

The Brookline Brief

Brookline Capital Markets

Life Sciences, Med. Tech. and Diagnostics
Equity Capital Markets Update

October 2024



Equity Market / New Issue Market **Tailwinds**

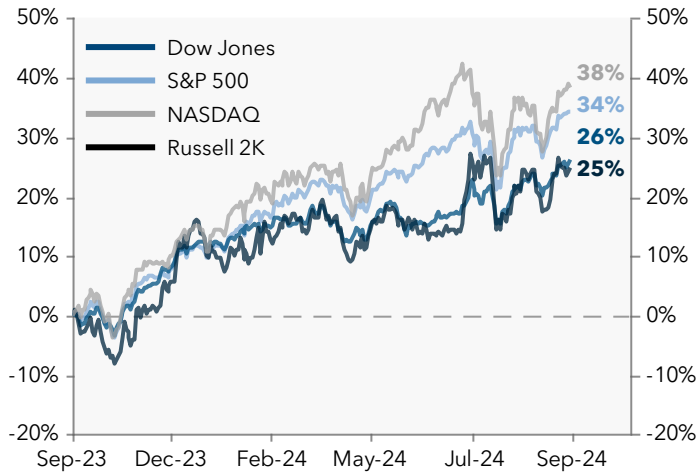
- After raising interest rates from essentially 0% in early 2022 to their highest levels in nearly 20 years by the end of 2023 to combat historic inflation, the Federal Reserve officially reversed course on September 18th, implementing the first cut to its Fed Funds Target Rate since March 2020. Although Chairman Powell conceded that US inflation remains somewhat elevated relative to the central bank's steady-state goal of 2% (as evidenced by August's 2.5% y/y headline CPI print), many interpreted the 50 basis point cut as an unmistakable signal of confidence by the Fed that inflation will continue to moderate over the near-term. In addition, many remain hopeful that the Fed's recent pivot - combined with increasing confidence around additional cuts in CY 2024 / CY 2025 - will help support risk appetite for biotech over the near- to medium-term. According to an analysis completed by Brookline, biotech and pharmaceutical subsector performance (as measured by the NBI prior to 2006 and by the XBI since 2006) has tended to meaningfully outperform the broader US equity market (as measured by the S&P 500) during the early stages of a Fed rate cut cycle. Specifically, the NBI/XBI have outperformed the S&P 500 by +22.9% on average (mean basis) over the 12-month period immediately following the start of a new Fed interest rate cut cycle.
- September represented the strongest month of IPO activity across the life sciences-, med. tech-, and diagnostics-focused subsegments in all of 2024 YTD, adding 4 new entrants to the IPO Class of 2024 (BCAX, BIOA, MBX, and ZBIO) that raised a combined total of \$912mm (prior to overallocments, where applicable). In addition, September marked just the 3rd single-month period with 4 or more IPOs since the start of 2022, matching January 2022 and February 2024's totals. Moreover, the influx of IPO capital this past month represented the highest total for any single calendar month since October 2021. Finally, post-IPO performance for September's IPO quartet surprised to the upside, as evidenced by the fact that 3 of last month's IPOs remain trading at levels north of their respective IPO prices (averaging an offer-to-current return of +28.5% on a median basis). Industry observers remain optimistic that September's IPO activity could represent a turning point in the slow and sporadic recovery of the IPO market since 2H 2021 - potentially opening the "IPO window" for prospective new entrants in Q4 and setting the stage for a strong start to 2025.
- Mirroring the IPO market's recovery during September, the follow-on segment of the new issue market for life sciences-, med. tech-, and diagnostics-focused issuers also rebounded significantly this past month, tallying 40 transactions that raised \$4.6bn in aggregate combined gross proceeds (prior to overallocments). Propelled by nearly a dozen large offerings by large-cap issuers, the total amount of follow-on capital raised during September more than doubled the total amount raised during July 2024 and August 2024 combined (\$4.6bn vs. \$2.2bn) and marked the first calendar month with \$4bn or more in total follow-on capital raised since May of this year. Though some remain concerned that the follow-on market remains somewhat inhospitable to smaller-cap issuers, others contend that the meaningful influx of new capital into the sector during September bodes well for prospective issuers of all sizes heading into Q4 2024.

