

# ***The Brookline Brief***

Healthcare Equity Capital Markets Update

**September 12, 2023**



**BROOKLINE  
CAPITAL MARKETS**

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New York, New York 10022

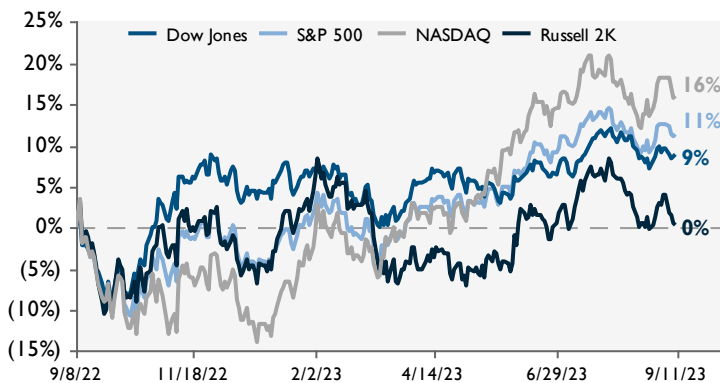
## Equity Market / New Issue Market **Tailwinds**

- Although the cadence of follow-on new issue activity within the life sciences-, med. tech.-, and diagnostics-focused subsectors declined this past month (with August tallying 32 follow-on transactions that raised a combined total of \$1.7bn in aggregate gross proceeds, prior to overallocments), many observers remained optimistic that the follow-on market's momentum over the past several months (\$11.2bn raised via 189 deals since May 1, 2023) could portend a significantly stronger-than-expected performance for the follow-on new issue market during the final 4 months of the year. On a year-over-year basis, follow-on activity in 2023, as measured by both total aggregate capital raised and total follow-on volume (deal count), represents year-over-year increases of +50% (\$19.3bn vs. \$12.8bn) and +79% (n=346 deals vs. n=193 deals) versus 2022.
- The Federal Trade Commission moved late last month to allow Amgen (AMGN) to proceed with its \$27.8bn acquisition of Horizon Therapeutics (HZNP), sending both AMGN and HZNP's shares up by +2% and +8%, respectively, through the close of trading yesterday afternoon. (1) While some observers expressed skepticism that the Commission's decision to allow the AMGN/HZNP deal to proceed reflected a softening of its hitherto aggressive regulatory posture under leadership of Chairwoman Kahn, others remained optimistic that the removal of a key regulatory overhang on the second-largest M&A deal in the sector since the start of 2022 (second only to PFE's currently-pending \$41.3bn acquisition of SGEN) could, in turn, pave the way for a meaningful uptick in M&A dealmaking activity during the final 4 months of the year.
- The FDA issued 10 first-time NDA / BLA approvals this past month, bringing the total number of first-time FDA approvals granted in 2023 YTD to 62 as of Aug. 31st. Although some observers noted that the overall cadence of FDA approval activity through the first 8 months of the year continued to lag on a year-over-year basis (n=79 first-time approvals as of Aug. 31, 2022), others remain hopeful that the recent uptick in FDA first-time NDA/BLA approval activity (versus just 6 and 4 first-time approvals in June and July 2023, respectively), could reinvigorate risk appetite throughout the subsector heading into Q4 2023.

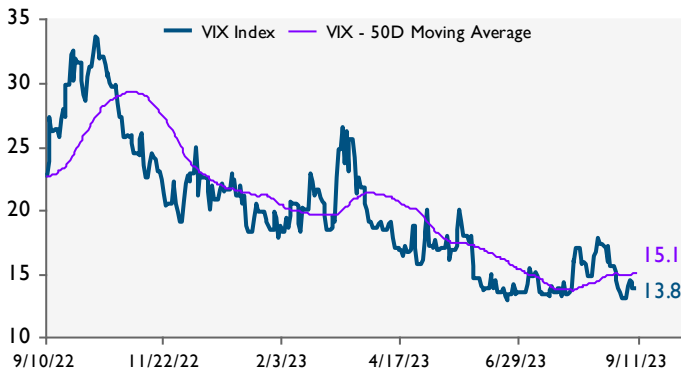
## Equity Market / New Issue Market **Headwinds**

- The S&P 500, NASDAQ, Dow, XBI, and IBB logged month-over-month losses of -1.8%, -2.2%, -2.4%, -6.0%, and -0.5%, respectively, during this past month - marking the first month of negative month-over-month returns for the S&P 500 and NASDAQ since February 2023 and the first down month for the Dow Jones Industrial Average since April 2023. In addition, August marked the third consecutive month of XBI underperformance relative to both the S&P 500 and the Dow and its fourth consecutive month of underperformance relative to the NASDAQ Composite. Though some remain hopeful that a Federal Reserve "pivot" and/or the revival of M&A dealmaking activity within the sector may serve to break the XBI's losing streak versus the broader US equity market in Q4 2023, others remain considerably more cautious on the outlook for the biotech sector in the coming months following a bruising first 8 months of 2023 (as of Aug. 31, 2023 - XBI absolute: -4.6%; XBI vs. NAS: -38.7%).
- Q2 2023 earnings season proved to be, on balance, a disappointment for the majority of companies within the life sciences-, med. tech.-, and diagnostics-focused subsectors. Brookline's analysis found that on an XBI-adjusted basis, only 18% of companies that reported Q2 financials over the past several weeks closed higher by +5% or more (vs. XBI) on the first trading day post-earnings release, while 24% of companies finished lower by -5% or more (vs. XBI) on the first trading day post-earnings release. Furthermore, Brookline's analysis found that the median post-Q2 earnings return for companies that reported <4 quarters of cash remaining (at June 30, 2023) was -12.1% as of Monday's close.
- Notwithstanding a strong follow-on market during 2023 YTD, only 25% of issuers within the life sciences-, med. tech.-, and diagnostics-focused subsectors with less than a year of cash runway entering Q2 that completed a regular-way follow-on financing during the quarter were able to extend their cash runway such that they exited Q2 with over a year of cash runway. 68 issuers in this cohort completed 76 transactions, with median gross proceeds of \$5.4mm and median returns of -37.7%, on an offer-to-current basis. On the contrary, 66 issuers entering Q2 with greater than a year of cash runway at the beginning of the quarter completed 67 transactions, with median gross proceeds of \$70mm and median returns of +0.5%, on an offer-to-current basis. Moreover, 70% of transactions completed by issuers with less than a year of cash entering Q2 featured  $\geq 100\%$  warrant coverage compared to just 17% of transactions completed by issuers with greater than a year of cash runway entering Q2.

