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Silicon Valley Bank
MID-YEAR
REPORT
2020
Healthcare
Investments and Exits
Biopharma | HealthTech | Dx/Tools | Device
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Healthcare Investments: Mid-Year 2020

Venture fundraising in healthcare soared to $10.4B in the first half of 2020, nearly matching 2019's full-year record. Mezzanine "Mezz" markups and great IPO performance have driven outsized returns, allowing investors to raise new funds, many of which were larger than their previous fund.

Company investment also spiked. 1H 2020 produced the largest two-quarter investment period ever for venture-backed healthcare companies. Biopharma and dx/tools saw increases in investment vs. 1H 2019, despite financial market turbulence and negative impacts to many companies due to COVID-19.

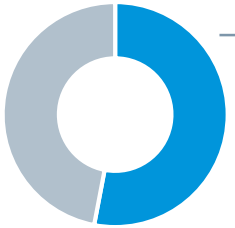
Biopharma Series A was stable in the first half, while overall investment is on pace for record dollars in 2020. We continued to see a significant number of large crossover-led mezzanine financings in Q1 and Q2 2020. This mezzanine activity exceeds 2019's pace and is a strong, positive sign for continued IPO activity.

HealthTech investments remained steady in 1H 2020 but showed an 18% increase in deals vs. 1H 2019, solidifying healthtech as the most prolific deal sector. Alternative care, which includes companies providing virtual care during COVID-19, raised $2B+ in 1H 2020, leading all healthtech subsectors.

Dx/Tools investment hit new highs, led by three large dx test financings. More than one-third of the dx/tools companies that raised capital in 1H 2020 (totaling $1.3B) leveraged their technologies to help in this pandemic, both in the discovery of new therapies and vaccines and in the processing and testing for COVID-19.

Device Series A investment declined 34%, but overall investment was stable with no significant disruption to Q2 funding. Imaging and non-invasive monitoring (NIM) emerged as fundraising leaders, representing 25% of all sector dollars raised. These indications, plus respiratory, saw seven companies raise new rounds related to COVID-19 business opportunities.

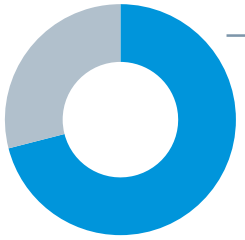
Silicon Valley Bank Market Stats*



53%

of all VC-backed US healthcare companies that raised rounds in 1H 2020 worked with SVB.

$10B **of the $15B in venture funding raised in the US in 1H 2020 was by companies that work with SVB.**



71%

of all VC-backed US healthcare companies that raised mega rounds in 1H 2020 worked with SVB.**

*SVB Market Stats composed of VC-backed healthcare companies that raised at least $4M in financing in 1H 2020. **Mega rounds defined as round size of $50M or more. 1H 2020 statistics represent SVB commercial bank clients and are compiled through 6/12/20.
Sources: PitchBook and SVB proprietary data.

Healthcare Exits: Mid-Year 2020

Lofty mezzanine round markups led to public offerings that experienced tremendous post-IPO performance across all healthcare sectors. Ten of 36 venture-backed IPOs went public with market caps of $1B+. Post-IPO, 15 of these newly-public companies sported 100%+ stock price performance at the end of 1H 2020.

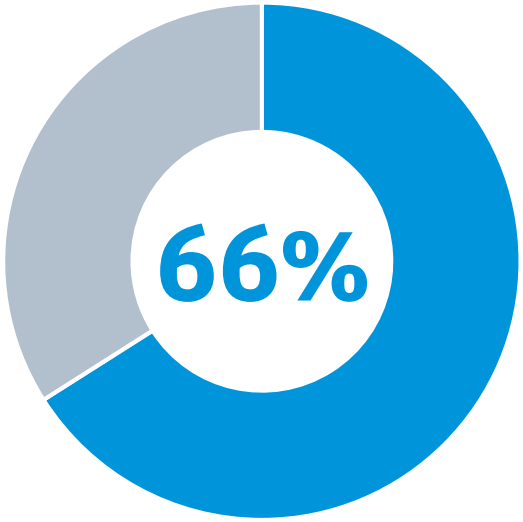
At the midway point of 2020, biopharma IPOs were on track to meet 2019 totals and continue a very impressive three-year exit run. Private M&A activity continued to decline as attractive pre-money IPO values encouraged companies to go public. Pre-money valuations and dollars raised at IPO are on a record pace in 1H 2020, and average post-IPO stock price performance for the Class of 2020 IPOs has spiked by over 89%.

HealthTech market cap at IPO in 1H 2020 totaled $4.5B with two public offerings so far this year (which is same number of IPOs as 1H 2019, although six IPOs debuted in 2H 2019). Historically, the alternative care subsector has led healthtech post-IPO performance, with four IPOs reaching $4B+ market caps since 2015, including one in 1H 2020. On the private M&A front, 2020 is on track to match 2019's pace.

Dx/Tools are on track to match exit activity and exceed record deal values from 2019. IPOs by commercial-stage companies highlighted returns in this sector. Private M&A continued to be sluggish; however, a $1.4B venture-backed acquisition in late June was a bright spot. Four dx/tools IPOs ended 1H 2020 at $1B+ market caps. Two were R&D tools companies pursuing computational drug discovery (both saw +100% performance post-IPO), and the other two were dx tests companies focused on oncology.

Device private M&A was down in 1H 2020, but IPO activity matched 2019's pace. Pre-money IPO values and IPO proceeds both are on pace to shatter yearly records. The Shanghai (SHG) and Hong Kong (HK) public markets continue to produce high-flying commercial-stage IPOs, accounting for four of the last seven public offerings since Q3 2019.

Silicon Valley Bank Market Stats



of all VC-backed healthcare IPOs in the past three years have worked with SVB.*

*IPOs are global. IPO statistics represent SVB commercial bank clients. Sources: PitchBook, press releases and SVB proprietary data.

Venture-Backed Healthcare Investments

US and Europe

1H Healthcare Venture Fundraising Approaches 2019's Year-End Record

A flurry of venture capital (VC) fundraising in 1H 2020 nearly eclipsed 2019's full-year record, building on a three-year trend of increased allocation to healthcare. Lofty mezzanine round markups led to IPOs that showed tremendous post-IPO performance. This has driven increased carrying value (TVPI) and great returns (DPI) back to limited partners.

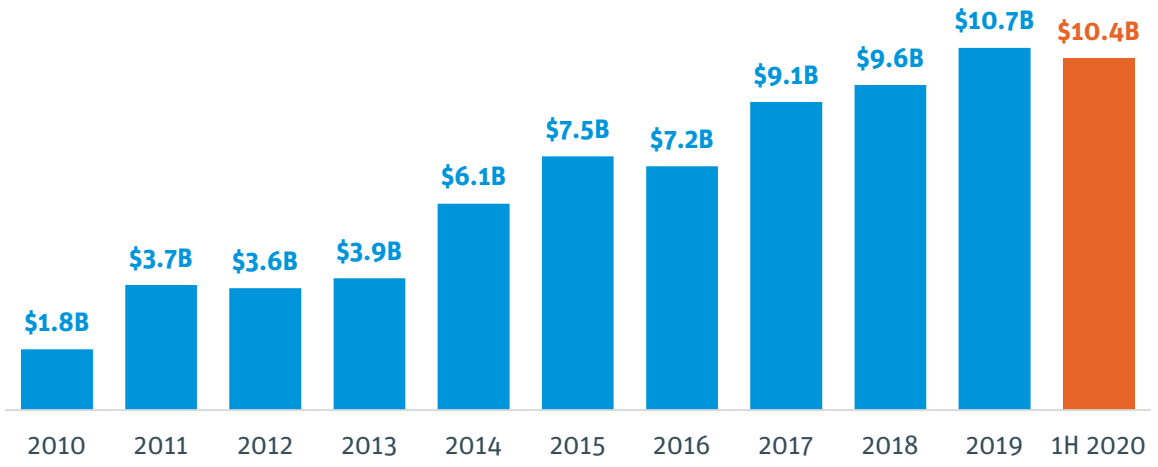
Early-stage venture investors, particularly in biopharma, built on this momentum to raise new funds, on average 30% larger than their last funds. In order to deploy these dollars, biopharma VCs started to join traditional crossover mezzanine rounds as new investors and also increased investment in mezzanine rounds of existing portfolio companies. The positive step-up to IPO and strong post-IPO performance support this later-stage investment even at higher private valuations.

Generalist investors continue to allocate funds to healthcare. Notable firms include New Enterprise Associates, Lightspeed Venture Partners, General Catalyst, Founders Fund, Town Hall Ventures, U.S. Venture Partners, Mayfield and Felicis.

US Healthcare Venture Capital Fundraising
2010–1H 2020

MID-YEAR REPORT 2020

Healthcare Venture Capital Fundraised



Notable Venture Funds Closed in 1H 2020

ANDREESSEN HOROWITZ

DEERFIELD Advancing Healthcare®

GENERAL CATALYST

Lightspeed

ARCH VENTURE PARTNERS

FRAZIER HEALTHCARE PARTNERS

NEA

ATLAS VENTURE

Flagship Pioneering

venBio

US Healthcare Venture Capital Fundraising defined as an approximation of healthcare investment dollars to be invested by firms that historically invest in +50% US companies. TVPI is defined as the ration of the current value of fund investments plus distributions to date divided by the total amount of capital invested to date. DPI is defined as the ration of the money a VC fund has returned to limited partners divided by the total amount of capital invested to date. Source: PitchBook and SVB proprietary data.

Company Investment Rises; Record Pace for Biopharma & Dx/Tools

1H 2020 produced the largest two-quarter investment total ever for venture-backed healthcare companies, despite financial market turbulence and setbacks to company product development, clinical trials, and revenues caused by COVID-19.

Biopharma investment is just ahead of 2018's record pace, as large crossover-funded mezzanine financings were driven by the hot IPO (and post-IPO) market.

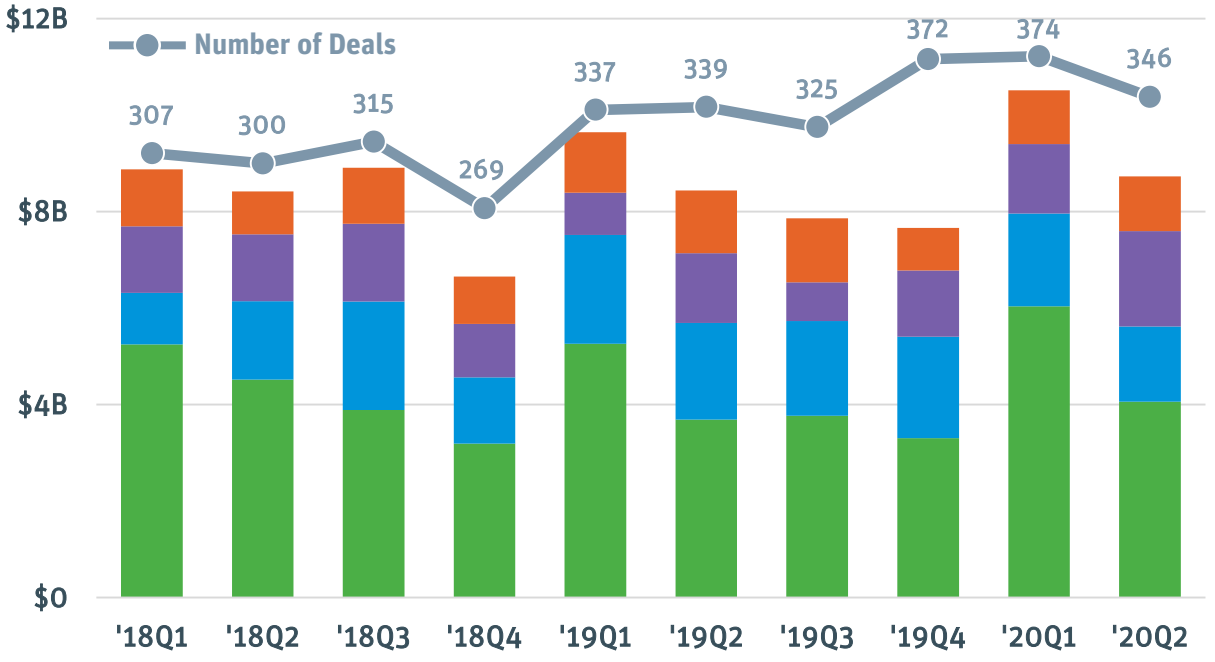
1H 2020 healthtech investments were up 29% from 1H 2018 financings but slightly down from 1H 2019's record-breaking metrics. Notably, Q1 2020 saw the highest quarterly deal count in healthtech's history.

1H 2020 dx/tools investment was up over 50% from 2H 2019, and Q2 2020 was the largest investment quarter since 2018. The investment spike was led by deals that leveraged their technologies to help in this pandemic — both in the discovery of new therapies and vaccines and in the processing and testing for COVID-19.

Device investments were slightly behind 1H 2019 numbers. However, Q1 2020 bounced back from a 2.5 year low in Q4 2019. Investment dollars were stable in 1H 2020 from Q1 to Q2, despite the anticipated fundraising disruption due to COVID-19.

VC Dollars and Deals by Healthcare Sectors

US and Europe



	2018			2019			1H 2020*		
Sectors ($M)	US	Europe	Total	US	Europe	Total	US	Europe	Total
Biopharma	14,171	2,687	16,858	12,788	3,244	16,032	7,564	2,536	10,100
HealthTech	5,827	489	6,316	6,982	1,347	8,329	2,869	611	3,480
Dx/Tools	5,096	387	5,483	3,820	670	4,490	2,752	669	3,421
Device	3,734	472	4,206	3,860	893	4,753	1,994	252	2,246
Total	28,828	4,035	32,863	27,450	6,154	33,604	15,179	4,068	19,247

*1H 2020 numbers are compiled through 6/12/20. Financing data include private financings by venture-backed companies in the US and Europe. Dates of financing rounds are subject to change based on add-on investments. HealthTech deals that overlap with other sectors were removed from healthtech totals. Source: PitchBook and SVB proprietary data.