Equity Market / New Issue Market **Headwinds**

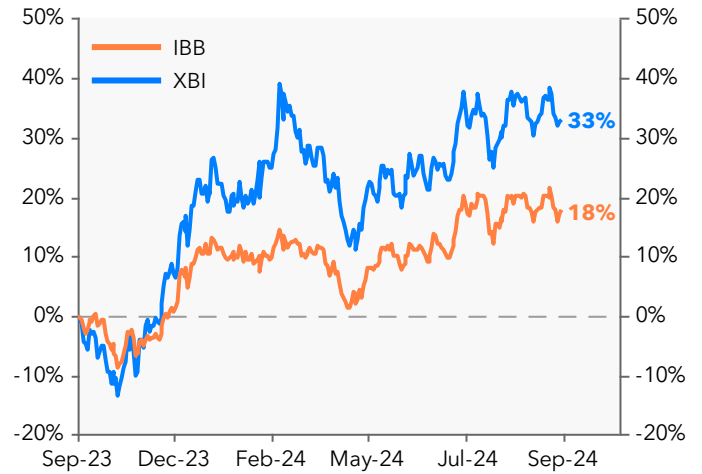
- The XBI and IBB posted negative month-over-month returns in September, falling -2.4% and -1.7%, respectively, breaking a 4 consecutive month winning streak dating back to May 2024. In contrast, broader US equity market benchmark indices posted positive month-over-month returns during September, with the S&P, NASDAQ, Dow, and Russell 2000 climbing +2.0%, +2.7%, +1.8%, and +0.6%, respectively. Of note, both the XBI and the IBB traded lower following the Fed's mid-month interest cut, while the broader market indices climbed (XBI, -2.1%; IBB, -1.5%; S&P 500, +2.3%; NASDAQ, +3.2%; DOW, +1.7%; Russell 2K +1.1%). Although some industry observers expressed concern about the trend relative to historical precedents in interest rate cut cycles, others contended that subsector trading likely coalesced around the expectations of the cut (as demonstrated by the XBI's +19.3% return from the end of April until September 17th vs. the S&P 500's +11.9% return over the same period). However, industry observers remain optimistic that as the Fed continues to ease monetary policy, the subsector could outperform the broader market once again.
- September marked the first month since March 2022 without an acquisition of a public life sciences-, med. tech-, or diagnostics-focused company, capping off a sluggish quarter of M&A activity. Just 4 public companies were acquired during Q3 2024 for an aggregate consideration of \$3.5bn - down significantly compared to Q1 and Q2 of this year (9 companies acquired for \$14.0bn in aggregate consideration during Q1 and 8 companies acquired for \$9.6bn in aggregate consideration during Q2). Although some industry observers remain anxious about the recent relative lack of subsector M&A activity, others contend that a return in buyout activity during Q4 could represent a meaningful catalyst for the sector.
- Follow-on volume (as measured by deal count) and aggregate gross proceeds raised (prior to overallocments, where applicable) by "micro-cap" issuers ticked down during Q3 compared the first two quarters of this year. ⁽¹⁾ "Micro-cap" issuers completed 70 offerings during Q3 2024 yielding aggregate combined gross proceeds of \$0.7bn - down from 97 and 100 deals in Q1 and Q2, respectively, and down from \$2.0bn and \$1.7bn raised in Q1 and Q2, respectively. In addition, offering terms for "micro-cap" issuers deteriorated incrementally during Q3, with average (median) gross proceeds ticking down to \$5.1mm (compared to \$6.5mm, on average, in 1H 2024), the average (median) file-to-offer discount increasing to -10.5% (vs. -9.6% in 1H 2024), and the incidence of warrant coverage climbing to 71% (vs. 67% in 1H 2024).

(1): "Micro-cap" issuers are defined as those with a fully-diluted pre-deal market capitalization less than \$150mm.
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 30, 2024, unless otherwise noted.

