or helping the broader ecosystem deliver care. Data from PitchBook though 6/30/25. Covers private, venture-backed investment. [1]Step-Ups calculated using Pitchbook valuation data for previous and new financing as follows: Divide new pre-money valuation by previous round post-money valuation. [2]Originally announced in prior years. Data sources: PitchBook, company websites. internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Healthtech Most Active Investors[1]

1H 2025 US & Europe

Investors display similar level of activity as 1H 2024

ALL DEALS

VC/Foundation/Angel		Corporate[3]/Gov.		Growth[2]	
5	VALTRUIS	4	CVS Health Ventures, OPTUM VENTURES, labcorp	3	TRANSFORMATION CAPITAL
4	DEFINE VENTURES, andreessen horowitz, SEQUOIA, SV Angel	2	UPMC, AZ Venture DEVELOPMENT CORPORATION	2	BUENAVISTA Equity Partners, HOSTPLUS, PSG
3	LRV HEALTH, Lightspeed, FLARE CAPITAL PARTNERS				
3 (tie)	HV CAPITAL, INSIGHT PARTNERS, IMPACTASSETS INVEST WITH MEANING				
3 (tie)	MORNINGSIDE, MBX Capital, WORMHOLE				

Healthtech defined as companies or product/solutions that help in delivering care, helping doctors or other forms of medical solution deliver care, or helping the broader ecosystem deliver care. Data from PitchBook as of 6/30/25. Covers private, venture-backed investment. [1]Most Active Investors only include investment into a new portfolio company, not follow-on financings. [2]Growth Investors defined as investment firms that typically invest in later-stage companies that either are revenue scaling, or the round is anticipated to be the last before an IPO. [3]Note that families of funds are combined for this slide, as are corporate and corporate venture with the same parent. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Healthtech Largest Post-Money Values[1]

1H 2025 US & Europe

IPOs returned; Corporate investment drives the highest-valued private companies

Largest Post-Money Valuations in 1H 2025

Subsector	Company	Date	Deal Size ($M)	Round	Post $ ($M)/ Step-up?[3]	Subsector Focus	Notable/Lead New Investor(s)
Provider Ops	ABRIDGE	6/24	$354	E	$5,300 (1.8x)	Workflow	VC
Alternative Care	sword	6/17	$40	Late Stage	$4,550 (1.5x)	Specialty Care	Angel, Corporate, VC
Provider Ops	innovaccer[2]	1/9	$275	F	$3,450 (1.2x)	Workflow	Corporate, Growth, PE, VC
Provider Ops	ABRIDGE[2]	2/17	$250	D	$2,750 (2.9x)	Workflow	Corporate, Growth, VC
Alternative Care	Function	5/8	$200	B	$2,500 (12.0x)	Primary Care	Growth, VC
Wellness & Education	NEKO	1/23	$260	B	$1,800	Medical Education	VC
Provider Ops	Hippocratic AI	1/9	$141	B	$1,640 (3.1x)	Workflow	PE, VC
Healthcare Navigation	Chapter	4/16	$75	D	$1,500 (2.5x)	Provider Matching	PE, VC
Provider Ops	TRUVETA	1/9	$320	C	$1,400	Workflow	Corporate

Valuation[2] Step-Up | Flat Rd | Step-Down

Return of the IPO
Following a multi-year freeze since 2022, traditional Healthtech IPOs reemerged in 2025, with Hinge Health and Omada Health signaling a cautious reawakening of the public exit market. Earlier SPAC entrants from 2021-22 faltered in public markets.

Hinge Health's IPO has been the stronger performer, though its valuation remains below the $6.2B private mark set in 2021. Omada Health's post-listing gains have been more subdued, but its public valuation now sits above its 2022 private round, potentially delivering a more favorable outcome for recent investors.

Resilience and momentum in later-stage valuation
Later-stage, high-growth companies continued to attract investor interest in 1H 2025, with six of the nine highest-valued private financings representing up rounds.

AI platforms dominate high-value deals
AI continued to drive the largest financings, emerging as a defining theme across top-valued deals and highlighting investor enthusiasm for AI applications in healthcare. Five of the top nine featured AI-enabled platforms, with two of those companies also securing significant financing just a year prior. Others captured attention in personal health diagnostics and senior care/Medicare navigation.