Series A Dollars Stable, Deals Up; Valuations Consistent in 1H 2020

1H 2020 investment dollars remained stable, with more deals than 1H 2019. Q2's decline from Q1 can likely be attributed to historical fluctuations rather than impacts from COVID-19.

Median valuations in 1H 2020 decreased in smaller (<$15M) Series A deals, raising $9M on a pre-money valuation of $8M (vs. 2019 $6M/$10M pre-money). However, valuations increased in larger ($15M+) deals, raising $40M on a pre-money of $27M (vs. 2019 $51M/$23M pre-money).

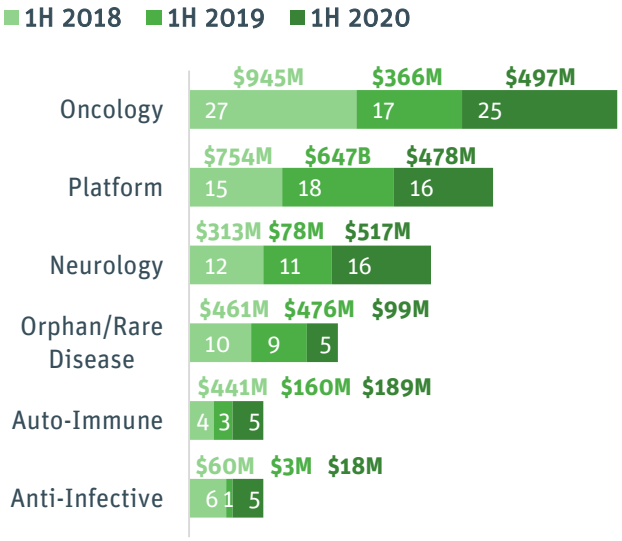
Neurology staged a significant increase in deals and dollars in 1H 2020, while orphan/rare disease saw an equally large decrease.

Many venture investors have a bifurcated early-stage strategy, balancing internally fashioned large Series A deals while supporting company creation and/or founder-led early-stage science. While we continue to see many $50M+ Series A deals, a number of venture firms have recently launched collaborations to help academic labs transition from science projects to venture endeavors. We anticipate this will lead to more small seed/Series A investments by traditional venture investors in 2020.

Series A Biopharma Deals
US and Europe

		1H 2018	1H 2019	1H 2020
Number of Investments	Q1 / Q2	52 / 41	49 / 33	49 / 45
	Total	93	82	94
Total Funding ($M)	Q1 / Q2	$1,791 / $1,415	$1,325 / $972	$1,155 / $886
	Total	$3,206	$2,297	$2,041
Corporate Investments	Q1 / Q2	21% / 10%	29% / 27%	33% / 27%

Series A by Top Indications



Top 1H 2020 Series A Deals

affinia THERAPEUTICS
LEGEND BIOTECH
alladapt IMMUNOTHERAPEUTICS
LYCIA THERAPEUTICS
ARVELLE THERAPEUTICS
MOMA THERAPEUTICS
Day One BIOPHARMACEUTICALS
ROME THERAPEUTICS
EQRx REMAKING MEDICINE
SwanBio THERAPEUTICS
KRIYA THERAPEUTICS
TYRA

Series A includes first-time investments from institutional or corporate venture investment in the US and Europe and any first-round investments equal to or greater than $2M, regardless of investor. 1H financing data are compiled through 6/12. Dates of financing rounds are subject to change based on add-on investments. Source: PitchBook and SVB proprietary data.

Oncology, Neurology Increase; Crossover LIPO Deals Grow

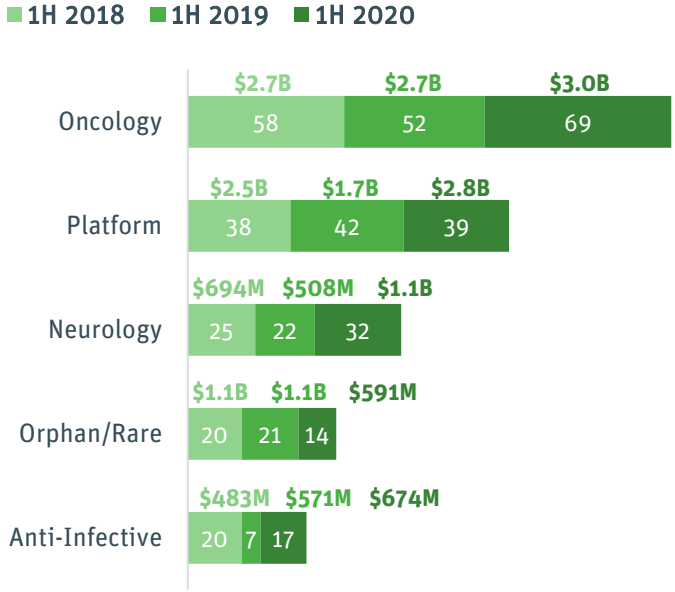
2020 is on track for a record investment pace. This surge was led by 26 financings of $100M+, totaling more than $5B.

Oncology continues to dominate financings through later-stage deals. Anti-infective deals were up, led by Vaxcyte, which raised a mezzanine round in March and then went public. The two largest anti-infective deals, Atea ($215M) and Affinivax ($120M), both closed in Q2. Neurology funding doubled vs. 1H 2019, focused on central nervous system and neuropathy companies.

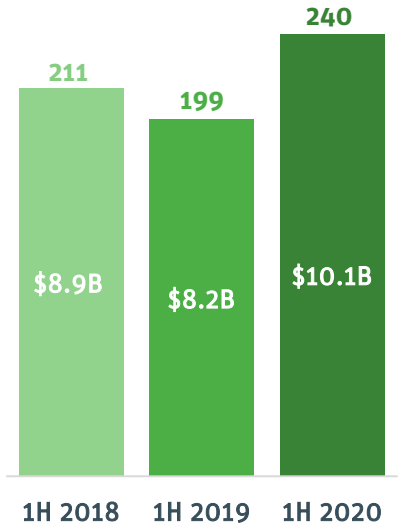
The LIPO (Likely to IPO) List tracks the Top 15 crossover-backed mezzanine deals ($40M+) as a proxy for IPO sentiment and pipeline. From 2017 to 2019, 122 companies joined the LIPO List. Seventy-four (61%) have since gone public or been acquired. In 2019 alone, 47 companies joined the LIPO List, and 25 (53%) went public.

During the start of the COVID-19 pandemic, many venture investors questioned whether private crossover investment would continue. In 1H 2020, 34 companies qualified for the LIPO List (four have since gone public), equally split between Q1 and Q2 and far ahead of 2019's 1H pace. Median deal size was $115M with a pre-money value of $110M. These LIPO deals confirm crossover activity and investor belief that IPOs will continue.

Biopharma Deals by Top Indications
US and Europe



Total Deals and $
US and Europe



1H 2020 LIPO List (Top 15 Crossover-Financed Deals $40M+)

2020 Q1

AKOUOS
ALIGOS THERAPEUTICS
ALX ONCOLOGY
DESIGN THERAPEUTICS
elevatebio
EQRx
imara
IMMUNOCORE
INOTREM control innate immunity
KALLYOPE
KEROS THERAPEUTICS
KYMERA
LEGEND BIOTECH
MOMA THERAPEUTICS
nurix
PLIANT
spruceBIOSCIENCES
TEMPEST
TYRA
Vaxcyte

2020 Q2

ATEA Pharmaceuticals
Athira PHARMA
Autobahn Therapeutics
cerevance
COMPASS Navigating Mental Health Pathways
Dynacure
ERASCA
EVEREST MEDICINES
insitro*
iTeos Therapeutics
KRIYA THERAPEUTICS
palvella THERAPEUTICS
PANDION THERAPEUTICS
TANGO therapeutics
verve THERAPEUTICS
ViaCyte

*This company overlaps with the healthtech sector and is included in both sets of analyses. Investments includes first-time investments from institutional or corporate venture investment in the US and Europe and any first-round investments equal to or greater than $2M, regardless of investor, plus all additional equity financings by these VC-backed companies during the period covered by this slide. 1H financing data are compiled through 6/12. Dates of financing rounds are subject to change based on add-on investments. Source: PitchBook and SVB proprietary data.

Crossovers Continue Funding Mezz Deals; New VCs Join the List

In 1H 2020, Novo funded four deals (2/4 Series A), and OrbiMed did six new financings (2/6 Series A). NFLS-Pivotal returned to the list with 11 deals (10/11 Series B+). MPM also returned, investing mostly in Series A. Nextech joined the list and focused on larger, later-stage opportunities.

Corporates Celgene and Merck dropped off the list, while Boehringer and WuXi AppTec joined. Pfizer did five new deals in 1H 2020 (4/5 Series A). GV, historically a Series B+ investor, did four new 2020 deals (2/4 Series A). Boehringer focused early, with two of six Series A deals in 2020, while WuXi AppTec completed three of six new deals in 2020.

Crossover investors continue to be active. Boxer and Citadel joined this list. Of the 15 most active crossovers in 2019, RA did the most deals in 1H 2020. Deerfield, Fidelity, Tavistock, and EcoR1 were less active this year, while Cowen Healthcare, Wellington Management, Janus Henderson, and Logos Capital picked up their investment pace. There will likely be a significant shake-up in the most active crossovers by year end.

Most Active New Biopharma Investors*

Number of Deals (US and Europe, 2019–1H 2020)

Venture Capital		Corporate Investor		Later-Stage/Crossover Investor	
16	novo holdings	27	Alexandria	22	RA Capital
12	Samsara BioCapital	14	Pfizer	17	Perceptive Advisors
11	ARCH Venture Partners	14	Novartis	17	Cormorant Asset Management
11	OrbiMed	11	GV	16	Redmile Group
11	Pivotal BioVenture Partners	9	J&J Innovation	15	Boxer Capital
10	nextech	7	Boehringer Ingelheim	14	Invus
9	MPM	6**	abbvie	12	Rock Springs Capital
8**	Canaan	6**	WuXi AppTec	12	Citadel

*Most Active New Investors calculated as new (first-time) investments into US and European companies from 2019–1H 20120. 1H 2020 financing data are compiled through 6/12/20. ** Additional investors have the same number of deals but are not included because of space limitations. Dates of financing rounds subject to change based on add-on investments. Corporate parent and corporate venture investment are combined under Corporate Investor. Alexandria investments typically averages $2M per deal, AREE, Inc. Earnings 12/31/19. Source: PitchBook and SVB proprietary data.

Investors Fund Big Deal Sizes, Large Valuations; 2020 IPOs Excel

This list contains the highest-valued private companies since 2019, all with publicly disclosed post-money valuations of $500M+.

Oncology and platform indications comprise the majority of this list (79%) and have also dominated IPOs since 2019 (59%).

The median round size for this group was $128M, with a pre-money value of $540M. The median step-up from the venture to the mezzanine round was 1.9x, with Legend and Nuvation joining this list at Series A. The median total equity raised was $224M, similar to the median private dollars raised for the IPO Class of 2020 prior to going public ($217M).

Four of these companies went public in 1H 2020 (Poseida went public in Q3), while Peloton was acquired on the eve of its IPO in 2019 by Merck for $1,050M upfront and $1,150M in milestones. Legend, Viela, Beam and Passage completed IPOs with flat median IPO pre-money valuations but saw great performance afterwards, with an average stock price gain of +82% at the end of 1H 2020. By contrast, the highest-valued companies that went public from the 2018–2019 list saw an average stock price decrease of -7% during 2019.

Post-Money Private Biopharma Companies ($500M+)

US and Europe, 2019–1H 2020

Oncology

LEGEND BIOTECH 3/31/20 $151M Round $1,950M Post	Lyell* 3/12/20 $493M Round $2,490M Post	Nuvation Bio 6/14/19 $275M Round $678M Post
Peloton Therapeutics 2/20/19 $150M Round $500M Post	POSEIDA THERAPEUTICS 4/22/19 $142M Round $568M Post	Rakuten Medical 7/31/19 $100M Round $1,150M Post

Auto-Immune

VIELABIO
6/12/19
$75M Round
$735M Post

Orphan/Rare

PassageBio*
9/4/19
$110M Round
$550M Post

Platform

Beam THERAPEUTICS 3/6/19 $135M Round $675M Post	JUVENESCENCE 8/19/19 $100M Round $500M Post	hims 1/28/19 $100M Round $1,100M Post
life BIOSCIENCES 1/15/19 $50M Round $500M Post	ROIVANT SCIENCES 1/3/20 $1,000M Round $9,000M Post	

Anti-Infective

allo VIR
5/21/19
$121M Round
$731M Post

Company was acquired

Company went public

*Company has multiple 2019–2020 deals with pre-valuation/post-valuation data in PitchBook that qualify for this slide, and only the most recent deal is shown. Dates of financing rounds are subject to change based on add-on investments. 1H 2020 financings are compiled through 6/12/20, and public market data are compiled through 6/30/20. Source: PitchBook, press releases and SVB proprietary data.

Series A Up in 1H 2020, Wellness & Education Sees Upswing

In 1H 2020, healthtech Series A investments rose 40% and total funding increased by 20%, driven by deals in the alternative care, wellness & education, and clinical trial enablement (CTE) subsectors.

The CTE subsector saw the top healthtech Series A financing in 1H 2020, Concerto Health AI ($150M+). Overall, CTE Series A dollars were up 16x in 1H 2020 vs. 1H 2019.

Wellness & education deals increased more than 2x in 1H 2020 from 1H 2019 and were primarily comprised of health & wellness companies (12 of 16 total deals) and contributed to roughly 70% of total dollars.