General Indices Performance (Last 12-Months)



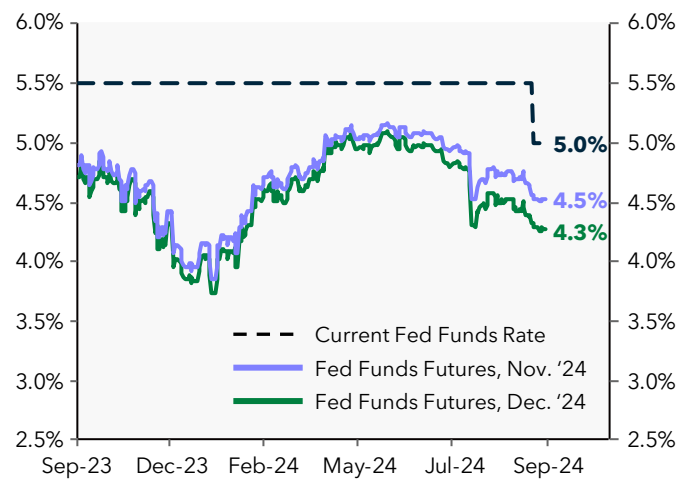
XBI and IBB Performance (Last 12-Months)



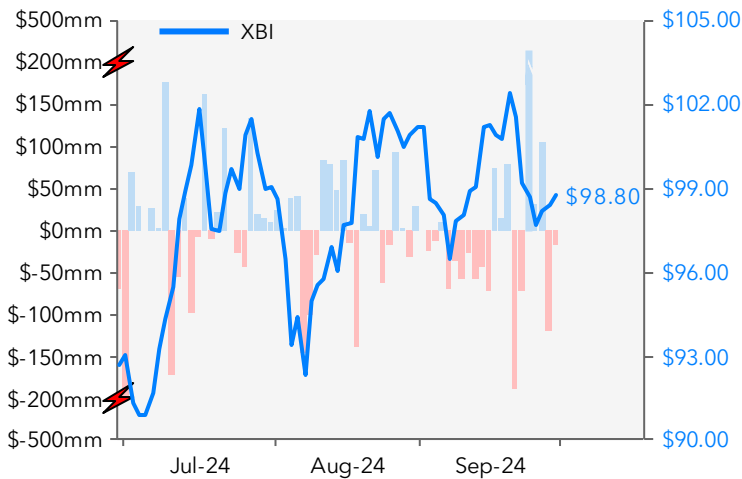
U.S. Treasury Yields (Last 12-Months)



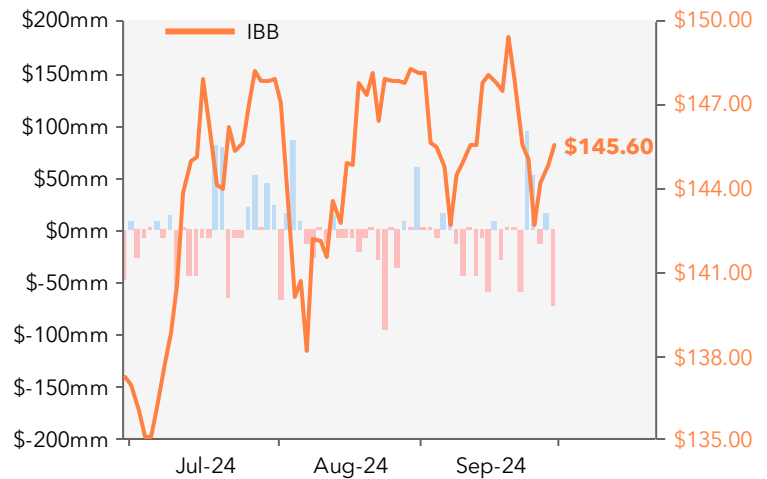
Fed. Funds Rate & Futures (Last 12-Months)



XBI Price & Weekly Fund Flows (Last 3-Months)