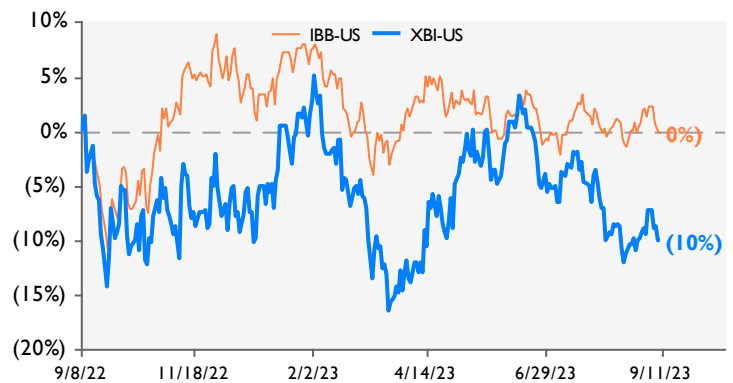
## General Indices (LTM)



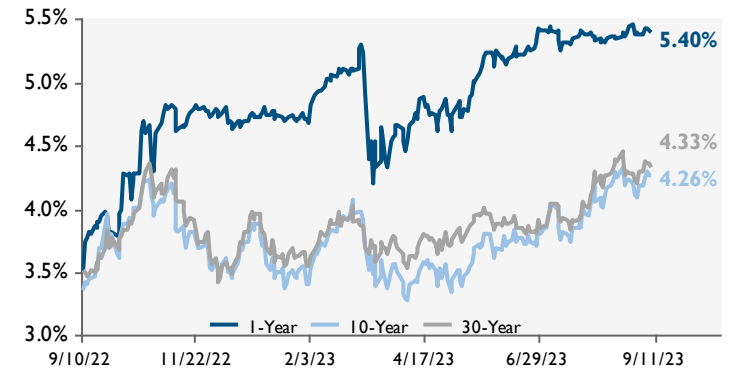
## CBOE Market Volatility Index (VIX)



## Biotech Tracking Funds: XBI and IBB (LTM)



## U.S. Treasury Yields (LTM)



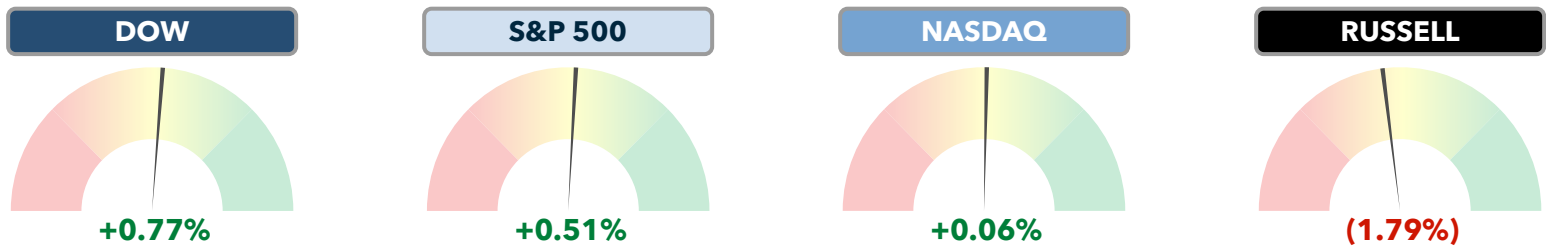
(1) Indexed to market close on August 31, 2023.

Sources: FactSet, Bloomberg, Brookline Capital Markets Investment Banking Data, US Food & Drug Administration Data, CME Group. Market data as of 4:00 PM on September 11, 2023, unless otherwise noted.

## Major US Indices ETF Performance - Monthly Performance Montage (2022 to 2023 YTD)

	Yr	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Full Yr / YTD
<b>Dow Jones</b> iShares Dow Jones ETF (DIA)	2023	+2.9%	-4.2%	+1.9%	+2.5%	-3.4%	+4.3%	+3.4%	-2.2%	-0.4%	--	--	--	+4.6%
	2022	-3.4%	-3.3%	+2.2%	-4.9%	+0.2%	-6.8%	+6.8%	-4.0%	-9.0%	+14.0%	+5.7%	-4.3%	-8.8%
<b>S&amp;P 500</b> SPDR S&P 500 ETF (SPY)	2023	+6.3%	-2.5%	+3.3%	+1.6%	+0.5%	+6.1%	+3.3%	-1.6%	-1.1%	--	--	--	+16.5%
	2022	-5.3%	-3.0%	+3.4%	-8.8%	+0.2%	-8.6%	+9.2%	-4.1%	-9.6%	+8.1%	+5.6%	-6.2%	-19.5%
<b>NASDAQ</b> Fidelity NASDAQ Comp (ONEQ)	2023	+10.8%	-1.1%	+6.8%	+0.1%	+6.0%	+6.4%	+4.2%	-2.0%	-2.1%	--	--	--	+32.1%
	2022	-8.8%	-3.3%	+3.5%	-13.3%	-1.9%	-8.7%	+12.5%	-4.6%	-10.5%	+4.0%	+4.4%	-9.0%	-32.7%
<b>Russell 2000</b> iShares Russell 2000 ETF (IWM)	2023	+9.8%	-1.7%	-5.2%	-1.8%	-0.8%	+7.8%	+6.1%	-5.1%	-2.5%	--	--	--	+5.5%
	2022	-9.5%	+1.0%	+1.0%	-9.9%	+0.2%	-8.6%	+10.6%	-2.0%	-10.1%	+11.2%	+2.2%	-6.9%	-21.6%

## Major US Index ETFs - Q3 2023 QTD Performance <sup>(1)</sup>



## Major US Index ETF Constituents - Largest Movers During Q3 2023 QTD <sup>(1)</sup>

DOW	Company	Ticker	% Chg.
	Amgen	AMGN-US	+16.8%
	Caterpillar	CAT-US	+14.7%
	Intel	INTC-US	+13.7%
	IBM	IBM-US	+10.4%
	Cisco Systems	CSCO-US	+9.5%
	Walgreens Boots Alliance	WBA-US	(22.8%)
	NIKE	NKE-US	(11.5%)
	Honeywell International	HON-US	(11.1%)
	Verizon Communications	VZ-US	(10.1%)
	American Express	AXP-US	(9.6%)