Healthtech defined as companies or product/solutions that help in delivering care, helping doctors or other forms of medical solution deliver care, or helping the broader ecosystem deliver care. Data from PitchBook as of 6/30/25. Covers private, venture-backed investment. [1]Financing data based on information available from PitchBook, including post-money values and step-up, flat and down round calculations. [2]Originally announced in prior years. [2]Step-Ups calculated using Pitchbook valuation data for previous and new financing as follows: Divide new pre-money valuation by previous round post-money valuation. Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

Deep Dive: Pharma Tech

1H 2025

HSBC Innovation Banking

Pharma Tech: Landscape

2023-1H 2025, US & Europe

Four main Pharma Tech categories (with illustrative examples)

Early R&D Enablement

Benchling[1]
orchestra
DNAnexus[1]
Flywheel
inductivebio
MANIFOLD
Dotmatics[1]
tetrascience

First-Financing 2023-1H 2025: $105M Raised, 11 Deals

All Deals: 2023-1H 2025: $623M Raised, 36 Deals

Clinical R&D Enablement

TRUVETA
Crescendo Health
Verana Health
faro
Lightship
Onc AI
peer
Power Medicine

First-Financing 2023-1H 2025: $507M Raised, 20 Deals

All Deals: 2023-1H 2025: $1.4B Raised, 70 Deals

Commercial & Market Access Solutions

alto PHARMACY
OpenEvidence
tandem
H1
ODAIA
RxLightning
Waltz Health
Solstice Health
OSTRO
House Rx

All Deals: 2023-1H 2025: $327M Raised, 28 Deals

Supply Chain, Quality & Manufacturing Infrastructure

Qualifyze
TRANSVOYANT
COLLATE
labviva
APPRENTICE
aizon

All Deals: 2023-1H 2025: $236M, 13 Deals

New framework for Pharma Tech

Pharma Tech represents an expanded subcategorization of deal profiles from the historic Healthtech framework – pulling in deal profiles traditionally categorized within clinical trial enablement, provider operations, medication management, and other verticals across the Healthtech, diagnostics and tools areas.

In collaboration with Define Ventures, HSBC sought to dig deeper into the intersection of technology and pharma. For more on how this space is evolving, especially in the context of AI, please see recent market insights from Define Ventures.

Companies were classified into four categories, based on their products and primary pharma function:

- **Early R&D Enablement**: Tools and platforms that accelerate pre-clinical R&D processes within pharma (e.g., target discovery, protocol design, literature review, etc.). Excludes companies developing therapeutics.
- **Clinical R&D Enablement**: Solutions that optimize clinical research design, execution, and evidence generation.
- **Commercial & Market Access Solutions**: Companies that support the successful launch, pricing, distribution, and promotion of a drug; includes sales enablement software, medical affairs platforms, provider marketing tools, digital hub services, etc.
- **Supply Chain, Quality & Manufacturing Infrastructure**: Vendors providing next-gen infrastructure and processes required to produce, quality control, and distribute drugs at scale.