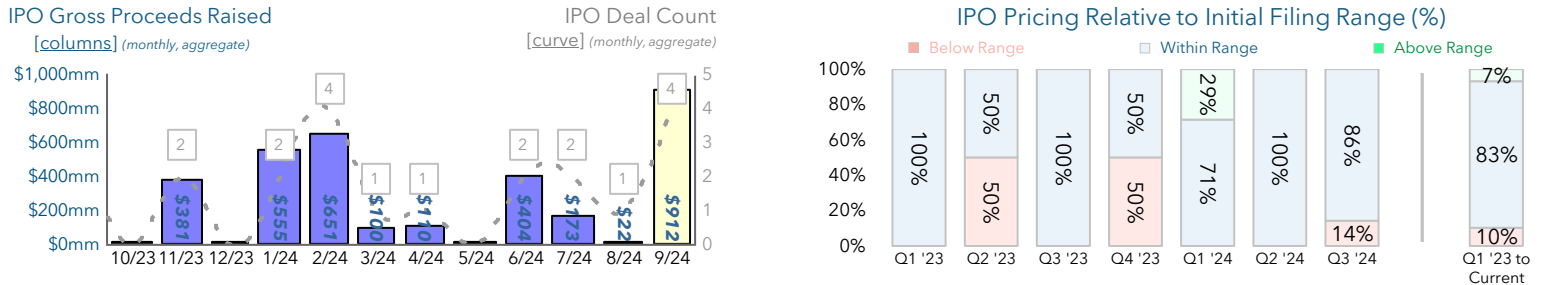


IBB Price & Weekly Fund Flows (Last 3-Months)



Sources: FactSet, Bloomberg, Brookline Capital Markets Investment Banking Data, US Food & Drug Administration Data.
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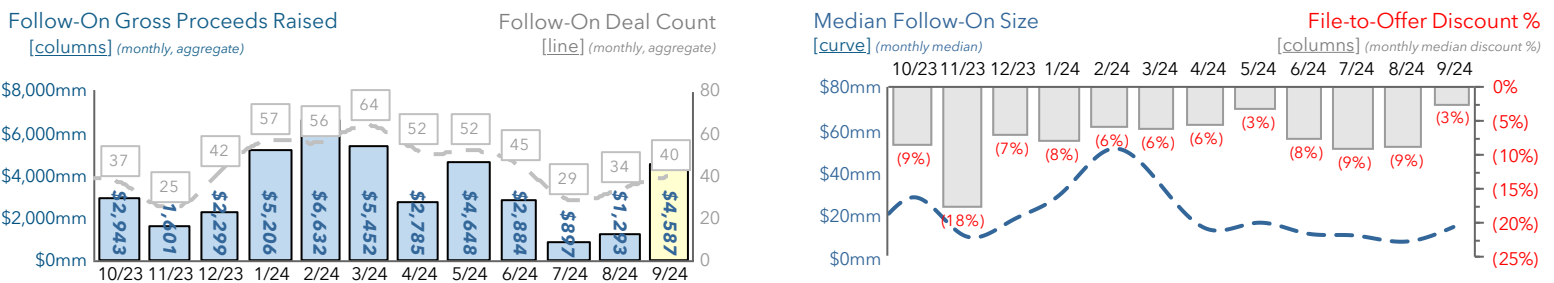
IPO Market Activity - Life Sciences, Med. Tech., and Diagnostics (Last 12-Months)



Five Most Recent IPOs

Company	Ticker	Indication	Offer Date	Offer Price	Gross Proceeds Raised ⁽¹⁾	Pre-Money Equity Valuation ⁽²⁾	Within Initial Range?	Disclosed Insider Part. (%)	% Change Offer / Current
BioAge Labs	BIOA	Metabolic Diseases (APJ agonist)	09-26-24	\$18.00	\$208.6mm	\$451.9mm	In Range	11%	+15.6%
Bicara Therapeutics	BCAX	Oncology (EGFR / TGF- β mAb)	09-13-24	\$18.00	\$315.0mm	\$706.7mm	In Range	5%	+41.5%
MBX Biosciences	MBX	Metabolic Diseases (PTH prodrug / GLP-1 antagonist)	09-13-24	\$16.00	\$163.2mm	\$375.1mm	In Range	5%	+62.4%
Zenas BioPharma	ZBIO	Immunology (CD19 / Fc γ mAb)	09-13-24	\$17.00	\$225.0mm	\$484.7mm	In Range	--	(0.5%)
Actuate Therapeutics	ACTU	Oncology (GSK-3 β)	08-13-24	\$8.00	\$22.4mm	\$132.5mm	In Range	18%	(6.9%)