S&P	Company	Ticker	% Chg.
	Marathon Petroleum	MPC-US	+33.2%
	Zions Bancorp	ZION-US	+30.0%
	APA	APA-US	+29.5%
	Phillips 66	PSX-US	+28.2%
	Global Payments	GPN-US	+27.8%
	SolarEdge Tech	SEDG-US	(44.7%)
	Insulet Corp	PODD-US	(40.4%)
	ResMed	RMD-US	(32.3%)
	Enphase Energy	ENPH-US	(28.2%)
	FMC	FMC-US	(27.7%)

NASDAQ	Company	Ticker	% Chg.
	Evelo Biosciences	EVLO-US	+106.8%
	Applied Optoelectronics	AAOI-US	+98.0%
	Tilray Inc	TLRY-US	+93.6%
	UP Fintech Holding	TIGR-US	+79.9%
	DLocal	DLO-US	+71.7%
	Proterra	PTRA-US	(94.6%)
	Faraday Future Intel. Electric	FFIE-US	(76.5%)
	Impel NeuroPharma	IMPL-US	(66.9%)
	Taoping	TAOP-US	(60.7%)
	FibroGen	FGEN-US	(58.9%)

RUSSELL	Company	Ticker	% Chg.
	VistaGen Therapeutics	VTGN-US	+260.4%
	Cardlytics	CDLX-US	+174.5%
	Polymet Mining	POM-CA	+169.2%
	Telephone and Data Systems	TDS-US	+120.9%
	Thorne HealthTech Inc	THRN-US	+115.3%
	Babylon Holdings	BBLNF-US	(99.7%)
	ViewRay	VRAYQ-US	(96.6%)
	Amyris	AMRS-US	(95.7%)
	Proterra	PTRA-US	(94.6%)
	Outlook Therapeutics	OTLK-US	(88.3%)

(1): Note: Index and individual stock performance (% chg.) indexed to each security's respective closing price on June 30, 2023.

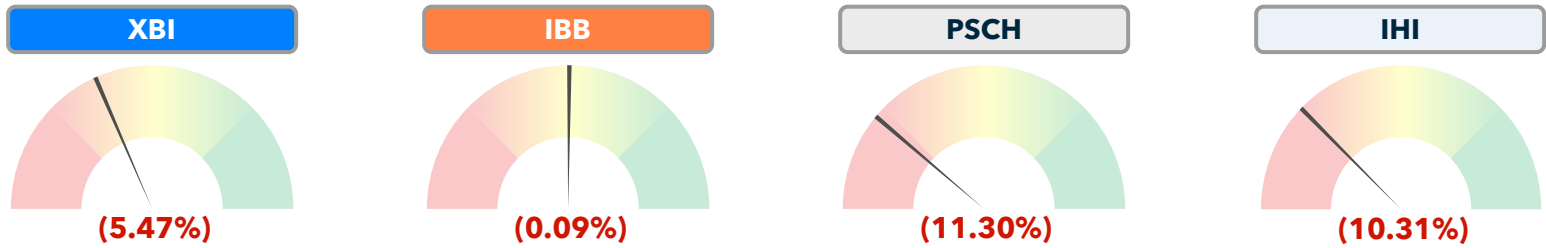
Sources: FactSet, Bloomberg, Brookline Capital Markets Investment Banking Data.

Market data as of 4:00 PM on September 11, 2023, unless otherwise noted.

## Healthcare ETF Performance - Monthly Performance Montage (2022 to 2023 YTD)

Yr	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Full Yr / YTD
<b>SPDR S&amp;P Biotech ETF (XBI)</b>													
2023	+7.1%	-6.8%	-8.0%	+5.2%	+4.6%	-0.9%	+1.3%	-6.0%	-0.7%	--	--	--	-5.2%
2022	-16.6%	-3.9%	+0.1%	-17.9%	-6.8%	+8.0%	+9.2%	+3.2%	-5.2%	+3.6%	+1.8%	-0.7%	-25.9%
<b>iShares NASDAQ Biotech ETF (IBB)</b>													
2023	+4.0%	-6.9%	+1.6%	+1.0%	-3.2%	+0.5%	+1.9%	-0.5%	-1.4%	--	--	--	-3.4%
2022	-13.6%	-4.4%	+3.4%	-10.5%	+0.0%	+0.8%	+5.5%	-2.1%	-3.7%	+9.9%	+6.2%	-3.8%	-14.0%
<b>Invesco S&amp;P SmallCap Healthcare ETF (PSCH)</b>													
2023	+6.0%	-2.8%	-3.8%	+1.3%	-2.9%	+3.5%	+0.0%	-7.1%	-4.6%	--	--	--	-10.4%
2022	-13.0%	+2.5%	+0.5%	-10.9%	-3.1%	-1.5%	+9.8%	-6.2%	-6.6%	+4.3%	+2.5%	-6.2%	-26.5%
<b>iShares U.S. Medical Devices ETF (IHI)</b>													
2023	+2.7%	-3.7%	+3.8%	+5.2%	-6.8%	+6.7%	-0.6%	-6.4%	-3.5%	--	--	--	-3.7%
2022	-10.4%	+0.3%	+3.0%	-9.7%	-1.1%	-7.3%	+6.5%	-6.0%	-6.6%	+6.4%	+5.7%	-0.9%	-20.2%