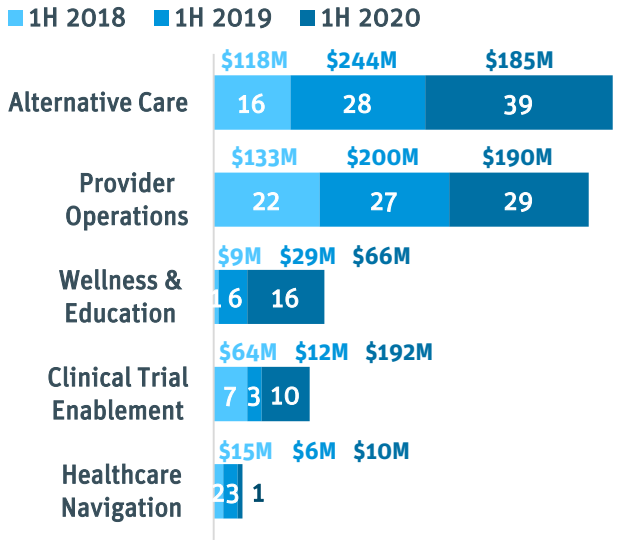
Alternative care companies, such as Vault and Temedica, surpassed the other subsectors in total deals but dropped 25% in investment from 1H 2019. Although the average alternative care deal size decreased 46%, the median deal size remained unchanged at around $4.5M.

From 1H 2019 to 1H 2020, median Series A deal size remained constant ($5M), while pre-money values increased by 50% ($10M to $15M).

Series A HealthTech Deals
US and Europe

		1H 2018	1H 2019	1H 2020
Number of Investments	Q1 / Q2	37 / 13	33 / 38	48 / 49
	Total	50	71	97
Total Funding ($M)	Q1 / Q2	234 / 107	195 / 342	398 / 263
	Total	341	537	661
Corporate Investments	Q1 / Q2	30% / 46%	9% / 18%	8% / 10%

Series A by Top Subsectors



Top 1H 2020 Series A Deals

100plus
HEALTH DATA ANALYTICS INSTITUTE
astiva HEALTH
LIFEPOD
CAREBRIDGE
Predicine*
Concerto HealthAI*
Temedica
clearly*
VAULT HEALTH

*These companies overlap with other device and dx/tools sectors and are included in both sets of analyses. Series A includes first-time investments from institutional or corporate venture investment in the US and Europe and any first-round investments equal to or greater than $2M, regardless of investor. 1H financing data are compiled through 6/12. Dates of financing rounds are subject to change based on add-on investments. Source: PitchBook, SVB proprietary data and SVB HealthTech Report.

Deals Up, Dollars Steady; Alternative Care Leads

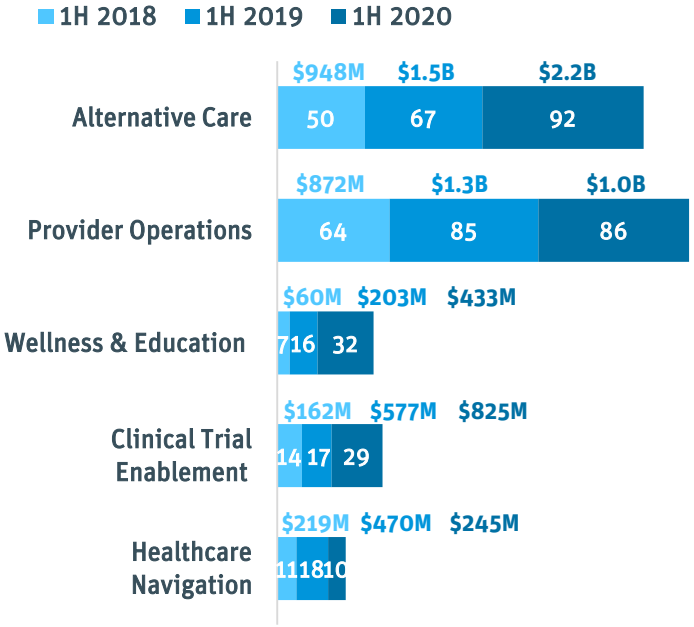
Healthtech invested capital in 1H 2020 remained stable, relative to 1H 2019, with an 18% increase in deals. This solidifies healthtech as the second-largest healthcare sector in terms of capital raised (trailing biopharma) and the largest sector for 1H 2020 deal activity.

Alternative care continues to lead in deals and dollars in 1H 2020, with total investment $1B ahead of the next highest subsector (provider operations). There were six alternative care $100M+ rounds in 1H 2020, focused on both providing virtual primary care (Amwell, Kry, Iora and Cue) and mental health (Mindstrong). Regulatory shifts due to COVID-19 have also increased the need for alternative care companies and promoted their continued growth.

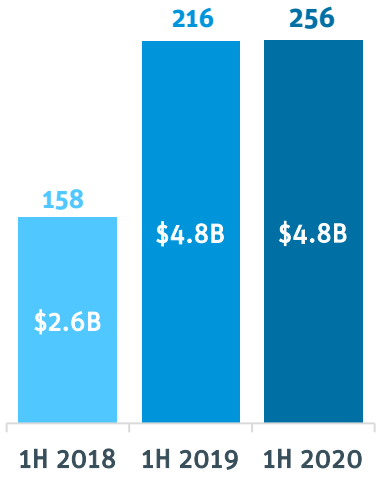
The other four $100M+ financings in 1H 2020 have all been in the CTE subsector (Concerto Health AI, Insitro, DNAnexus and Verana).

Dispatch Health's (alternative care) $136M financing on 6/23/20 and Oscar's (insurance) $225M financing on 6/26/20 are not captured here, as they occurred after the date of data collection for this report.

HealthTech Deals by Top Subsectors
US and Europe



Total Deals and $
US and Europe



1H 2020 Deals

$150M+

amwell

Concerto HealthAI*

KRY

$100M to $150M

cue

iorahealth

DNAnexus*

mindstrong

ELEMENT SCIENCE*

Verana Health*

insitro*

$60M+ to $99M

Aledade

Hinge Health

Cera We Care Better.

LetsGetChecked

color*

lyra

Exscientia*

nference®

headspace

virta

*These companies overlap with biopharma, dx/tools, and device sectors and are included in both sets of analyses. Investments includes first-time investments from institutional or corporate venture investment in the US and Europe and any first-round investments equal to or greater than $2M, regardless of investor, plus all additional equity financings by these VC-backed companies during the period covered by this slide. 1H financing data are compiled through 6/12. Dates of financing rounds are subject to change based on add-on investments. Source: PitchBook, SVB proprietary data and SVB HealthTech Report.

Active Investors Remain Focused on Funding Later-Stage Rounds

Of the most active venture investors, Social Starts focused on Series A investments. 8VC, Alumni Ventures Group, Greycroft, Felicis Ventures, Bpifrance, Merck, Philips, and Viking completed a mix of both Series A and later-stage deals, while the rest of the venture investors focused predominately on later-stage deals.

Other notable venture investors within healthtech include Venrock, NEA, Bessemer, .406 Ventures, Maverick, and Flare Capital.

UnityPoint Health Ventures and MemorialCare Innovation Fund appeared on the list for the first time. They are two examples of corporate investment arms of hospitals systems investing in the provider operations subsector.

Overall, corporate investors on this list skewed toward investing in the alternative care subsector and participating in deals totaling $300M+.

Most Active New HealthTech Investors*

Number of Deals (US and Europe, 2019–1H 2020)

Venture Capital		Corporate Investor		Later-Stage/Crossover Investor	
9	8VC	10	BlueCross BlueShield	5	PERCEPTIVE ADVISORS
8	SOCIALSTARTS	12	Alphabet	5	DEERFIELD
6	LIFEFORCE CAPITAL	6	UnityPoint Health Ventures	4	Blue Heron CAPITAL
5	ALUMNI VENTURES GROUP	5	MERCK	3	CASDIN CAPITAL
5	BainCapital VENTURES	5	OPTUM	3	Viking
5	GREYCROFT	5	echo	3	TTCP
5	Felicis Ventures	5	MemorialCare Innovation Fund	3	TRANSFORMATION CAPITAL
4**	a16z	5	PHILIPS	2**	FORESITE CAPITAL

*Most Active New Investors calculated as new (first-time) investments into US and Europe companies from 2019–1H 2020. **Additional investors have the same number of deals but are not included because of space limitations. 1H 2020 financing data are compiled through 6/12/20. Dates of financing rounds subject to change based on add-on investments. Corporate parent and corporate venture investment are combined under Corporate Investor.
Source: PitchBook, SVB proprietary data and SVB HealthTech Report.

Seven $1B+ Valuations Across Multiple HealthTech Subsectors

This list contains the highest-valued private companies over the last 18 months, all with publicly disclosed post-money valuations of $550M+.

Eight companies achieved $1B+ post-money valuations. Tempus, a provider operations company, led all valuations at $3.1B on $200M in invested capital.

There have been no $1B+ post-money valued financings in 1H 2020. Mindstrong ($675M post) and Lyra ($557M post) were the highest-valued companies. Both companies focus on alternative care for mental health patients. Highlighting the growing importance of this indication for investors during the COVID-19 pandemic, both companies raised Series C funding at step-ups of 2.9x and 2.0x, respectively.

1H 2020 saw Schrödinger's public offering, which is in the dx/tools sector but also overlaps with healthtech CTE. This is the first CTE company focused on drug discovery to go public, helping to pave an IPO path for similar companies within this subsector.

Accolade went public in Q3 2020.

Post-Money Private HealthTech Companies ($550M+)

US and Europe, 2019–1H 2020

Provider Operations

Accolade*
10/10/19
$20M Round
$630M Post

HeartFlow*
6/13/19
$65M Round
$1,565M Post

komodohealth
8/23/19
$50M Round
$1,000M Post

HealthCatalyst
2/6/19
$100M Round
$1,000M Post

TEMPUS*
5/30/19
$200M Round
$3,100M Post

Insurance

bright HEALTH
12/16/19
$635M Round
$2,540M Post

HC Navigation

Doctolib
3/20/19
$170M Round
$1,280M Post

Medication Mgmt.

alto
12/10/19
$352M Round
$600M Post

Alternative Care

babylon
8/1/19
$550M Round
$2,000M Post

lyra
3/11/20
$75M Round
$557M Post

mindstrong
5/21/20
$100M Round
$675M Post

omada
6/26/19
$73M Round
$593M Post

Clinical Trial Enablement

SCHRÖDINGER*
5/8/19
$165M Round
$623M Post

Wellness & Education

Calm
7/2/19
$115M Round
$1,027M Post

Company went public

*These companies overlap with dx/tools and are included in both sets of analyses. Only includes post-money values reported by PitchBook for US and Europe companies. Dates of financing rounds are subject to change based on add-on investments. 1H 2020 financing and market cap data are compiled through 6/12/20, and public market data are compiled through 6/30/20. Source: PitchBook, SVB proprietary data and SVB HealthTech Report.

Tests & Analytics Focus on Oncology; Tools Help with COVID-19

Series A dollars in this sector were stable, but deals were slightly down vs. 1H 2019. Corporate investment decreased significantly. Deals were closely split between Q1 and Q2 (22/16), but the three largest deals (Concerto Health AI, OMass Therapeutics, and Cyagen) all closed in Q1, totaling $245M. Dx tests dollars were down 58% in 1H 2020 versus 1H 2019 while dx analytics investment increased 81%.

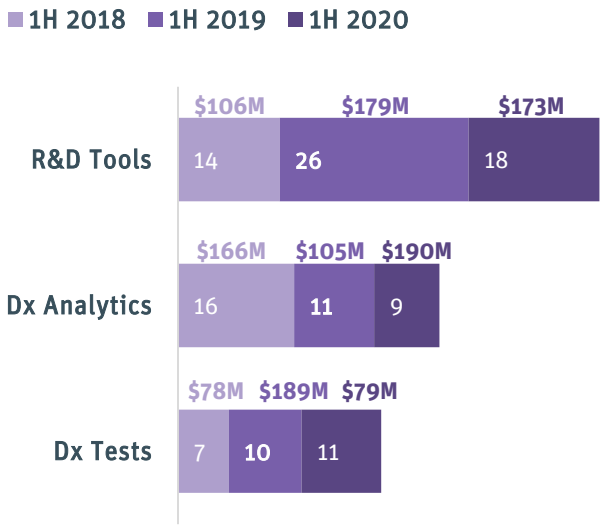
R&D tools deals represented almost half of all Series A deal activity (48%). A number of these companies, including Cyagen, Hyris, seqWell, and Veravas, are leveraging their technologies to aid the COVID-19 response.

Applying AI to oncology treatment continues to pique investor interest, as five of nine dx analytics investments in 1H 2020 focused on oncology (Concerto Health AI, Pathware, Predicine Holdings, Xilis, and C2i Genomics). Investments in dx tests saw activity in both the oncology liquid biopsy space (Naveris and Base Genomics) and in infectious diseases, with two deals related to COVID-19 projects (Lumos and Covaxx).

Series A Dx/Tools Deals
US and Europe

		1H 2018	1H 2018	1H 2020
Number of Investments	Q1 / Q2	18 / 19	22 / 25	22 / 16
	Total	37	47	38
Total Funding ($M)	Q1 / Q2	$199 / $150	$143 / $330	$348 / $94
	Total	$349	$473	$442
Corporate Investments	Q1 / Q2	11% / 32%	27% / 40%	18% / 13%

Series A by All Subsectors



Top 1H 2020 Series A Deals

base
H1 *
C2i
LUMOS DIAGNOSTICS
C2N Diagnostics
NAVERIS
Concerto HealthAI *
OMass THERAPEUTICS
cyagen We help you discover life
Predicine *

*These companies overlap with healthtech and are included in both sets of analyses. Series A includes first-time investments from institutional or corporate venture investment in the US and Europe and any first-round investments equal to or greater than $2M, regardless of investor. 1H financing data are compiled through 6/12. Dates of financing rounds are subject to change based on add-on investments. Source: PitchBook and SVB proprietary data.