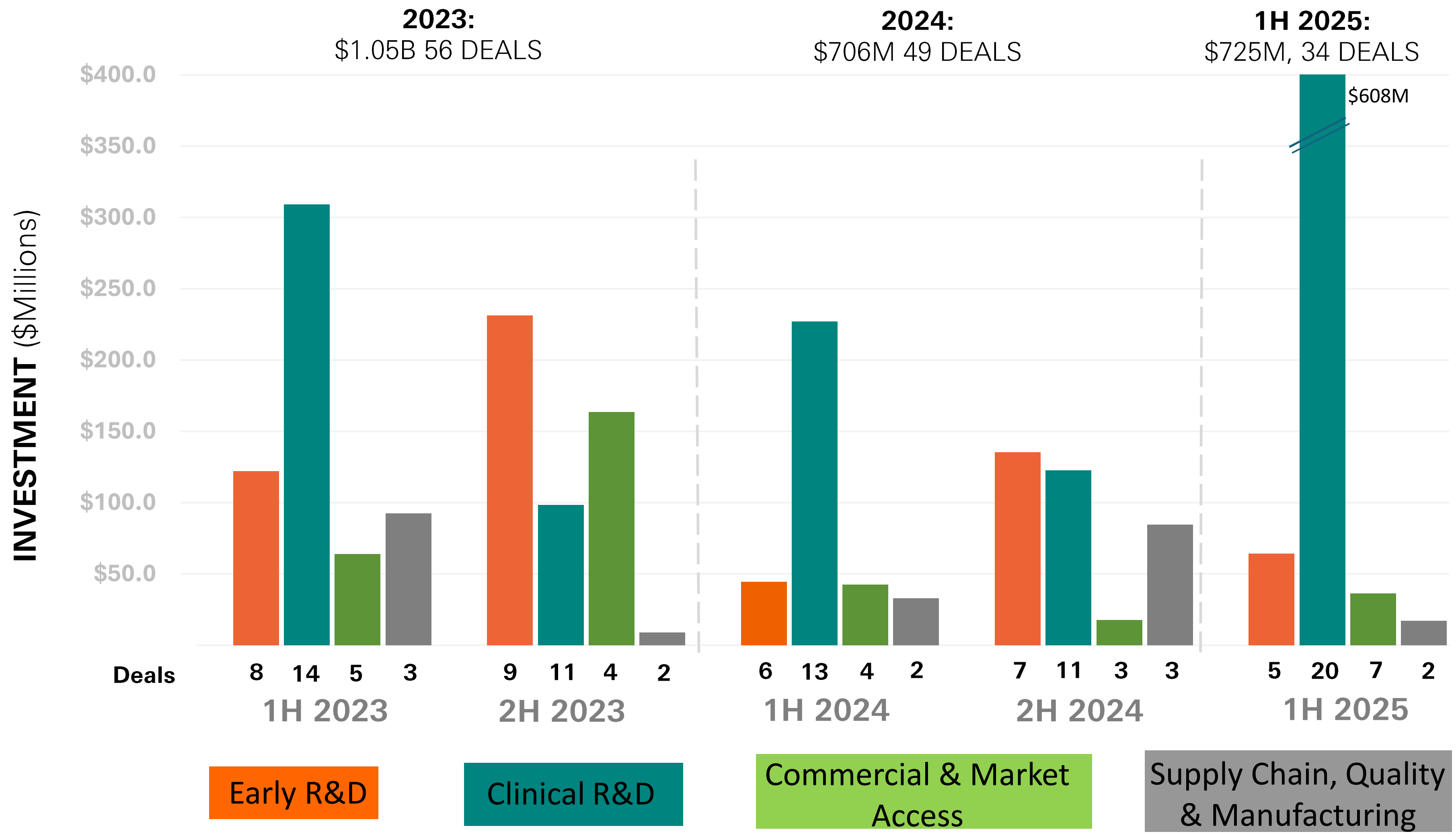
[1] Representative deal for illustrative purposes and not included in 2023-1H 2025 deal and dollar totals.

Data sources: PitchBook, company websites, internal analysis.

Pharma Tech: Investment Trends

2023–1H 2025 US & Europe

Pharma Tech Investment Activity ($/Deals)



From 2023 to 1H 2025 we identified a non-exhaustive list of 139 Pharma Tech companies and financing rounds that resulted in cumulative funding of $2.5B to track general trends in the emerging subsector.

For this analysis, to qualify as a Pharma Tech company, a firm must directly serve the operational and budgetary needs of biopharmaceutical companies across core functions: R&D, clinical development and clinical trials, commercialization, and manufacturing – often spanning multiple internal stakeholders and budget centers; and have raised over $2M in a disclosed financing round. Many of these companies serve across multiple pharma functions, but for the sake of this analysis the primary function was used to categorize.

Clinical development drives momentum in 2025
Digital tools are rapidly transforming clinical development – particularly in patient recruitment, trial design, and trial execution. Truveta led the way with its $320M Series C, positioning 2025 for a three-year high in investment dollars.

Commercial & Market Access Software
As traditional revenue channels face pressure, Pharma Tech is helping companies optimize market position and pricing strategy. Stakeholders are investing in commercial analytics, KOL platforms, and payer- and –provider access tools that support real-world evidence (RWE) adoption. Policy reforms, such as in drug pricing, sustain the urgency to continue momentum.

Data from PitchBook as of 6/30/25. Covers private, venture-backed investment. Data sources: PitchBook, company websites, internal analysis.