## Major US Healthcare Index ETFs - Q3 2023 QTD Performance <sup>(1)</sup>



## Major US Healthcare Index ETF Constituents - Largest Movers During Q3 2023 QTD <sup>(1)</sup>

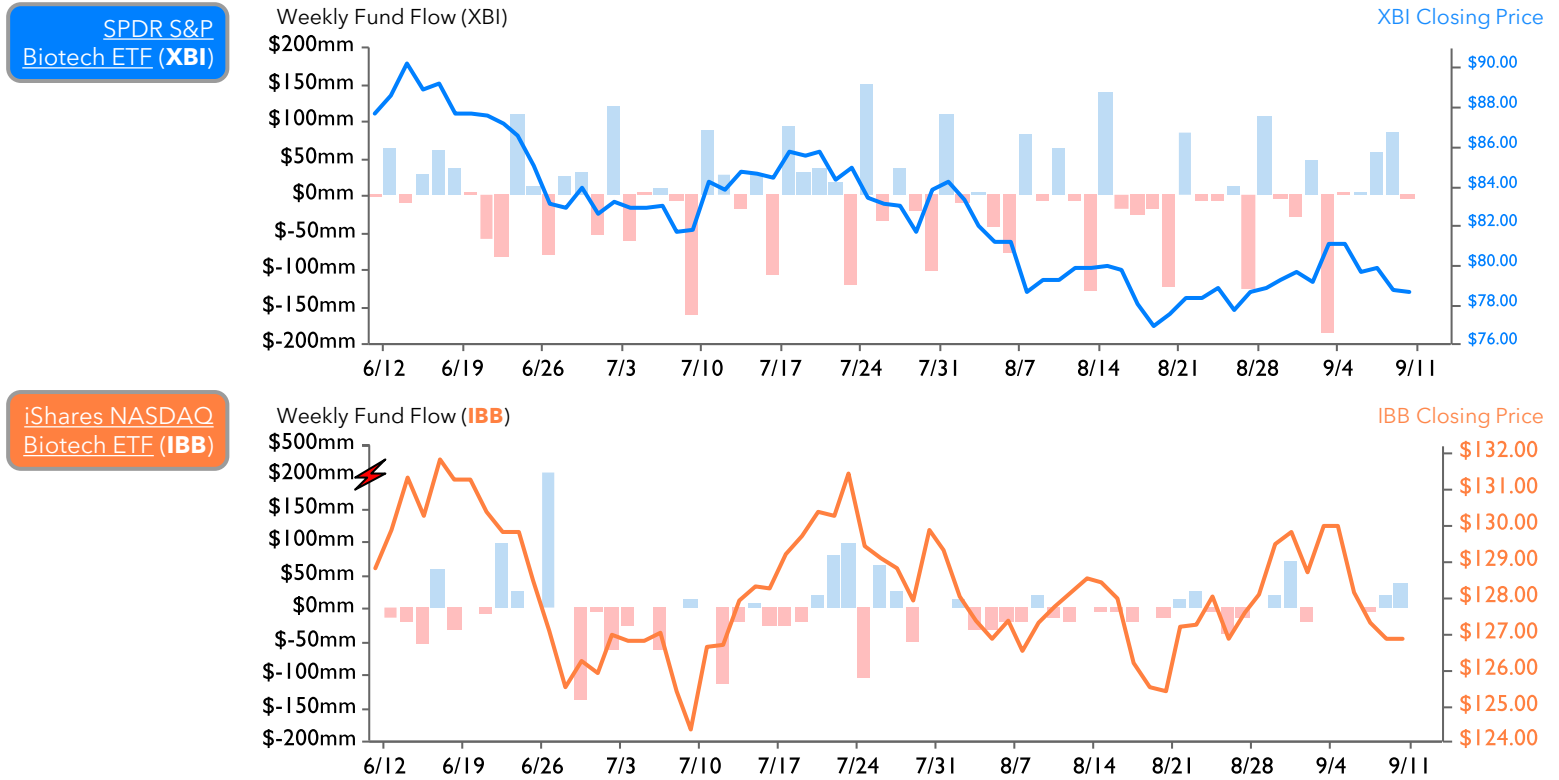
ETF	Company	Ticker	% Chg.
XBI	BridgeBio Pharma	BBIO-US	+65.2%
	Rhythm Pharmaceuticals	RYTM-US	+51.0%
	Ardelyx	ARDX-US	+35.4%
	Roivant Sciences	ROIV-US	+25.0%
	Insmed	INSM-US	+24.5%
	Mersana Therapeutics	MRSN-US	(59.6%)
	FibroGen	FGEN-US	(58.9%)
	TG Therapeutics	TGTX-US	(58.2%)
	Vir Biotechnology	VIR-US	(55.2%)
	Scilex Holding	SCLX-US	(54.4%)
	IBB	Tango Therapeutics	TNGX-US
Evelo Biosciences		EVLO-US	+106.8%
Invivyd		IVVD-US	+68.6%
Reata Pharmaceuticals		RETA-US	+67.0%
BridgeBio Pharma		BBIO-US	+65.2%
Alaunos Therapeutics		TCRT-US	(75.0%)
Kodiak Sciences		KOD-US	(69.5%)
NanoString Technologies		NSTG-US	(59.8%)
Mersana Therapeutics		MRSN-US	(59.6%)
FibroGen		FGEN-US	(58.9%)
PSCH		Corcept Therapeutics	CORT-US
	NextGen Healthcare	NXGN-US	+46.0%
	OraSure Technologies	OSUR-US	+20.6%
	Ani Pharmaceuticals	ANIP-US	+15.1%
	Coherus BioSciences	CHRS-US	+14.5%
	Vir Biotechnology	VIR-US	(55.2%)
	Agiliti Inc	AGTI-US	(51.3%)
	Enanta Pharmaceuticals	ENTA-US	(41.3%)
	CPSI	CPSI-US	(40.6%)
	BioLife Solutions	BLFS-US	(39.7%)
	IHI	SurModics	SRDX-US
Axonics		AXNX-US	+15.2%
Inari Medical		NARI-US	+13.4%
Glaukos		GKOS-US	+4.5%
LivaNova		LIVN-US	+4.3%
NanoString Technologies		NSTG-US	(59.8%)
NovoCure		NVCR-US	(51.7%)
Treace Medical		TMCI-US	(46.9%)
Silk Road Medical		SILK-US	(42.8%)
Insulet Corp		PODD-US	(40.4%)

(1): Note: Index and individual stock performance (% chg.) indexed to each security's respective closing price on June 30, 2023.