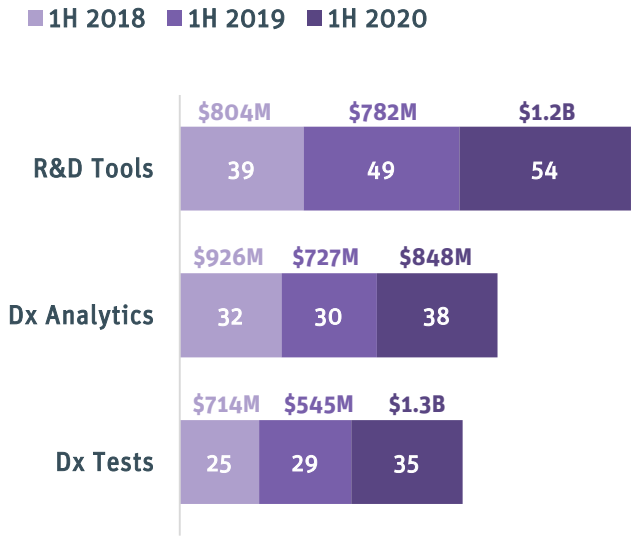
Investment on Track for Three-Year High; New Deals Aid COVID-19

With multiple $100M+ financings, dx/tools totaled their largest first-half investment in the last three years by a significant margin. Dx Tests captured the three largest deals, with Grail ($390M), LumiraDx ($302M), and Karius ($165M). Grail, focused on liquid biopsy for early cancer detection, has now raised more than $2B in equity. LumiraDx, a point-of-care digital diagnostics platform, has raised more than $600M. The other two subsectors combined for a total of five $100M+ deals, with Concerto Health AI ($150M), Verana Health ($100M), and Tempus ($100M) in dx analytics and Rapid Micro Biosystems ($120M) and DNAnexus ($100M) in R&D tools.

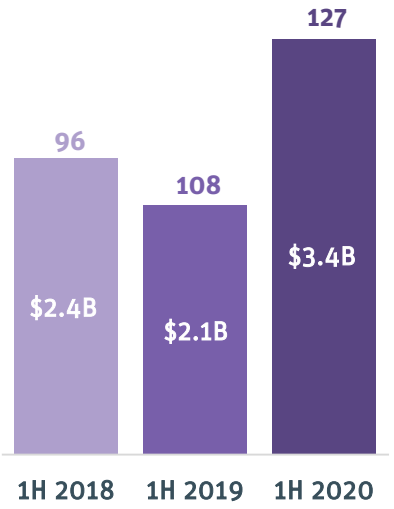
More than one-third of the dx/tools companies that raised capital in 1H 2020 (totaling $1.3B) leveraged their technologies to help during this pandemic — both in the discovery of new therapies and vaccines and in the processing and testing for COVID-19.

These companies have forged more than 20 collaborations with key academic institutions and large life science companies to work on COVID-19-related projects.

Dx/Tools Deals by All Subsectors
US and Europe



Total Deals and $
US and Europe



COVID-19 1H 2020 Deals

R&D Tools
ADARZA BIOSYSTEMS, HYRIS, Clear Labs, MEDGENOME, cyagen, Metabolon, Exscientia*, MOBILion SYSTEMS, INC., GINKGO BIOWORKS, OWKIN*, GreenLight BIOSCIENCES

Dx Analytics
Braid*, phys iQ*, color*, bio*, LYNXCARE*, VIDA*, OCTANT*

Dx Tests
BillionToOne, LUMOS DIAGNOSTICS, ChromaCode*, MammothBiosciences, COVAXX, NOVAI, EXBIO, PathSpot™*, Inflammatix, KARIUS, scailyte*, LUCIRA HEALTH, Spindiag, lumiraDx, visby medical

*These companies overlap with healthtech and are included in both sets of analyses. Investments includes first-time investments from institutional or corporate venture investment in the US and Europe and any first-round investments equal to or greater than $2M, regardless of investor, plus all additional equity financings by these VC-backed companies during the period covered by this slide. 1H financing data are compiled through 6/12. Dates of financing rounds are subject to change based on add-on investments. Source: PitchBook and SVB proprietary data.

Corporate Deals Down; Increased Activity by Early-Stage VCs

Northpond and 8VC were the top venture investors since 2019. In 2020, Northpond participated in $25M+ rounds in three later-stage deals, one in each subsector. 8VC backed one Series A and two later-stage deals in R&D tools and dx analytics. A new addition to the list, China-based Cowin Capital, funded two new R&D tools deals (one Series A), both under $4M. Liquid2Ventures and Startup Funding Club recently emerged as active early-stage investors.

Corporate investment was down. Several active corporate investors from the last few years were quiet in 1H 2020. The only corporates to complete Series A deals in 2020 were M Ventures and Agilent.

Casdin and Perceptive led top crossover investors in 2020 deals. Casdin backed one Series A and one mezzanine deal in dx analytics, while Perceptive funded two mezzanine deals in R&D tools. T. Rowe and Viking invested in the mezzanine round for Color Genomics. Foresite funded two new, UK-based R&D tools companies. Parkwalk did not invest in dx/tools in 2020.

Most Active New Dx/Tools Investors*

Number of Deals (US and Europe, 2019–1H 2020)

Venture Capital		Corporate Investor		Later-Stage/Crossover Investor	
9	Northpond Ventures	5	ALEXANDRIA	6	CASDIN CAPITAL
6	8VC	4	LabCorp	5	PERCEPTIVE ADVISORS
4	REVELATION PARTNERS	4	Agilent	4	PARKWALK Advisors
4	KEIRETSU FORUM	3	MAYO CLINIC	4	T.RowePrice
4	凯风创投 COWIN VENTURE	2**	M. VENTURES	3	Viking
3**	F/PRIME CAPITAL PARTNERS	2**	Baidu.ventures 百度风投	3	FORESITE CAPITAL
3**	L2 VENTURES	2**	AMGEN	2**	Redmile Group

*Most Active New Investors calculated as new (first-time) investments into US and European companies from 2019–1H 20120. **Additional investors have the same number of deals but are not included because of space limitations. 1H 2020 financing data are compiled through 6/12/20. Dates of financing rounds subject to change based on add-on investments. Corporate parent and corporate venture investment are combined under Corporate Investor. Alexandria investments typically average $2M per deal, AREE, Inc. Earnings 12/31/19. Source: PitchBook and SVB proprietary data.

Top-Valued Deals Raise Flat-Valued Rounds and Now Eye Public Market

This list contains the highest-valued private companies since 2019, all with publicly disclosed post-money valuations of $275M+.

The median mezzanine pre-money valuations for these deals was $230M, and the median step-up was 1.6x. Shrödinger had the largest step-up at 4.8x. Progenity, HeartFlow, Tempus, and Ginkgo closed flat add-on rounds, and HeartFlow and Ginkgo both executed secondary transactions in 1H 2020. Besides the flat round from Tempus, Omniome (3x step-up) and Nautilus (2x step-up) closed deals in 1H 2020.

Three deals on this list went public (10X Genomics in 2019, and Schrödinger and Progenity in 1H 2020). 10X Genomics stock popped at IPO, and as of 1H 2020 is up 129% from its IPO price, valued at $8.7B. The 2020 IPOs from this list have been a mixed bag. Schrödinger spiked at IPO, and the stock price was up +439% as of 1H 2020 with a market cap of $5.8B. Progenity, however, has declined since its IPO, down 40% to end 1H 2020 below its mezzanine post.

Post-Money Private Dx/Tools Companies ($275M+)

US and Europe, 2019–1H 2020

R&D Tools

10X GENOMICS
1/7/19
$35M Round
$1,280M Post

emulate
8/16/19
$28M Round
$278M Post

GINKGO BIOWORKS
THE ORGANISM COMPANY
9/19/19
$290M Round
$4,000M Post

INSCRIPTA**
The Digital Genome Engineering Company
12/10/19
$125M Round
$515M Post

nautilus
biotechnology
5/18/20
$76M Round
$326M Post

OMNIOME
1/10/20
$60M Round
$600M Post

Dx Tests

PathAI*
4/17/19
$60M Round
$375M Post

Dx Analytics

HeartFlow*
6/13/19
$65M Round
$1,565M Post

OM1*
12/18/19
$50M Round
$280M Post

progenity
9/13/19
$25M Round
$515M Post

SCHRÖDINGER*
5/8/19
$110M Round
$610M Post

Seer*
12/17/19**
$55M Round
$290M Post

TEMPUS*
3/13/20**
$100M Round
$5,000M Post

Company went public

*These companies overlap with healthtech and are included in both sets of analyses. **Company has multiple 2019–2020 deals with pre-valuation/post-valuation data in PitchBook that qualify for this slide, and only the most recent deal is shown. Dates of financing rounds are subject to change based on add-on investments. 1H 2020 financings are compiled through 6/12/20, and public market data are compiled through 6/30/20. Source: PitchBook, press releases and SVB proprietary data.

Series A Dollars, Deal Size Down; NIM and Neuro Trend Higher

Series A dollars dropped 34% versus 1H 2019, while deal activity stayed stable relative to the last three years. We saw continued downward pressure in Series A median deal size, reaching $4M in both 2019 and 1H 2020 (vs. $7.6M in 2018).

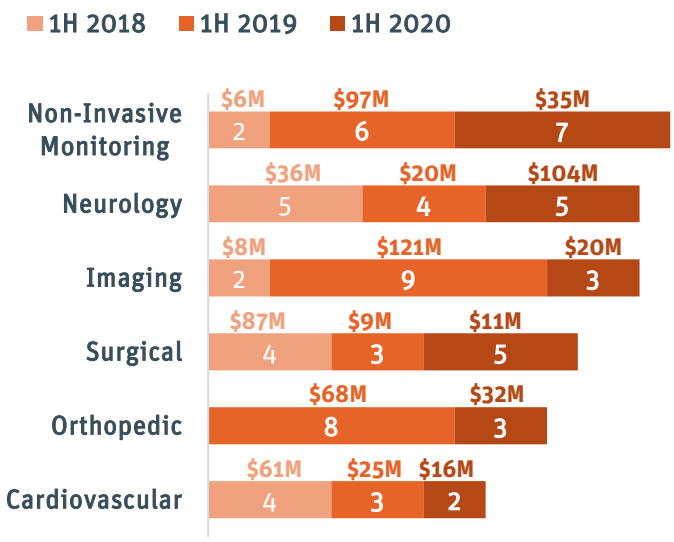
NIM and neurology continued to attract Series A funding. NIM companies focused on monitoring vital signs, as well as for renal, GI, and cardiovascular indications. Neurology quadrupled dollars raised vs. 1H 2019, highlighted by CereVasc's $44M in early June. Neurology deals focused on neuromodulation and neurostimulation technologies. In imaging, Series A deals and dollars declined from 1H 2019, but later-stage financings continued to drive growth for this subsector. Cardiovascular and orthopedics indications also declined.

Northern California led Series A device financings with eight deals totaling $43M, on par with 1H 2019. Massachusetts, which was a bright spot in new device company formation in 2019, dropped from five Series A deals in 1H 2019 to only two in 1H 2020. Similarly, Minnesota dropped from three deals in 1H 2019 to a single deal in 1H 2020.

Series A Device Deals
US and Europe

		1H 2018	1H 2019	1H 2020
Number of Investments	Q1 / Q2	19 / 19	31 / 14	16 / 22
	Total	38	45	38
Total Funding ($M)	Q1 / Q2	$202 / $225	$292 / $116	$110 / $169
	Total	$427	$408	$279
Corporate Investments	Q1 / Q2	5% / 16%	16% / 0%	6% / 14%

Series A by Top Indications



Top 1H 2020 Series A Deals

AVATION MEDICAL
b-one ORTHO
CathVision
CereVasc™
cleerly*
IHS
Neo
R2 Technologies
ShiraTronics A NuXcel COMPANY

*These companies overlap with healthtech and are included in both sets of analyses. Series A includes first-time investments from institutional or corporate venture investment in the US and Europe and any first-round investments equal to or greater than $2M, regardless of investor. 1H financing data are compiled through 6/12. Dates of financing rounds are subject to change based on add-on investments.
Source: PitchBook and SVB proprietary data.

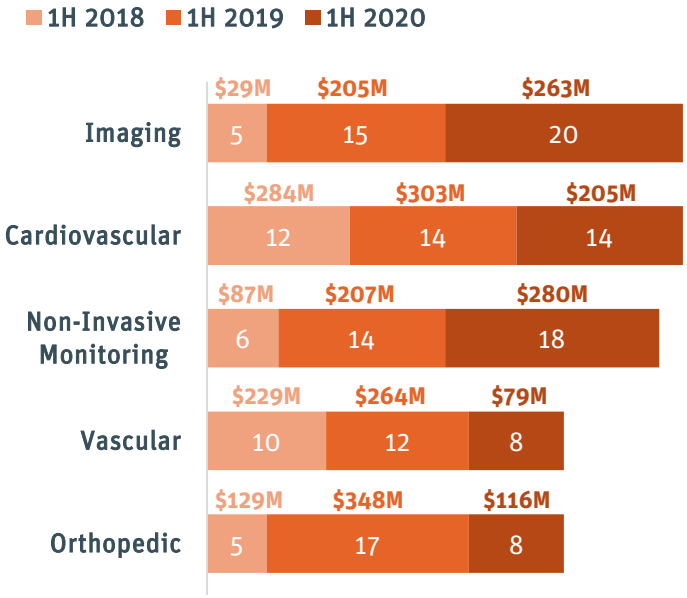
Imaging/NIM Increase Dollars; New Fundings to Fight COVID-19

The concern that venture investment would be impacted by clinical trial delays and declining revenue caused by COVID-19 has not materialized, as deals and dollars are both up. Previous top Series A indications imaging and NIM became late-stage fundraising leaders and comprised 25% of the total dollars raised in the sector.

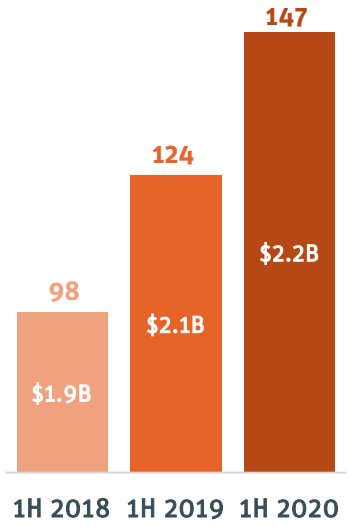
1H 2020 exceeded 1H 2019 numbers, defying the anticipated COVID-19 disruption. There were three $100M+ financings: Element Science ($146M) in NIM, Outset Medical ($125M) in renal, and RefleXion Medical ($100M) in oncology.