Healthcare Outlook: Perspectives for 2H 2025

HSBC Innovation Banking

Healthcare Outlook: A Look Ahead to 2H 2025

GENERAL OVERVIEW

In 2H 2025, first-financing activity is expected to remain muted across most sectors, as uncertainty in the market and limited exit options will reduce VC pace. This environment will likely drive new investments toward later-stage, where technology risk is mitigated and time to exit is hopefully shorter. Overall investment in 2H 2025 will likely decline versus 1H 2025, with a weaker Q3, similar to Q2, but an uptick in Q4 based on likely stability across many of the financing and geopolitical uncertainties we see at midyear. We will continue to see significant consolidation and shutdowns, especially for Series B/C companies that are currently on insider rounds. New investment will focus on larger deal sizes, with the top 10% of deals accounting for 50% of all dollars. Should uncertainty ease, M&A activity is expected to rise, and we forecast 10-15 healthcare IPOs in 2H 2025.

Biopharma

- **First-financing mega round dominance:** First-financing will continue to be dominated by mega rounds and smaller $2-10M financings. Overall investment will likely fall between $1.5 -2B per quarter.
- **Investments will remain robust:** Total investment will reach $22–$24B, at $5-6B per quarter, as many later-stage companies that anticipated IPOs will likely need to raise additional private financing. At the same time, many mid-stage companies seeking another round may struggle to secure funding.
- **M&A activity:** Large deal sizes will continue, especially as IPO optionality remains limited. We will continue to see a mix of both early and later-stage M&A.
- **IPO activity in Q4?** Generous optimism would forecast 7-10 IPOs in 2025, with four already completed in 1H 2025,

Dx/Tools

- **Stable first-financing with AI potential:** We repeat our 1H 2025 forecast for 2H 2025. Investment will continue to be at cycle lows but driven by comp bio investments in R&D tools and Dx Analytics.
- **Overall investment:** Investment should remain steady, but we anticipate an increase in dx test $50M+ financings.
- **Investor focus:** Corporate and VC investment will continue to fund larger, later-stage deals, but we anticipate IPO buzz in this sector will lure crossover and growth investors back to the sector.
- **IPO and M&A outlook:** While hoped-for IPOs did not materialize in 1H 2025, we anticipate a few venture-backed companies to go public by year-end. IPO activity will hopefully drive a few outsized private M&A exits.

Med Device

- **First-financing rebound in dollars:** First-financings will continue to struggle in 2H 2025, though there is optimism that traditional venture will return to Series A in 2025. Forecasts are for $300-400M in 2H 2025, with a stronger Q4.
- **Overall investment steady:** We anticipate strong support for later-stage companies, but overall investment will retract slightly to $4-4.5B in 2H 2025.
- **Sector focus:** AI-enabled device companies, especially in neuro, NIM and imaging, continue to drive strong investment.
- **IPO and M&A outlook:** Med device M&A will increase in 2H 2025, as strong pivotal trials jumpstart M&A talks. We anticipate 2-4 additional IPOs as a strong group of $50M revenue companies hope to navigate a very selective but slightly open IPO market.

Healthtech

- **Market trends in 2025:** Despite our estimates that activity could be slower as investors track administration regulatory policies and early IPO performance, 1H 2025 saw a meaningful upswing in deals and dollars, notably in AI-enabled provider operations and workflow platforms.
- **Exit paths more defined:** Some elite late-stage companies now see a clearer path to IPO in 2026, following the reopening signaled by Hinge/Omada. However, despite renewed exit optimism, many late and mid-stage companies may be preparing for M&A rather than IPOs through 2H 2025 and into 2026.
- **Q3 slowdown, followed by a strong Q4**: A Q3 slowdown is possible as investors consolidate their portfolios and reassess their capital capability, but a strong Q4 is expected.

Data sources: PitchBook, company websites, internal analysis. Thanks to Mind Machine for slide strategy, creative, and design.

HSBC Innovation Banking: Contributing Authors

STEVE AGULAR
Healthtech

Head of Healthcare Investor Coverage
Steve.Agular@us.hsbc.com
Boston, MA

CHRIS MONIZ
Healthtech

Managing Director
Chris.Moniz@us.hsbc.com
San Francisco, CA

MATT GRIFFITHS
Healthtech

Managing Director
Matt.Griffiths@us.hsbc.com
Boston, MA

BRANDON CLARK
Healthtech

Director
Brandon.Clark@us.hsbc.com
San Francisco, CA

ALEX HATZIS
Healthtech

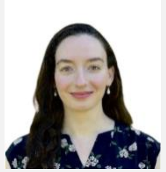
Vice President
alex.hatzis@us.hsbc.com
Boston, MA