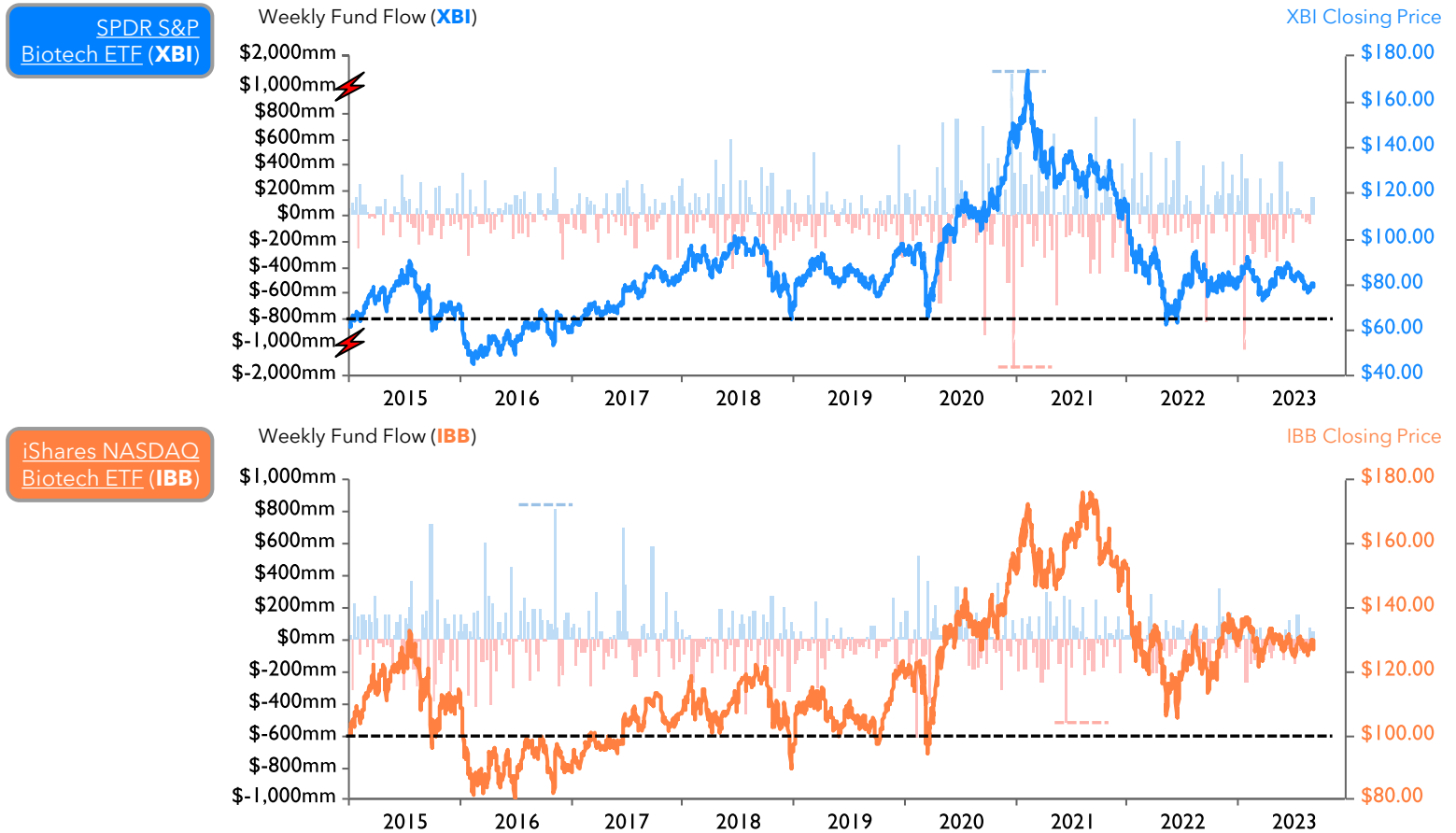
Sources: FactSet, Bloomberg, Brookline Capital Markets Investment Banking Data.

Market data as of 4:00 PM on September 11, 2023, unless otherwise noted.

## Selected Healthcare ETF Fund Flows: **Weekly Net ETF Fund Flow Data - Last 3 Months**



## Selected Healthcare ETF Fund Flows: **Weekly Net ETF Fund Flow Data - January 2015 to Current**



Note: ETF fund flow data reflects weekly net fund flow, unless otherwise noted.  
 Sources: FactSet, Bloomberg, Brookline Capital Markets Investment Banking Data.  
 Market data as of 4:00 PM on September 11, 2023, unless otherwise noted.

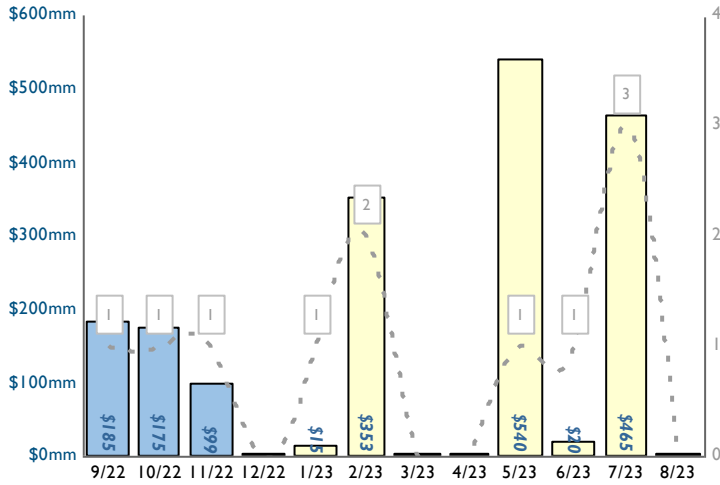
## IPO Market Update - Life Sciences, Med. Tech, and Diagnostics

IPO Gross Proceeds Raised

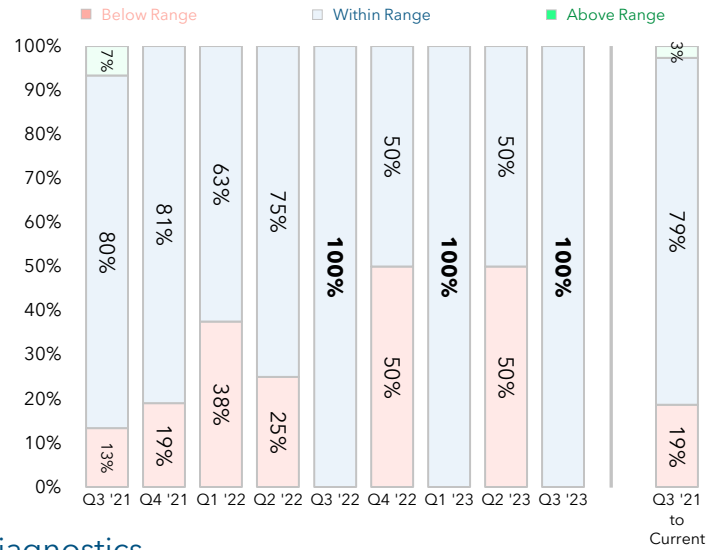
[columns] (monthly, aggregate)

IPO Deal Count

[curve] (monthly, aggregate)