Fundraising toward COVID-19 or associated diseases was led by imaging, NIM, and respiratory companies. The median round for COVID-19-related companies ($21M) was more than 2.5x other deals ($8M). Imaging companies (Exo Imaging and Nanox) built upon 2019 financings for ultrasound imaging and X-ray screening. NIM companies (Neural Analytics and Caretaker Medical) provide solutions to monitor COVID-19 symptoms while minimizing patient contact. Respiratory companies CorVent Medical ($5.5M) and ALung ($16M) focus on a single-use ventilator and lung failure treatment.

Device Deals by Top Indications
US and Europe



Total Deals and $
US and Europe



COVID-19 1H 2020 Deals

Respiratory

ALUNG

CORVENT™

Imaging

EXO

IONETIX

NANOX

Non-Invasive Monitoring

Caretaker MEDICAL

NEURAL ANALYTICS

Investments include first-time investments from institutional or corporate venture investment in the US and Europe and any first-round investments equal to or greater than $2M, regardless of investor, plus all additional equity financings by these VC-backed companies during the period covered by this slide. 1H financing data are compiled through 6/12. Dates of financing rounds are subject to change based on add-on investments.
Source: PitchBook and SVB proprietary data.

VCs Focus on Series A; Crossover Lead Later Stage Deals

Shangbay Capital was the most active new investor since 2019, focusing on later-stage/commercial companies in imaging, urology/gynecology, and ophthalmology, mostly in the Bay Area. US Venture Partners picked up activity since 2019, primarily in neurology (ShiraTronics $36M Series A deal in 1H 2020) and cardiovascular.

Hon Hai (contract manufacturer) and REX Health Ventures (UNC hospital system) joined the list of most active corporate investors. In 1H 2020, Hon Hai invested in two new deals (oncology and imaging), while REX invested in one (cardiovascular).

Deerfield continues to lead all later-stage crossover investors, with three new investments since March 2020 (Element, Meditrina, and CorVent). Redmile did two new 1H 2020 deals: a Series A deal in respiratory (CorVent Medical) and a late-stage deal in tissue regeneration (LifeSprout). Cormorant continues to back companies formed by Shifamed innovation hub, with a 2020 investment in Supira Medical (following 2019 investments in Atia Vision and Tioga Medical).

Most Active New Device Investors*

Number of Deals (US and Europe, 2019–1H 2020)

Venture Capital		Corporate Investor		Later-Stage/Crossover Investor	
5	SHANGBAY CAPITAL	3	J&J INNOVATION	5	DEERFIELD
4	USVP	2	REX HEALTH VENTURES	3	Ally Bridge Group
3**	LSP	2	intel	3	CORMORANT ASSET MANAGEMENT
3**	VENSANA CAPITAL	2	varian	2	ROCK SPRINGS CAPITAL
3**	RTW Investments	2	FOXCONN 鴻海科技集團	2	PERCEPTIVE ADVISORS
3**	Aphelion Capital			2	Foresight group
3**	QUESTA CAPITAL			2	D1 CAPITAL PARTNERS
3**	APERTURE Venture Partners, LLC			2	Redmile Group

*Most Active New Investors calculated as new (first-time) investments into US and European companies from 2019–1H 2020. **Additional investors have the same number of deals but are not included because of space limitations. 1H 2020 financing data are compiled through 6/12/20. Dates of financing rounds subject to change based on add-on investments. Corporate parent and corporate venture investment are combined under Corporate Investor. Source: PitchBook and SVB proprietary data.

Healthy IPO Pipeline in Device, but COVID-19 Impacts Valuations

Shockwave, Silk Road and Inari's post-IPO performance point to significant value creation in the device sector beyond M&A. The rise in highly valued late-stage private deals signals that investors believe there is an open IPO window.

In 1H 2020, Outset and PulmonX each raised large hedge fund–backed mezzanine rounds. CMR Surgical, the only publicly disclosed $1B+ private device deal, closed in 2019. Most of the deals on this list raised more than $200M in total financing. However, CorneaGen ($37M), 908 Devices ($74M), and MediBeacon ($85M) all raised less than $100M.

Decreased/impacted revenues deterred many late-stage companies from going public; instead, these companies raised additional private capital, many at lower values. For companies with a minimum post-money value of $75M, 1H 2020 step-ups decreased to 1.6x (vs. 2.2x in 2019). Revenue unpredictability amidst COVID-19 is the likely cause, and it has pushed many companies to sacrifice valuation for runway. However, recent anecdotal evidence shows that revenues, across emergency and elective surgeries, have bounced back faster than anticipated.

Post-Money Private Device Companies ($150M+)

US and Europe, 2019–1H 2020

Renal

MediBeacon	Outset
9/4/19 $34M Round $300M Post	2/5/20 $125M Round $725M Post

Neurology

Neuralink
6/28/19 $51M Round $509M Post

Ophthalmology

Sight Sciences	CorneaGen
8/26/19 $31M Round $211M Post	2/26/19 $37M Round $157M Post

Gastrointestinal

EndoGastric Solutions
5/28/19 $45M Round $180M Post

Respiratory

pulmonX
5/5/20 $83M Round $304M Post

Surgical

CMR Surgical
9/17/19 $239M Round $1,226M Post

Imaging

Acutus Medical
6/20/19 $193M Round $323M Post

Platform

908devices
4/25/19 $18M Round $232M Post

Only includes post-money values reported by PitchBook for US and European companies. Dates of financing rounds are subject to change based on add-on investments. 1H 2020 financings are compiled through 6/12/20. Source: PitchBook, press releases and SVB proprietary data.

Venture-Backed Healthcare Exits

Global

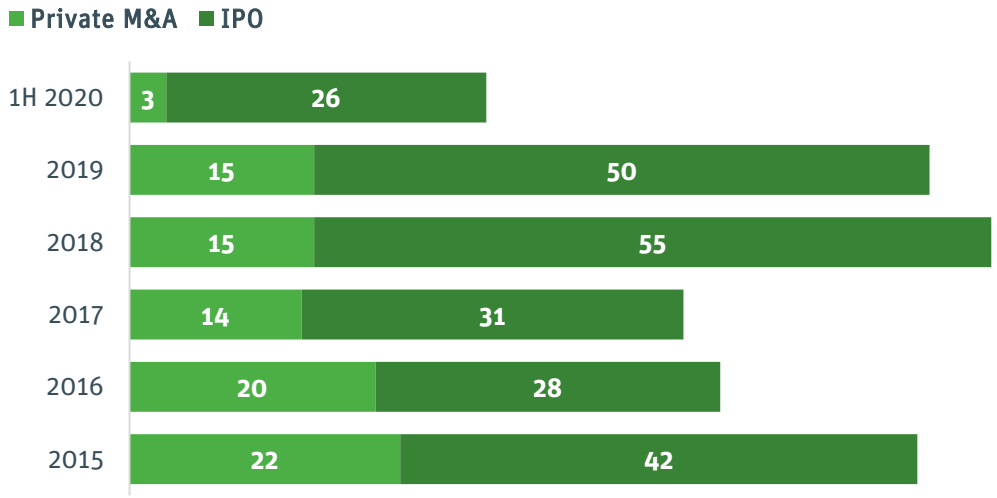
Stellar IPO Performance Encourages Deals to Go Public

A) Despite concerns that the COVID-19 pandemic would shut the public markets, IPOs and strong post-IPO performance continued, encouraging crossover and venture investors to continue to fund large mezzanine rounds and then go public. The median time from last private round to public offering for the IPO Class of 2020 was six months, with six companies going public in three months or less. At the midway point in 2020, IPOs were on track to meet 2019 totals. Private M&A activity continued to decline, driven by pre-money IPO values that significantly exceeded up-front private M&A medians.

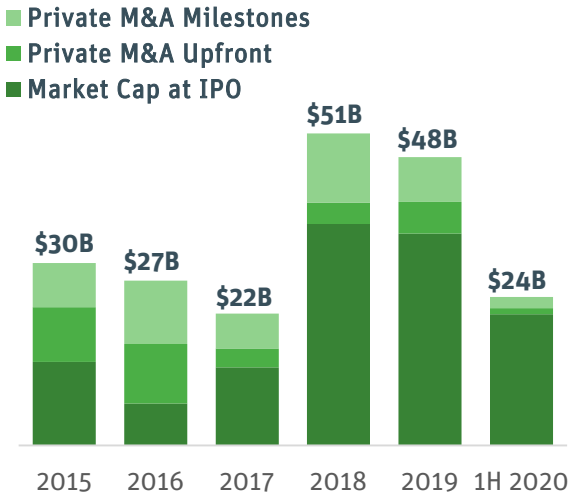
B) Exit values are on pace to match 2019, as the sector continues to an unprecedented two-and-a-half-year exit run. Led by record IPO valuations in 1H 2020, the total IPO market cap value ($21.4B) is far ahead of 1H 2019's pace ($13.7B).

C) There were 10 oncology IPOs in 1H 2020 vs. nine in 1H 2019. Platform deals increased from 1H 2019 (up from four to nine). Other indications saw fewer IPOs than in 1H 2019, such as neurology (down from five to zero) and orphan/rare (down from three to two).

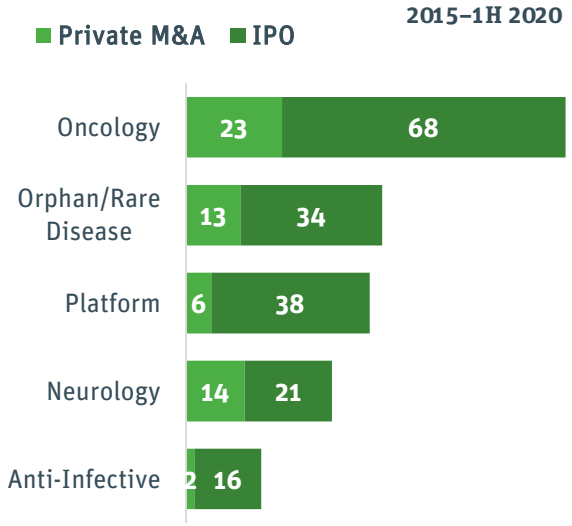
A) Biopharma Private M&A Deals & IPOs by Year



B) Exit Values by Year



C) Top M&A and IPOs by Indication



M&A defined as all private, global, venture-backed M&A deals with upfront payments of at least $75M. IPO defined as all private, global, venture-backed IPOs raising at least $25M in proceeds. Market cap at IPO used to estimate value of public companies. Public market performance metrics calculated as of 6/30/20. Source: PitchBook, press releases and SVB proprietary data.

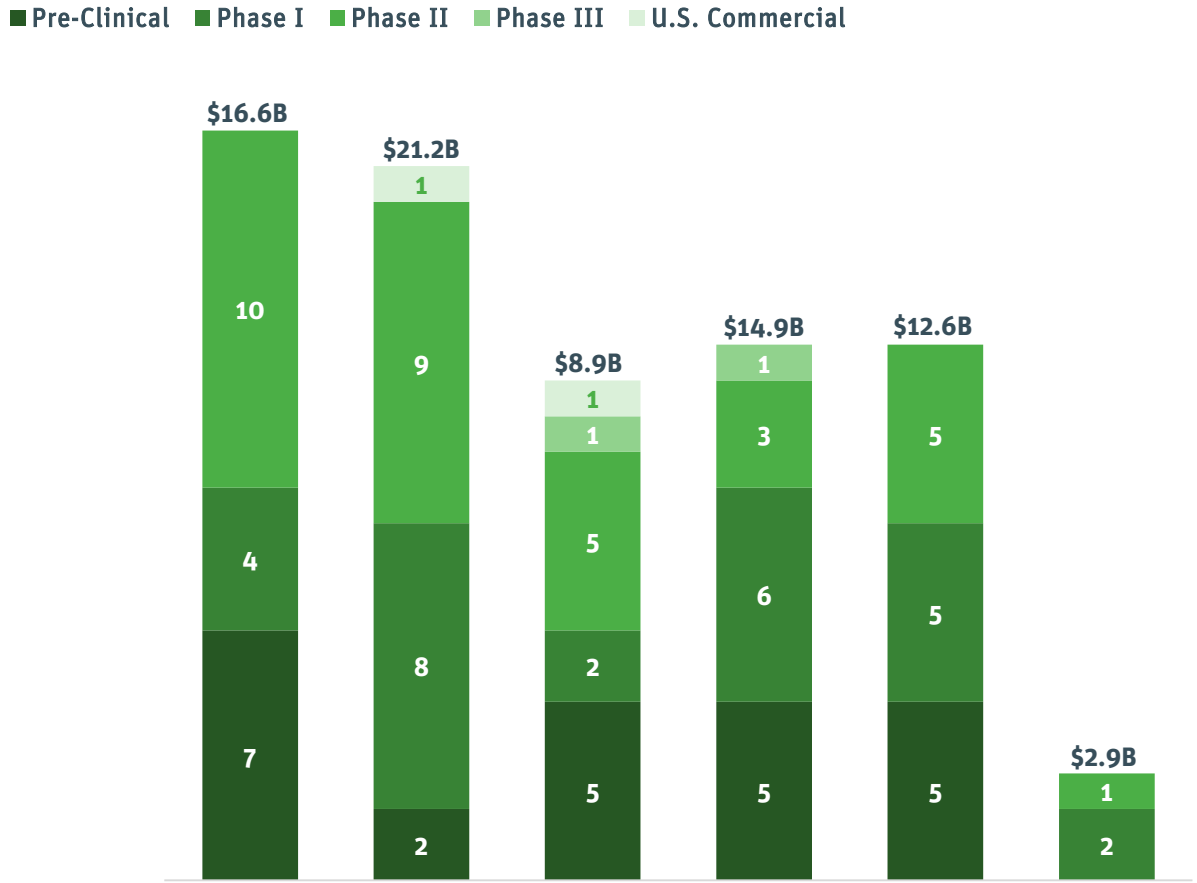
Private M&A Down but Yields Strong Investment Multiple

Attractive IPO valuations drove early-stage companies to pursue IPOs over private M&A. Pre-clinical/phase I IPOs totaled half of all 1H 2020 public offerings (13/26), with pre-money IPO valuations doubling historical private M&A upfront payments.