NOAH MELNICK
Med Device

Associate Vice President
Noah.Melnick@us.hsbc.com
San Francisco, CA

SAIRA REYES
Comp Bio, Editor

Bioengineering Graduate Student @ Stanford
spreyes@stanford.edu



DANIELLE KLINGER
Comp Bio, Editor

Biotech Consultant
Danik@stanford.edu
Palo Alto, CA

DEVAN MELWANI
Contributor

LBSE & Data Science Student @ UC Berkeley
Devan.Melwani@gmail.com

Thank you

US Disclaimer:

This material has been prepared and provided to you by members of the Commercial Corporate Banking business of HSBC Bank USA, N.A. ("HBUS" or "we"). HSBC Innovation Banking is a business division with services provided in the United States by HBUS. Materials are being provided to you in connection with an actual or potential mandate or engagement and may not be used or relied upon by any other person or for any purpose other than as specifically contemplated by a written agreement with the issuer. We will not be liable for any liabilities arising under or in connection with the use of, or any reliance on, this document or the information contained within it. It is not intended as an offer or solicitation for business to anyone in any jurisdiction. Distribution is restricted to the United States.

Information is for discussion purposes only. Presentment to you does not constitute in whole or in part, any commitment to extend or arrange credit, or underwrite, subscribe for or place any securities, or provide any other product or service in any jurisdiction. This document does not constitute an offer or solicitation for, or advice that you should enter into, the purchase or sale of any security, commodity, or other investment product or investment agreement, or any other contract, agreement, or structure whatsoever. Materials have been prepared without regard to your particular need, investment objectives, financial situation, or means. This document shall not be regarded as creating any form of adviser/client relationship, and HSBC may only be regarded by you as acting on your behalf as a financial adviser or otherwise following the execution of an engagement letter on mutually satisfactory terms.

This information is intended for your sole use, and not for general distribution. You are permitted to store, display, analyze, modify, reformat, and print the information for your own use. You are not permitted to publish, distribute, disclose, transmit, or otherwise reproduce this information, in whole or in part, in any format, to any third party without our expressed written consent.

We do not provide tax, accounting, or legal advice. Accordingly, you should seek advice based on your particular circumstances from your independent advisors. All United States persons (including entities) are subject to U.S. taxation on their worldwide income and may be subject to tax and other filing obligations with respect to their U.S. and non-U.S. accounts. Any discussion of U.S. tax matters contained herein is not intended or written to be used, and cannot be used in connection with the promotion, marketing or recommendation of avoiding U.S. taxes.

Any information contained in this material is not and should not be regarded as investment research, debt research, or derivatives research for the purposes of the rules of the Financial Conduct Authority, the SEC, FINRA, the CFTC or any other relevant regulatory body. It has not been prepared in accordance with regulatory requirements to promote the independence of investment research. Any opinions in this material are the opinions of the author and may be changed at any time without notice. Opinions expressed in this material may differ from the opinions expressed by other divisions of the HSBC Group, including its research department and corresponding research reports.

This material contains information relating to third parties. The information does not constitute any form of endorsement by these third parties of the products and/or services provided by HSBC or any form of cooperation between HSBC and the respective third parties. All trademarks are the property of their respective owners.

All product and company names are trademarks™ or registered® trademarks of their respective holders. Use of them does not imply any affiliation with or endorsement by them.

Financial instruments described herein may not be suitable for everyone. You should not act upon the information contained in this document without consulting your business advisor, attorney, tax and accounting advisors. This material should not support the primary basis for investment or hedging decisions made.

The Information contained herein is not meant to be comprehensive. Information is derived from sources believed to be reliable but not independently verified. HSBC and third-party contributors do not undertake, and are under no obligation, to provide any additional information, to update this document, to correct any inaccuracies or to remedy any errors or omissions. Under no circumstances will HSBC or the third-party contributor be liable for (i) the accuracy or sufficiency of this document or of any information, statement, assumption or projection contained in this document or any other written or oral information provided in connection with the same, or (ii) any loss or damage (whether direct, indirect, consequential or other) arising out of reliance upon this document and the information contained within it.

© HSBC Bank USA, N.A. 2025 ALL RIGHTS RESERVED. Member FDIC