IPO Pricing Relative to Initial Filing Range (%)



## Selected Recent IPOs - Life Sciences, Med. Tech, and Diagnostics

Company	Ticker	Indication	Offer Date	Offer Price	Gross Proceeds Raised <sup>(1)</sup>	Pre-Money Equity Valuation <sup>(2)</sup>	Within Initial Range?	Disclosed Insider Part. (%)	% Change Offer / Current
Turnstone Biologics	TSBX	Oncology (next-gen TIL)	07-21-23	\$12.00	\$80.0mm	\$194.1mm	In Range	49%	(8.7%)
Apogee Therapeutics	APGE	Immunology (SubQ IL-13 mAb)	07-14-23	\$17.00	\$300.1mm	\$516.4mm	In Range	32%	+42.4%
Sagimet Biosciences	SGMT	NASH (FASN inhibitor)	07-14-23	\$16.00	\$85.0mm	\$301.4mm	In Range	--	(23.4%)
Intensity Therapeutics	INTS	Oncology (cisplatin / vinblastine sulfate)	06-30-23	\$5.00	\$19.5mm	\$46.0mm	Below	10%	+15.3%
Acelyrin	SLRN	Immunology (SubQ IL-17A inhibitor)	05-05-23	\$18.00	\$540.0mm	\$1,221.2mm	In Range	5%	+54.6%
Mineralys Therapeutics	MLYS	CV Diseases (rHTN / CYP11B2 - AS - inhibitor)	02-10-23	\$16.00	\$192.0mm	\$192.0mm	In Range	--	(19.4%)
Structure Therapeutics	GPCR	Metabolic Diseases (GLP-1R; sm. molecule)	02-03-23	\$15.00	\$161.1mm	\$414.3mm	In Range	5%	+94.9%
Genelux	GNLX	Oncology (OCV immunotherapy)	01-26-23	\$6.00	\$15.0mm	\$128.1mm	In Range	--	+305.8%
Acrivon Therapeutics	ACRV	Oncology (CHK1/2 inhibitor)	11-15-22	\$12.50	\$99.4mm	\$182.8mm	Below	89%	(6.3%)
Prime Medicine	PRME	Gene Editing (PRIME edit / pegRNA + CaS)	10-20-22	\$17.00	\$175.0mm	\$1,500.8mm	In Range	63%	(30.3%)
Third Harmonic Bio	THRD	Immunology (urticaria / KIT inhibitor)	09-15-22	\$17.00	\$185.3mm	\$496.0mm	In Range	--	(64.7%)
Maia Biotechnology	MAIA	Oncology (telomere-targeting sm. mol.)	07-28-22	\$5.00	\$10.0mm	\$58.4mm	In Range	--	(65.0%)
PepGen	PEPG	Rare Diseases (DMD / exon-51 skipping EDO)	05-06-22	\$12.00	\$108.0mm	\$169.5mm	Below	46%	(47.1%)
Belite Bio	BLTE	Ophthalmology (STGD1 / RBP4 antagonist)	04-29-22	\$6.00	\$36.0mm	\$119.6mm	In Range	42%	+445.2%
Hillevax	HLVX	Infectious Diseases (VLP Norovirus vaccines)	04-29-22	\$17.00	\$200.0mm	\$449.8mm	In Range	5%	(25.4%)
Tenon Medical	TNON	Med. Tech (SI-Joint fixation/fusion surgery)	04-27-22	\$5.00	\$16.0mm	\$40.6mm	In Range	--	(94.2%)
AN2 Therapeutics	ANTX	Infectious Diseases (LeuRS inhibitor / NTMLD)	03-25-22	\$15.00	\$69.0mm	\$226.9mm	In Range	61%	(2.5%)
Blue Water Vaccines	BWV	Infectious Diseases (ELV / univ. flu vaccine)	02-18-22	\$9.00	\$20.0mm	\$85.2mm	In Range	--	(91.7%)
Arcellx	ACLX	Oncology (next-gen CAR-T / CART-ddBCMA)	02-04-22	\$15.00	\$123.8mm	\$434.8mm	In Range	5%	+148.3%
Nuvectis Pharma	NVCT	Oncology (HSF1 inhibitor)	02-04-22	\$5.00	\$16.0mm	\$48.2mm	Below	44%	+203.4%
Hillstream BioPharma	HILS	Oncology (ferroptosis / IMCD inducer)	01-12-22	\$4.00	\$15.0mm	\$29.9mm	Below	--	(94.1%)
Amylyx Pharma	AMLX	CNS (ALS / UPR-Bax inhibitor)	01-07-22	\$19.00	\$190.0mm	\$955.8mm	In Range	5%	+13.1%
Cincor Pharma	CINC	CV Diseases (rHTN / aldosterone inhibitor)	01-07-22	\$16.00	\$193.6mm	\$417.9mm	In Range	5%	+125.0%
Vigil Neuroscience	VIGL	CNS (Rare Diseases / TREM2 mAb)	01-07-22	\$14.00	\$98.0mm	\$302.2mm	Below	5%	(54.8%)
Immix Biopharma	IMMX	Oncology (GLUT-1 x PCC inhibitor)	12-16-21	\$5.00	\$21.0mm	\$42.9mm	In Range	--	(50.6%)

Sources: Dealogic, Brookline Capital Markets Investment Banking Data.

(1) Excludes Shoe; (2) based on fully diluted shares outstanding immediately prior to offering.

Note: All offerings <\$10mm have been excluded. Includes life sciences, medical technology, and diagnostics companies.

Market data as of 4:00 PM on September 5, 2023, unless otherwise noted.