Over the past 3.5 years, private M&A were typically early-stage (64% pre-clinical/phase I), raised a smaller amount of capital ($35M), and exited quickly (3.2 years from closing their Series A). Of the 30 pre-clinical/phase I M&A deals during this time, the upfront deal value was $171M, representing a 4.4x upfront multiple on capital invested and a potential deal value of 14x, including milestones (all medians).

1H 2020 had three private M&A deals. Two were phase I neurology companies that were acquired within 3.5 years from their Series A, raised $40M or less, and had an upfront multiple of 3x and total deal value of 8.5x, including milestones (all averages). The phase II cardiovascular company, Corvidia, raised $92M in equity (plus undisclosed convertible debt) and was acquired for $725M upfront, with up to $1,375M in potential milestones.

Private Biopharma M&A by Stage



	2015	2016	2017	2018	2019	1H 2020
Upfront*	$200M	$200M	$171M	$140M	$250M	$330M
Total Deal*	$570M	$600M	$461M	$480M	$600M	$839M
Years to Exit**	4.2	5.9	3.5	3.1	2.7	3.6

*Upfront and total deal values are medians except for 1H 2020, which is calculated as an average due to small sample size. **Years to Exit values are medians. M&A defined as all private, venture-backed M&A deals with upfront payments of at least $75M, globally. Stage defined as last completed clinical trial prior to M&A announcement. Source: PitchBook, press releases and SVB proprietary data.

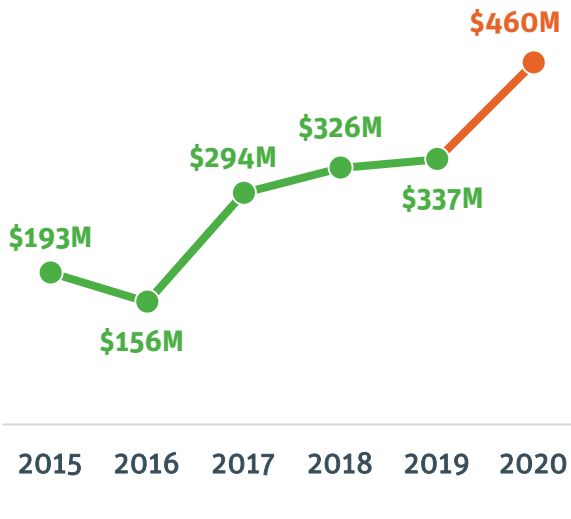
IPO Pre-Money Value and Proceeds Increase; Post-IPO Prices Jump

IPO median pre-money valuation increased 36% over 2019's number, following a three-year upward trend. IPO proceeds also skyrocketed to more than 2x any year since 2015. Pre-clinical/phase I IPOs dropped to only 17% (3/24) in 2H 2019 but bounced back to 50% (13/26) in 1H 2020, led by oncology and platform companies. The top IPO indications showed a step-up of 1.2x–1.5x from mezzanine round to pre-money IPO except for oncology, which had the most IPOs but had a flat valuation median from mezz to pre-money IPO.

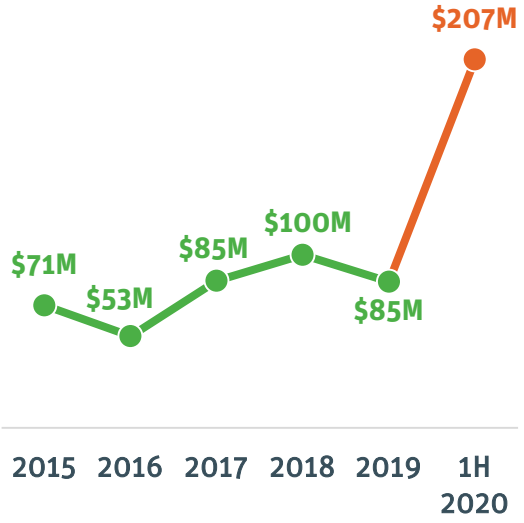
Biopharma IPOs in 2020 had strong post-IPO performance, with stocks surging an average of +79% in the public market (median 82%). Deals with Top 15 Crossover Investors in the mezzanine rounds dominated 1H 2020 IPOs (19/26). Post-IPO, these stocks outperformed venture-only IPOs by +35%. One reason for the swing is that Top 15 Crossover Investors create positive momentum by buying and holding a significant percentage of the IPO shares. This creates scarcity value at the IPO and fuels interest by outside investors at higher prices, leading to significant post-IPO stock price increases.

VC-Backed Biopharma IPOs by Year

IPO Pre-Money Valuation*



IPO Proceeds*



2019–1H 2020 IPOs by Top Indications

Indication	Number of Deals	% Early Stage (Pre-Clinical & Phase I)	Median Step-Up from Venture to Mezz Round	Median Step-Up from Mezz Round to Pre-Money IPO
Oncology	27	52%	1.6x	1.0x
Platform	18	44%	1.7x	1.3x
Orphan/Rare	8	38%	2.4x	1.5x
Neurology	6	33%	1.8x	1.2x

*Median numbers are reported for each year. IPO defined as all private, venture-backed IPOs raising at least $25M in proceeds, globally. Stage defined as clinical trial initiated at time of IPO. Public market performance metrics calculated as of 6/30/20.
Source: PitchBook, press releases and SVB proprietary data.

$1B+ VC-Backed Biopharma M&A and IPO Market Cap Values

$1B+ M&A Deals by Year: 20 Private/8 Public

Private M&A | Public M&A

2015	2016	2017	2018	2019	1H 2020
Acerta Pharma, IKARIA, Cardioxyl, DEZIMA pharma, FLEXUS BIOSCIENCES	Acetylon, Stemcentrx, Afferent, GANYMED, NIMBUS THERAPEUTICS	After BioScience, IFM THERAPEUTICS	BeneVir, ARMO BIOSCIENCES, IMPACT BIOMEDICINES, avexis, PREXTON THERAPEUTICS, syntimmune	IFMTRE, AUDENTES, Peloton Therapeutics, clementia, Promedior, Ra Pharma, Spark, synthorx	CORVIDIA, FortySeven

$1B+ Public Deals by IPO Vintage: 69 Companies

2015	2016	2017	2018	2019	1H 2020
Adaptimmune, aimmune THERAPEUTICS, ascendis pharma, AXSOME THERAPEUTICS, blueprint MEDICINES, GBT, MyoKardia, REGENXBIO	CRISPR THERAPEUTICS, editas MEDICINE, Intellia THERAPEUTICS, REATA PHARMACEUTICALS	Apellis, Athenex, biohaven pharmaceuticals, decipher a, DENALI THERAPEUTICS, zai Lab, zymeworks	Allakos, Allogene THERAPEUTICS, ARCUS BIOSCIENCES, ARVINAS, Constellation PHARMACEUTICALS, eidos a bridgebio company, Innovent, KINIKSA, KODIAK, moderna, PRINCIPIA BIOPHARMA, TranslateBIO, TRICIDA, -mAbs	ALECTOR, 康宁杰瑞 ALPHAMAB ONCOLOGY, Ascentage Pharma, BIONTECH, BridgeBio, BrightGene, CanSinoBIO, 微芯生物 CHIPSCREEN, CORTEXYME, 基石药业 CSTONE PHARMACEUTICALS, Henlius, igm Biosciences, KARUNA THERAPEUTICS, NGM Bio, SpringWorks THERAPEUTICS, Turning Point Therapeutics, VIELA BIO, VIR	ADC THERAPEUTICS, Akesobio, ARCUTIS, AVIDITY BIOSCIENCES, Beam THERAPEUTICS, BIO-THERA, BLACK DIAMOND THERAPEUTICS, forma THERAPEUTICS, I-MAB BIOPHARMA, INNOCARE, LEGEND BIOTECH, ORIC, PassageBio, PLIANT, REPARE THERAPEUTICS, REVOLUTION MEDICINES, Vaxcyte, zentalis

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Private M&A defined as all private, venture-backed M&A deals with upfront payments of at least $75M and total deal value of $1B+, globally. Public M&A defined as M&A total deal value of $1B+ from a VC-backed company that went public between 2015–1H 2020, globally. IPO defined as all private, venture-backed IPOs raising at least $25M in proceeds, globally. Public market performance metrics calculated as of 6/30/20. Source: PitchBook, press releases and SVB proprietary data.

Performance for Alternative Care IPOs Skyrockets

A) The IPO market cap for the two healthtech public offerings in 1H 2020 represented 96% of total exit value, despite 10x more M&A deals than IPOs.

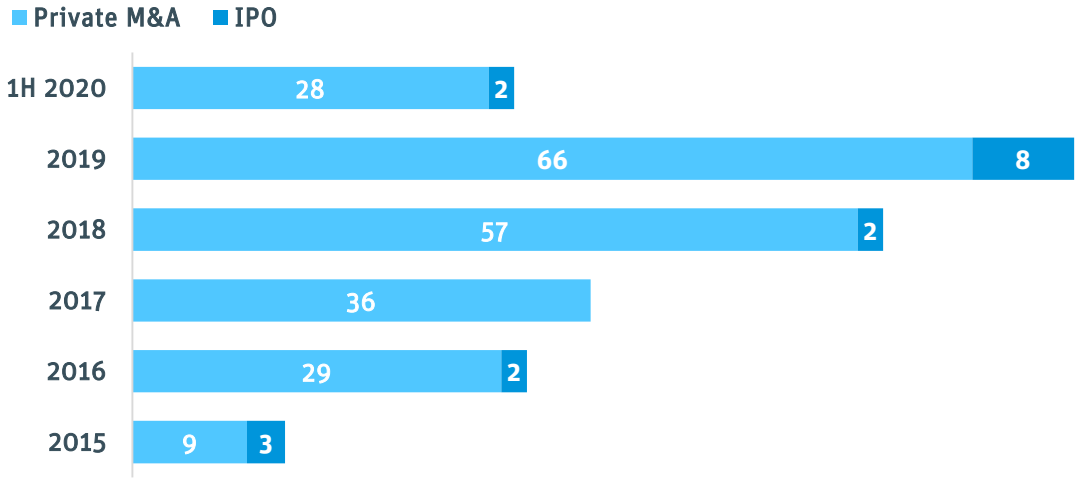
B) There were three publicly disclosed private M&A over $10M in 1H 2020: Care Zone (medication management) by Walmart for ~$200M, NurseGrid (provider operations) by HealthStream for $25M, and BioBeats (medication management) by Huma for $10M.

C) Led by Teladoc's incredible stock performance (+904%), post-IPO increases have been solid for the 17 healthtech companies that went public since 2015 (average: +100%; median: +50%).

Companies providing alternative care outside the hospital, like Ping An Good Doctor (primary care), Livongo (diabetes), and One Medical (primary care), show great post-IPO performance as a sector (average +100%). Amwell and Oak Street Health, who are also in this sector, have filed to go public.

Accolade, a healthcare navigation company, went public in early Q3. That IPO priced at $22 per share and raised $220M at a $1.2B valuation.

A) HealthTech Private M&A Deals and IPOs by Year



B) Exit Values by Year

C) Top IPOs ($4B+ Market Cap)

2015–1H 2020

	IPO Price (Date)	Price 6/30/20	Price +/-	Market Cap 6/30/20
平安健康 PING AN HEALTH	$7.07 (5/03/18)	$15.21	115%	$16.2B
Teladoc HEALTH	$19.00 (7/01/15)	$190.84	904%	$14.2B
Livongo	$28.00 (7/25/19)	$75.19	168%	$7.4B
SCHRÖDINGER*	$17.00 (2/06/20)	$91.57	439%	$5.8B
one medical	$14.00 (1/30/20)	$36.32	128%	$4.6B

*This company overlaps with dx/tools and is included in both sets of analyses. M&A defined as all private, venture-backed M&A deals with no upfront limitations, globally. IPO defined as all private, venture-backed IPOs raising at least $25M in proceeds, globally. Market cap at IPO used to estimate value of public companies. Public market performance metrics calculated as of 6/30/20. Source: PitchBook, press releases, SVB proprietary data and SVB HealthTech Report.