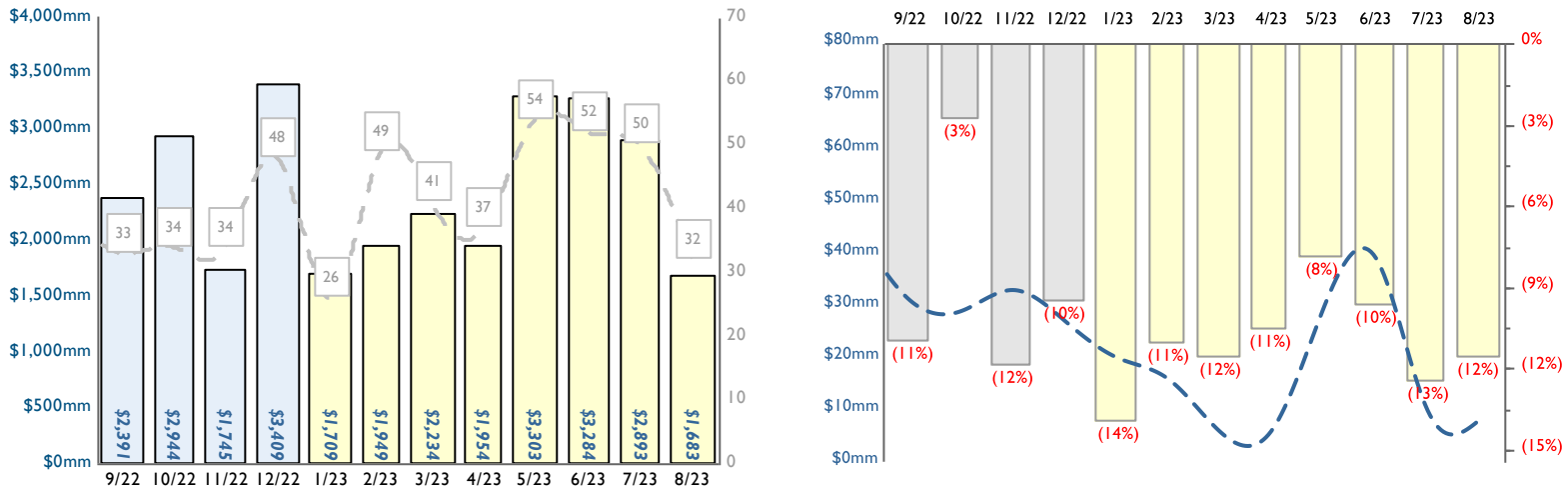
## Follow-On Market Update - Life Sciences, Med. Tech, and Diagnostics

Follow-On Gross Proceeds Raised  
[columns] (monthly, aggregate)

Follow-On Deal Count  
[line] (monthly, aggregate)

Median Follow-On Offering Size (single-deal)  
[curve] (monthly median)

File-to-Offer Discount %  
[columns] (monthly median discount %)



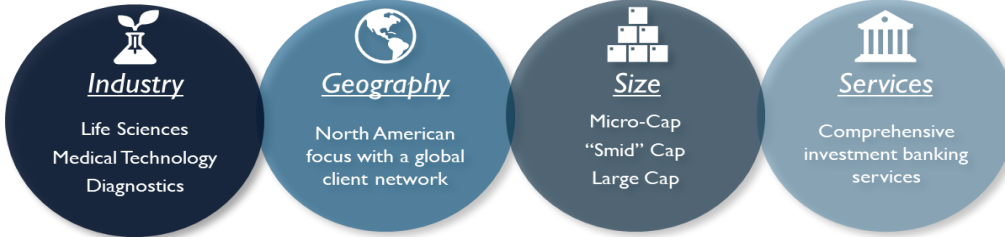
## Selected Recent Follow-Ons / CMPOs / Reg. Directs / PIPEs - Life Sciences, Med. Tech, and Diagnostics

Company	Ticker	Indication	Offer Date	SEC Form	Offer Price	Gross Proceeds Raised <sup>(1)</sup>	Pre-Offer Market Cap <sup>(2)</sup>	% Chg. File / Offer	% Chg. Offer / Current
Cellectar Biosciences ††	CLRB	Oncology (PLE + i131)	09-05-23	PIPE	\$1.82	\$24.5mm	\$17.7mm	at market	+36.0%
Dare Bioscience ††	DARE	Women's Health	08-30-23	R/D	\$0.70	\$7.0mm	\$61.1mm	+1.2%	(1.6%)
Inhibrx [FF]	INBX	Oncology (OX40 hexavalent sdAb)	08-29-23	PIPE	\$19.35	\$200.0mm	\$845.0mm	at market	+14.9%
Bluejay Diagnostics †† [FF]	BJDX	Med. Tech (Biomarker Discovery/Identification)	08-25-23	R/D	\$7.37	\$1.6mm	\$7.9mm	(4.7%)	(25.4%)
Eyenovia †	EYEN	Ophthalmology (pediatric progressive myopia)	08-25-23	R/D	\$1.86	\$12.0mm	\$71.0mm	at market	+3.2%
Myomo	MYO	Med Tech. (Robotics)	08-25-23	CMPO	\$0.60	\$4.4mm	\$20.9mm	(20.0%)	+48.3%
Societal CDMO	SCTL	Pharma Services (CDMO)	08-24-23	CMPO	\$0.40	\$8.3mm	\$54.7mm	(34.2%)	+38.1%
ProMIS Neurosciences ††	PMN	CNS (Alzheimer's Disease / A-beta mAb)	08-22-23	PIPE	\$1.88	\$20.4mm	\$13.6mm	+18.2%	+10.6%
Athersys †††	ATHX	Allogenic Cell Therapy (ischemic stroke)	08-18-23	S-1	\$0.32	\$3.5mm	\$17.1mm	(58.9%)	+45.0%
Baudax Bio ††	BXRX	CNS (Pain)	08-17-23	R/D	\$0.56	\$1.9mm	\$3.9mm	at market	(30.2%)
AN2 Therapeutics [FF]	ANTX	Infectious Diseases (LeuRS inhibitor / NTM lung disease)	08-16-23	R/D	\$9.00	\$70.0mm	\$189.5mm	+4.2%	+62.4%
COMPASS Pathways ††	CMPS	CNS (Treatment Resistant Depression)	08-16-23	PIPE	\$7.78	\$125.1mm	\$349.8mm	+1.8%	+18.0%
RVL Pharma (fka OSMT) †††	RVLP	Spec. Pharma	08-16-23	R/D	\$0.42	\$5.0mm	\$41.7mm	at market	(72.1%)
TFF Pharmaceuticals	TFFP	Spec. Pharma (Drug Delivery)	08-15-23	CMPO	\$0.25	\$5.0mm	\$16.3mm	(44.4%)	+51.1%
Taysha Gene Therapies	TSHA	Rare Diseases (GM2 gangliosidosis)	08-14-23	PIPE	\$0.90	\$150.0mm	\$47.7mm	+21.8%	+288.3%
180 Life Sci. (fka KBLMU) ††	ATNF	Hepatology (anti-TNF)	08-10-23	S-1	\$0.65	\$3.0mm	\$7.7mm	(44.4%)	+7.5%
Merus NV	MRUS	Oncology (NRG1 Fusion Protein)	08-10-23	CMPO	\$22.00	\$150.0mm	\$1,164.5mm	(3.9%)	+7.0%
Tango Tx (fka BCTGU) [FF]	TNGX	Oncology (PRMT5 inhibitor)	08-10-23	PIPE	\$5.15	\$80.0mm	\$720.1mm	(34.1%)	+36.3%
Benitec Biopharma ††	BNTC	Cell/Gene Therapy	08-09-23	S-1	\$1.93	\$30.0mm	\$9.3mm	(53.9%)	+44.0%
Mirati Therapeutics	MRTX	Oncology (KRAS G12C inhibitor)	08-09-23	CMPO	\$27.80	\$300.0mm	\$1,621.8mm	at market	+32.4%
Gracell Biotech. † [FF]	GRCL	Oncology (next-gen CAR-T)	08-07-23	PIPE	\$3.60	\$100.0mm	\$233.0mm	+5.3%	(4.9%)
IO Biotech †† [FF]	IOBT	Oncology (IDO x PD-L1)	08-07-23	PIPE	\$2.03	\$75.1mm	\$54.2mm	+7.7%	(9.6%)
Tivic Health Systems	TIVC	Med. Tech (electric-wave sinus inflammation)	08-07-23	CMPO	\$4.10	\$1.4mm	\$8.2mm	(42.8%)	(32.9%)
INVO Bioscience †††	INVO	Women's Health (Fertility Treatments)	08-04-23	S-1	\$2.85	\$4.5mm	\$3.2mm	(24.6%)	(52.3%)
Bio-Path ††	BPTH	Oncology (Liposomal Grb2 antisense)	08-03-23	S-1	\$0.60	\$2.1mm	\$17.0mm	(71.8%)	(33.3%)