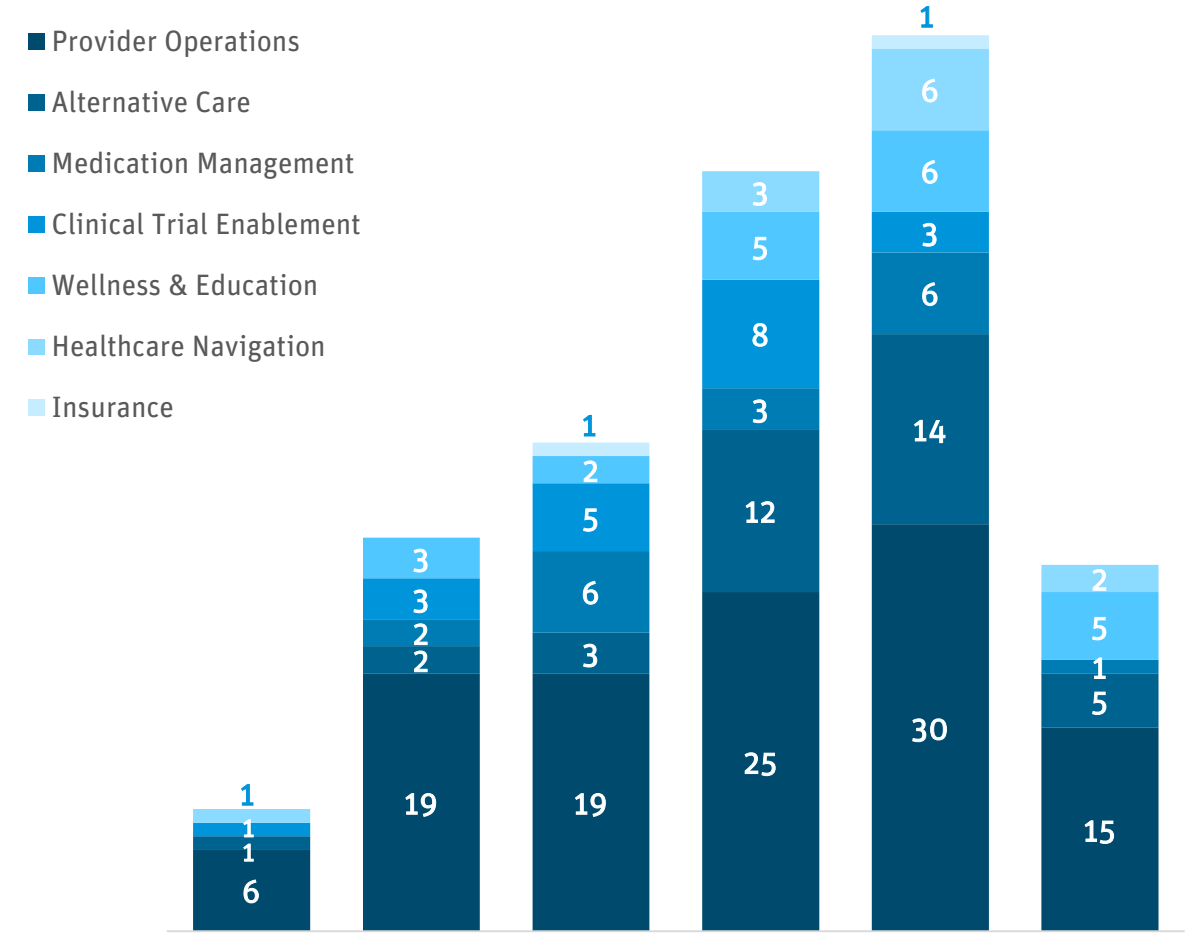
Provider Ops Lead M&A; Strategics Outnumber Financial Buyers

Provider operations remained the top subsector for private healthtech M&A, representing 51% of M&A deals since 2015 (114/223) and 56% of M&A in 1H 2020 (15/27). Since 2015, this subsector has had 16 $100M+ private M&A deals, including three $1B+ exits: eviCore Healthcare by Express Scripts in 2017 ($3.6B), Ability Network by Inovalon in 2018 ($1.2B), and Flatiron Health by Roche in 2018 ($1.9B).

Strategic buyers continue to buy venture-backed healthtech companies at a 2:1 ratio vs. pure financial buyers.

Private HealthTech M&A by Subsectors

US and Europe, 2015–1H 2020



	2015	2016	2017	2018	2019	1H 2020
Years to Exit*	4.3	5.1	5.2	4.7	5.4	5.1

*Median values are shown. M&A defined as all private, venture-backed M&A deals with no upfront limitations, globally.
Source: PitchBook, press releases, SVB proprietary data and SVB HealthTech Report.

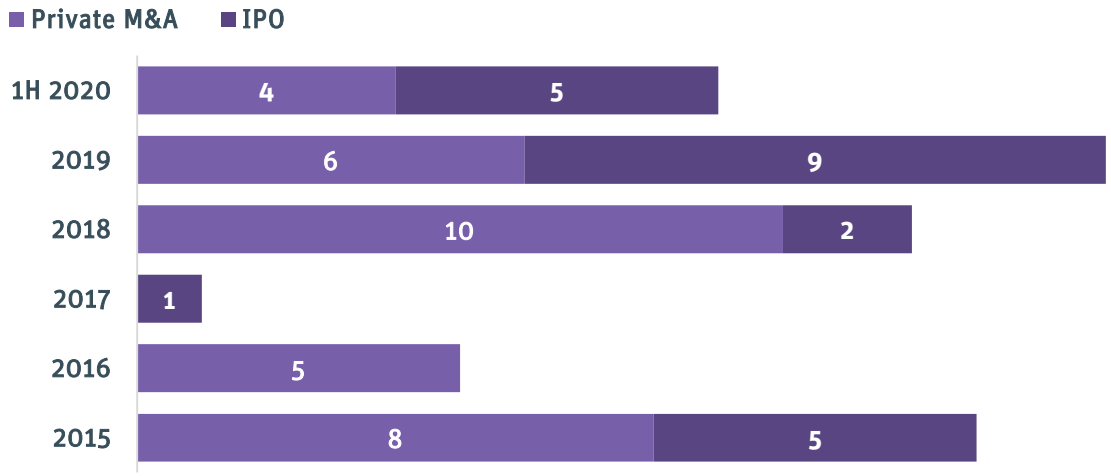
Public Offerings & Post-IPO Surge Propels Dx/Tools Exits in 2020

Dx/Tools M&A and IPO activity are on track to match 2019's pace. IPOs highlight returns in this sector (with China-based companies raising three of five IPOs), while private M&A continues to struggle with small deal sizes. M&A did see a flagship deal at the end of Q2 2020 with ArcherDX's acquisition by Invitae for $1.4B ($886M upfront).

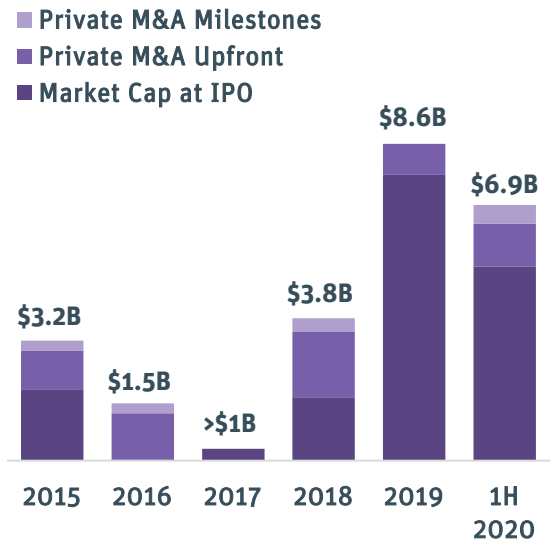
IPO market cap drove the majority of deal value ($5.2B of the $6.9B total), led by two R&D tools companies in the computational drug discovery space. HitGen went public at a $1.1B market cap and performed well post-IPO (+164%), closing 1H 2020 at a $3.1B market cap. By comparison, Schrödinger had a smaller IPO market cap of $821M but showed stronger post-IPO performance (+439%), increasing market cap to $5.8B by the end of 1H 2020.

Burning Rock and Genetron, commercial dx tests companies in the oncology testing space, had different post-IPO results. The IPOs were about a week apart at similar market caps ($1.5B and $1.1B). Burning Rock was up 64% post-IPO, while Genetron was down 25%. The difference could be the diverse hold strategies between healthcare-focused investors and generalist investors. Progenity, focused on prenatal testing, went public at a $667M market cap in mid-June but dropped 40% in the next two weeks.

A) Dx/Tools Private M&A Deals & IPOs by Year



B) Exit Values by Year



C) 1H 2020 Post-IPO Performance

	IPO Price (Date)	Price 6/30/20	Price +/-	Market Cap 6/30/20
SCHRÖDINGER*	$17.00 (2/6/20)	$91.57	+439%	$5.8B
HITGEN	$9.91 (4/16/20)	$7.68	+164%	$3.1B
燃石医学 Burning Rock Dx	$16.50 (6/12/20)	$27.01	+64%	$2.7B
GENETRON HEALTH	$16.00 (6/19/20)	$12.07	-25%	$1.1B
progenity	$15.00 (6/19/20)	$9.00	-40%	$406M

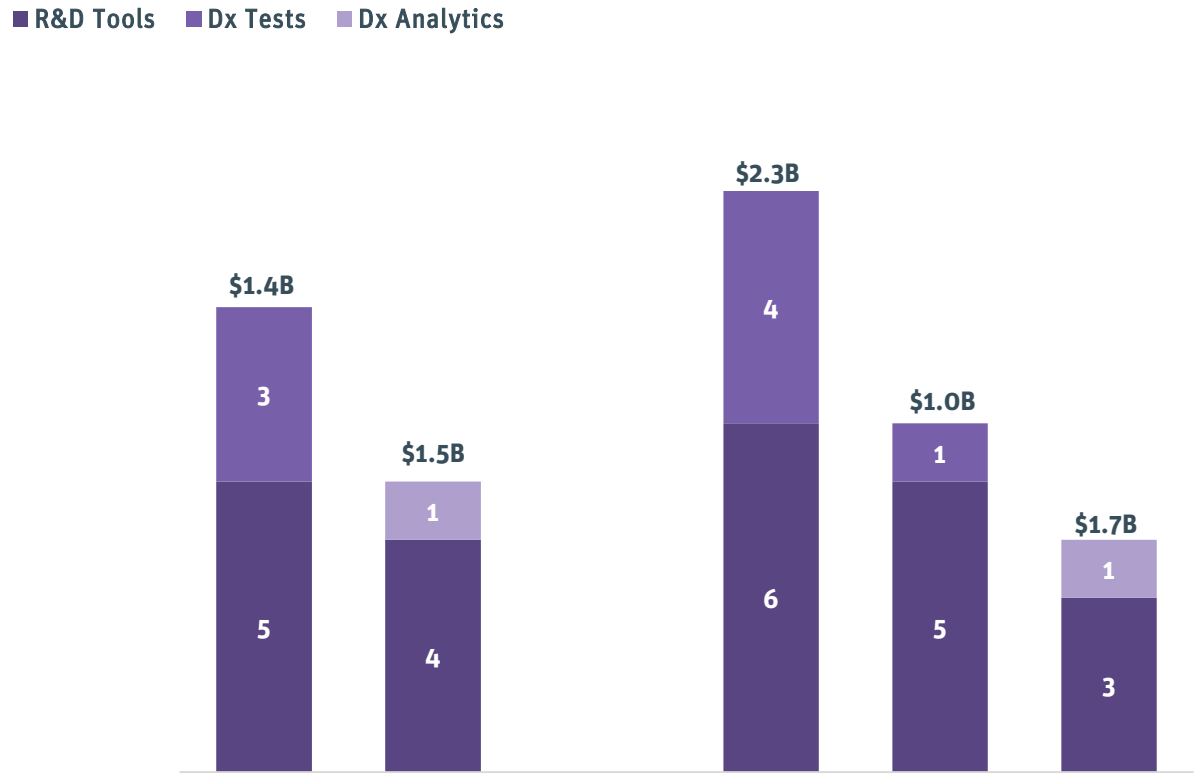
*This company overlaps with healthtech and is included in both sets of analyses. M&A defined as all private, venture-backed M&A deals with upfront payments of at least $50M, globally. IPO defined as all private, venture-backed IPOs raising at least $25M in proceeds, globally. Market cap at IPO used to estimate value of public companies. Public market performance metrics calculated as of 6/30/20.
Source: PitchBook, press releases and SVB proprietary data.

ArcherDX's $1.4B M&A Provides Flagship Deal for Dx/Tools

Private M&A returns continue to lag, especially compared to IPO performance over the past two years. Private dx/tools were comprised of three smaller all-cash deals until late June, when ArcherDX, which recently filed to go public in a $100M IPO, was acquired by Invitae for $886M upfront ($1.4B total deal value). This is Invitae's fourth venture-backed acquisition in the past two years, following R&D tools companies Singular Bio and Jungla, and healthtech company Clear Genetics. ArcherDX's last disclosed post-money value was at $255M after its $55M Series C round in 2019.

The other three acquisitions were commercial-stage all-cash deals (no milestones) totaling between $80M–$108M. Two were R&D tools companies (Andrew Alliance and Celsee), and the third was a dx analytics company (Blueprint Genetics). All three of these deals raised less than $45M in equity. We continue to monitor large tech companies' acquisition interest in the dx analytics and dx tests spaces but have yet to see any major venture-backed deals.

Private Dx/Tools M&A by Subsector



	2015	2016	2017	2018	2019	1H 2020
Upfront*	$164M	$225M	—	$126M	$68M	$113M
Total Deal*	$164M	$325M	—	$161M	$83M	$164M
Years to Exit*	3.6	8.5	—	8.6	5.3	5.0

*Median values are shown. M&A defined as all private, venture-backed M&A deals with upfront payments of at least $50M, globally.
Source: PitchBook, press releases and SVB proprietary data.

Device Returns Led by Commercial-Stage IPOs as M&A Lags

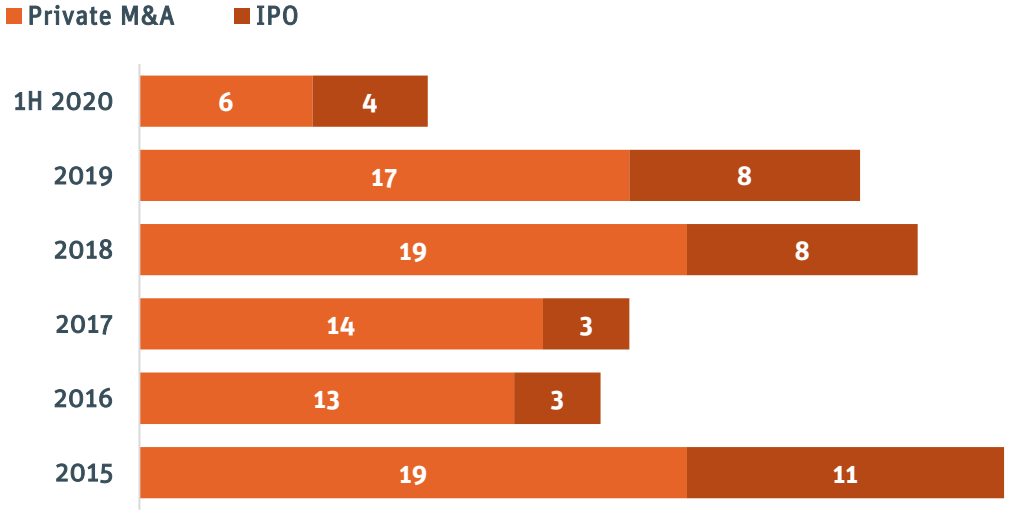
A) M&A deals were down vs. 1H 2019 but on pace with 1H 2018. We typically see more M&A in the second half of the year. Device IPOs are on pace to match 2019 totals. All four IPOs occurred in 2Q 2020, including $1B+ market cap non-US deals by Shanghai Sanyou Medical (SHG) and Peijia Medical (HK).

B) Deal values have regressed to median numbers after 2019's record-setting performance. Most of the deal value in 1H 2020 (83%) was driven by IPO market cap.

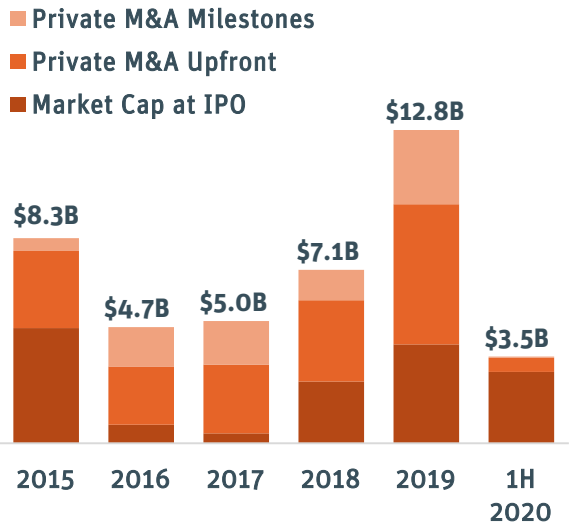
C) Device IPO pre-money valuations in 1H 2020 (median $610M) more than doubled 2019's record high, and IPO proceeds (median $141M) were also above historic levels. These companies had a median valuation step-up of 1.3x from their mezzanine round, and three of four appreciated more than 100% since going public.

Since 2015, the 36 IPOs (minus six public M&A deals) have shown significant, sustained stock price performance (average: +111%; median: +61%). Additionally, total market cap for the IPO Classes of 2019 and 2020 showed a 3x increase post-IPO.

A) Device Private M&A Deals & IPOs by Year



B) Exit Values by Year



C) 1H 2020 Post-IPO Performance

	IPO Price (Date)	Price 6/30/20	Price +/-	Market Cap 6/30/20
PEIJIA 沛嘉医疗	$1.98 (5/15/20)	$4.53	+129%	$2.9B
INARI MEDICAL	$19.00 (5/22/20)	$48.44	+155%	$2.3B
SANYOU 上药	$2.97 (4/9/20)	$11.22	+278%	$2.3B
LYRA THERAPEUTICS	$16.00 (5/1/20)	$11.34	-29%	$147M

M&A defined as all private, venture-backed M&A deals with upfront payments of at least $50M, globally. IPO defined as all private, venture-backed IPOs raising at least $25M in proceeds, globally. Market cap at IPO used to estimate value of public companies. Public market performance metrics calculated as of 6/30/20. Source: PitchBook, press releases and SVB proprietary data.

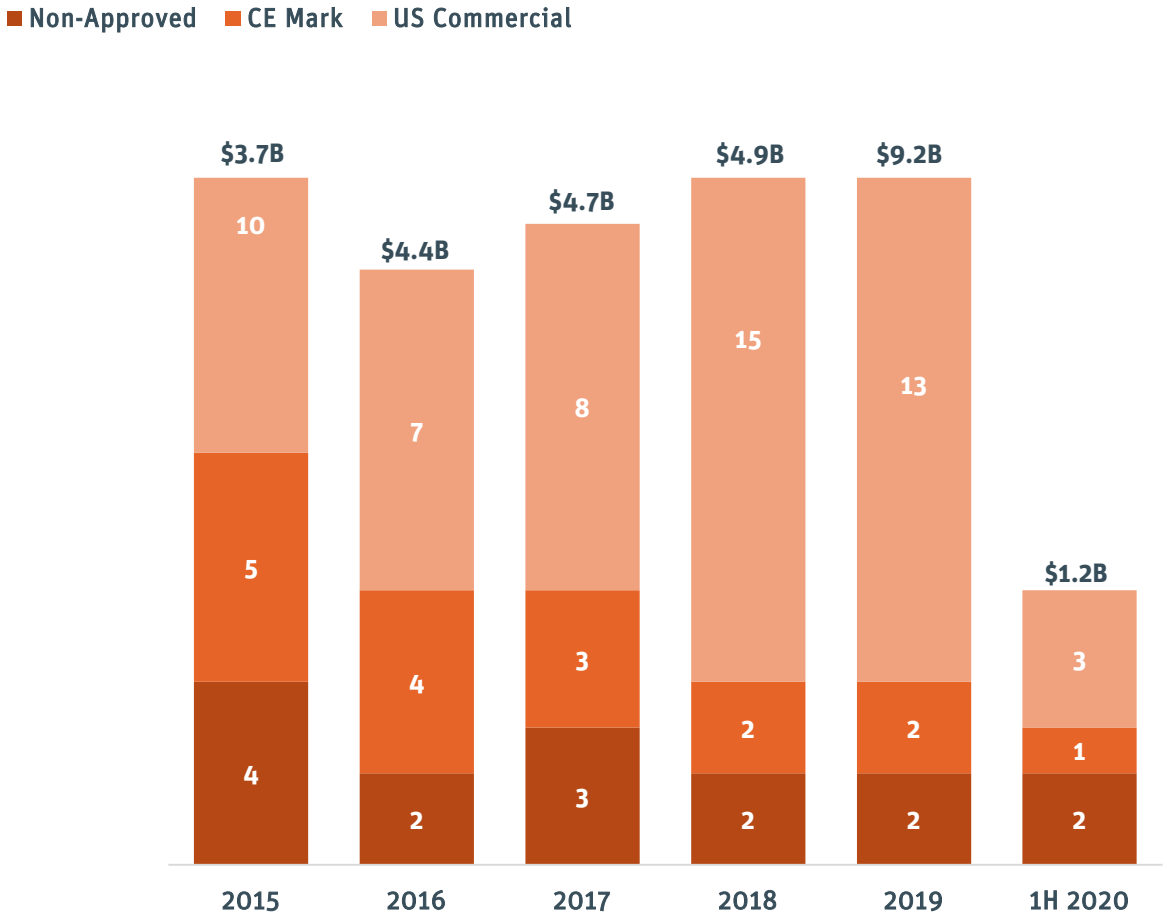
M&A Upfront Values Decline to Lowest Level in Six Years

M&A deal size continued a downward trajectory, with a 46% drop in median upfront value and a 33% drop in total deal value vs. 2019. Only two deals eclipsed $100M in upfront value. Time to exit was lower than historical levels, reflecting that three of six take-outs were prior to a US commercialization round. Deals were evenly split between PMA and 510(k).

Over the last four years, orthopedics and cardiovascular led private M&A with nine deals each. Since 2019, however, surgical (5), orthopedic (4), and respiratory (3) led device M&A. There has not been a venture-backed cardiovascular M&A since January 2019.

During COVID-19, large cap acquirer interest varied: either seeing this as a buying opportunity and engaged in multiple acquisition talks, or regrouping from stock price declines and staying inwardly focused. Medtronic has completed three VC-backed M&A deals since 2019 (two in 1H 2020) and was the most active acquirer in this period, despite a quiet 2016–2018. Since Boston's seven-deal spree in 2018, it has announced only one venture acquisition (Vertiflex in May 2019). Smith & Nephew resumed targeting venture device deals, acquiring an ENT company in 1H 2020 (following two M&A deals in orthopedics in 2017 and 2018).

Private Device M&A by Stage



	2015	2016	2017	2018	2019	1H 2020
Upfront*	$125M	$120M	$131M	$190M	$120M	$65M
Total Deal*	$141M	$380M	$283M	$225M	$220M	$148M
Years to Exit*	7.0	8.1	7.7	8.1	7.9	5.2

*Median values are shown. M&A defined as all private, venture-backed M&A deals with upfront payments of at least $50M, globally. CE Mark defined as achieving a CE Mark but not FDA approval. US Commercial defined as achieving FDA clearance or approval, with or without CE Mark. Source: PitchBook, press releases and SVB proprietary data.

Healthcare Outlook: Second Half 2020

Predictions for Venture-Backed Healthcare Sectors

Total healthcare venture fundraising will not keep pace with 1H 2020 but should still set a $15B+ record for the full year.

2H 2020 company investment will lag 1H 2020 numbers, but biopharma and dx/tools will likely set investment records, fueled by large crossover-backed mezzanine rounds. Device investment will be stable and should total at least $4B. HealthTech investments will surpass previous years, solidifying it as the number two healthcare sector after biopharma.

Series A deals and dollars should be stable across most sectors for the full year but will likely decline in device, as most investor interest has been in later-stage deals.

Biopharma IPOs should continue, absent major macroeconomic issues, although we predict there will be fewer IPOs in 2H 2020, likely ending the year at 40–45 venture-backed public offerings. Dx/tools and device should total 10 IPOs each, with significant participation by SHG and HK listings. We believe device M&A will pick up in 2H 2020.

Public market interest for healthtech companies will likely center on alternative care and CTE (drug discovery platforms), which continue to be aided by the issues presented by COVID-19. We believe there will be four to five IPOs for full-year 2020 (down from eight in 2019).

Glossary

Deal Descriptions

Structured Deal defined as a pay-for-performance acquisition where some of the deal value is paid upfront when the deal closes, but also contains additional value based on milestones that must be achieved.

All-In Deal defined as an acquisition where the full deal value is paid at deal close.

Upfront Payments defined as initial proceeds from an acquisition paid upon the close of a structured deal; they do not include milestones.

Milestones to be Earned defined as proceeds from an acquisition that are paid once predetermined milestones are met.

Total Deal Value defined as the full value of the acquisition, including any milestones to be earned.

Time to Exit defined as the time from the close of a company's first institutional round of financing to the exit.

Step-Up defined as the valuation change from the last round post-money value to the next round pre-money value.

Corporate Investor

Corporate Investor defined as both corporate venture and parent company investment into venture-backed companies.

Series A

Series A defined as all first-round institutional or corporate venture investment, and all first-round investments equal to or greater than $2M, regardless of investor.

Biopharma Top 15 Crossover Investor

Biopharma Top 15 Crossover Investor defined as a public-minded investor who strategically invests in private companies. The Top 15 list includes: RA Capital, Perceptive Advisors, Deerfield Management, Redmile Group, Cormorant Asset Management, The Invus Group, Fidelity (et al), EcoR1, Foresite Capital Management, ArrowMark Partners, BVF Partners, Casdin Capital, Citadel, Rock Springs Capital, and Tavistock Group.

Device Regulatory Definitions

Non-approved defined as a device product that has no regulatory clearance or approval for its product.

CE Mark defined as a device company that has CE Mark approval but has not received FDA approval. CE Mark is a European Union designation that is typically less difficult to obtain than FDA approval, and the approval process often has a faster timeline.

US Commercial defined as a device company that has received FDA approval or clearance of its product and usually is in a commercial stage.

Indication Definitions

Neurology defined as CNS, pain and psychology companies, as well as neuro implant technologies.

Non-Invasive Monitoring (NIM) defined as medical data collection through sensors and other technology.

Dx Tests defined as proprietary yes/no diagnostic tests.

Dx Analytics defined as actionable data analytics to help determine treatment.

R&D Tools defined as research equipment/services for biopharma and academia.

HealthTech Subsector Definitions

Provider Operations defined as companies that provide solutions to increase the efficiency and accuracy of provider-provider, provider-patient interactions.

Alternative Care defined as companies that provide primary or specialty care outside of a hospital or private practice.

Clinical Trial Enablement (CTE) defined as companies that develop solutions to accelerate drug discovery and the digitization of clinical trials.

Healthcare Navigation defined as companies that guide users to relevant providers and/or payers based on their needs.

Medication Management defined as companies that aid users in access and adherence to their prescribed medication.

Wellness & Education defined as companies that inform users of healthy lifestyle and medical best practices.

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Notes: For additional information on SVB's HealthTech definitions, please see our SVB HealthTech Report.

Authors

Jonathan Norris
Managing Director
jnorris@svb.com
@jonnysvb

Jonathan Norris spearheads strategic relationships with many healthcare VC firms and serial entrepreneurs. In addition, he helps SVB Capital through sourcing and advising on limited partnership allocations and direct investments.

Jonathan speaks at major investor and industry conferences about healthcare VC trends. He has 19+ years of banking experience working with healthcare companies and VC firms.

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

Katherine Harris
Associate
katharris@svb.com

Katherine Harris is responsible for conducting data-driven analyses on the global innovation economy that SVB serves. In this role, she supports global research efforts that explore investment, fundraising, and exit dynamics in the venture ecosystem.

Prior to SVB, Katherine worked at the intersection of basic and clinical research, studying the neurodevelopmental effects of opioids in newborns to advance treatment strategies.

She graduated from Dartmouth College with high honors, receiving a B.A. in neuroscience.

Dhruv K. Vig, Ph.D.
Vice President
dvig@svb.com
@DhruvVigPhD

Dhruv Vig leverages a combination of SVB's proprietary data, its vantage point within the global innovation ecosystem and healthcare industry knowledge to build global, strategic relationships and publish thought-leadership pieces.

Prior to SVB, Dhruv co-founded Decoded Health, a primary care–focused healthtech company, and was part of the SRI (formerly Stanford Research Institute) Ventures team.

He holds a Ph.D. from the University of Arizona and completed a postdoctoral fellowship at Johns Hopkins University in computational biophysics.

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Silicon Valley Bank

About Silicon Valley Bank

For more than 35 years, Silicon Valley Bank has helped innovative companies and their investors move bold ideas forward, fast. SVB provides targeted financial services and expertise through its offices in innovation centers around the world. With commercial, international and private banking services, SVB helps address the unique needs of innovators.

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