Sources: Dealogic, Brookline Capital Markets Investment Banking Data. Market data as of 4:00 PM on September 5, 2023, unless otherwise noted.  
Notes re: SEC Form: (S-1): fully marketed offering; (R/D): registered direct offering; (CMPO): confidentially marketed public offering (S-3/F-3); (PIPE): private investment in public equity. (1) Excludes Shoe; (2) based on basic shares outstanding immediately prior to offering. †, ††, and ††† denote transactions with <100% warrant coverage, 100% to 199% warrant coverage, and ≥200% warrant coverage, respectively. [FF] denotes transactions representing an issuer's first follow-on offering post-IPO (or rev. merger). (\*\*\*) denotes OTC-to-NAS Uplisting / "NASDAQ IPO" (\*) denotes ex-US public company dual listing / "US IPO." Dataset excludes transactions classified as convertible offerings and secondary offerings (block trades with no proceeds to issuers). Includes transactions completed by life sciences, medical technology, and diagnostics companies.

## Firm Overview

Brookline Capital Markets is a **full-service** investment bank and was co-founded by three former colleagues with **deep roots** on Wall Street. The team is led by **seasoned professionals**, each with more than **25 years** of capital markets, advisory and equity sales experience at some of the world's **most prominent** financial institutions such as Alex. Brown, Citi, Cowen, Credit Suisse First Boston, Deutsche Bank, Lazard, Leerink and Orbimed



## Selected Recent Transactions

<p>Biopharmaceuticals Company</p> <p>Capital Markets Advisor Ongoing Engagement</p>	<p>Biopharmaceuticals Company</p> <p>Capital Markets Advisor Ongoing Engagement</p>	<p>Biopharmaceuticals Company</p> <p>Capital Markets Advisor Ongoing Engagement</p>	<p>Diagnostics Company</p> <p>Capital Markets Advisor Ongoing Engagement</p>	<p>Specialty Pharmaceuticals Company</p> <p>Capital Markets Advisor Ongoing Engagement</p>
<p> eyenovia</p> <p>\$12,000,000 Registered Direct Co-Placement Agent August 2023</p>	<p> 99 ACQUISITION GROUP</p> <p>\$75,000,000 IPO Joint Bookrunner August 2023</p>	<p> Adial™ PHARMACEUTICALS</p> <p>Completed Engagement Capital Markets Advisor August 2023</p>	<p> TONIX PHARMACEUTICALS</p> <p>\$7,000,000 Follow-On Co-Placement Agent July 2023</p>	<p> KVAC Keen Vision Acquisition Corporation</p> <p>\$149,500,000 IPO Joint Bookrunner July 2023</p>
<p> BUJAU BUKIT JALIL GLOBAL ACQUISITION 1 LTD.</p> <p>\$57,500,000 IPO Co-Manager June 2023</p>	<p> GENELUX REDEFINING IMMUNO-ONCOLOGY</p> <p>\$5,500,000 PIPE Financial Advisor June 2023</p>	<p> 9METERS BIO PHARMA</p> <p>Completed Engagement Capital Markets Advisor June 2023</p>	<p> Biocept Completing the Answer™</p> <p>\$5,000,000 Follow-On Lead Manager May 2023</p>	<p> GENELUX REDEFINING IMMUNO-ONCOLOGY</p> <p>\$18,000,000 PIPE Financial Advisor May 2023</p>
<p> IMUNON</p> <p>Completed Engagement Capital Markets Advisor May 2023</p>	<p> Aquestive</p> <p>Completed Engagement Capital Markets Advisor April 2023</p>	<p> Better+ THERAPEUTICS</p> <p>\$6,500,000 PIPE Co-Placement Agent April 2023</p>	<p> GENELUX REDEFINING IMMUNO-ONCOLOGY</p> <p>\$15,918,000 IPO Joint Bookrunner January 2023</p>	<p> Apexigen</p> <p>\$2,800,000 PIPE Exclusive Placement Agent January 2023</p>
<p> Adial™ PHARMACEUTICALS</p> <p>Completed Engagement Capital Markets Advisor December 2022</p>	<p> OUTLOOK THERAPEUTICS</p> <p>\$31,800,000 Unsecured Convertible Promissory Note Financial Advisor December 2022</p>	<p> IceCure Innovating Cryotherapy Solutions</p> <p>\$14,500,000 Registered Direct Co-Placement Agent December 2022</p>	<p> SAB BIOTHERAPEUTICS</p> <p>\$7,900,000 PIPE Exclusive Placement Agent December 2022</p>	<p> X4 PHARMACEUTICALS</p> <p>\$65,000,000 Follow-On Financial Advisor December 2022</p>

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