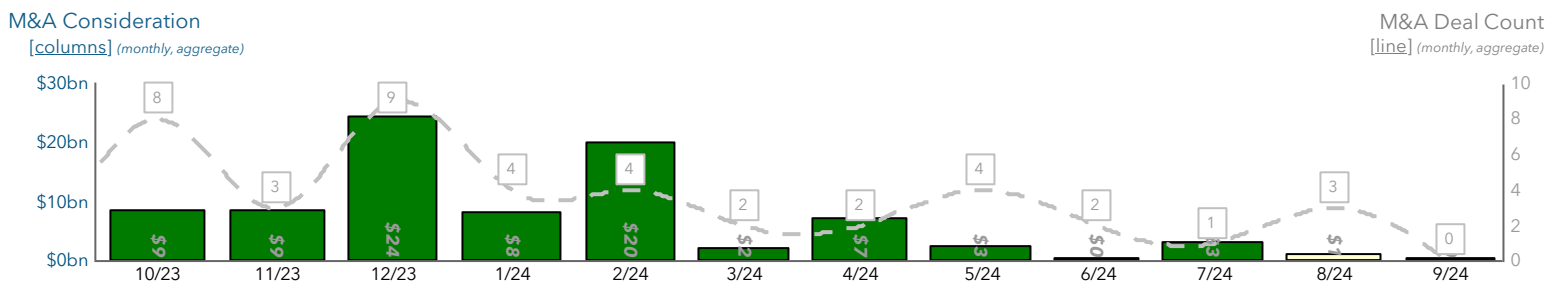
Follow-On Market Activity - Life Sciences, Med. Tech., and Diagnostics (Last 12-Months)



Five Largest Follow-Ons, September 2024

Company	Ticker	Indication	Offer Date	Deal Type	Offer Price	Gross Proceeds Raised ⁽¹⁾	Pre-Offer Market Cap ⁽²⁾	% Chg. File / Offer	% Chg. Offer / Current
Vaxcyte	PCVX	Infectious Diseases (Pneumococcal Vaccines)	09-05-24	CMPO	\$103.00	\$1,300.0mm	\$13,832.3mm	(6.5%)	+10.9%
Ionis Pharmaceuticals	IONS	Diversified Biopharma (RNA therapies)	09-10-24	CMPO	\$43.50	\$500.3mm	\$7,057.4mm	(10.0%)	(7.9%)
Nuvalent	NUVL	Oncology (ROS1 inhibitor)	09-17-24	CMPO	\$100.00	\$500.0mm	\$6,187.7mm	+14.4%	+2.3%
Ascendis Pharma	ASND	Endocrinology (GHD)	09-20-24	CMPO	\$150.00	\$300.0mm	\$8,987.3mm	+0.8%	(0.5%)
Summit Therapeutics	SMMT	Oncology (PD-1 x VEGF bispecific)	09-12-24	PIPE	\$22.70	\$235.0mm	\$17,752.5mm	at market	(3.5%)

M&A Activity - Public Life Sciences, Med. Tech., and Diagnostics (Last 12-Months)⁽³⁾



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

(1) Excludes Shoe; transaction amounts reflect the total value of all transactions priced in a concurrent fashion, where applicable (e.g., bifurcated CMPO / PIPE offering structures)

(2) Based on fully diluted shares outstanding immediately prior to offering.

(3): Excludes all acquisitions of private companies.

Note: IPOs with <\$10mm gross proceeds have been excluded, unless otherwise noted. Includes life sciences-, medical technology-, and diagnostics-focused issuers.

Market data as of 4:00 PM on September 30, 2024, unless otherwise noted.

Firm Overview

Brookline Capital Markets is a **premier healthcare-focused boutique investment bank** led by former executives of top Wall Street firms **focused on underwriting and growth capital for private and public companies** with a full suite of advisory capabilities



Leadership With Decades of Industry Experience

Brookline prides itself on taking an advisor's mentality to the complexities facing life sciences, medical technology, and diagnostics companies in the capital markets



Unique Distribution Network

We have a strong network of **difficult-to-reach fundamental investors** including **Family Offices, Ultra High Net Worth Individuals, and Industry Specialists**

Selected Recent Transactions

 Ongoing Engagement Capital Markets Advisor	 Ongoing Engagement Capital Markets Advisor	 Ongoing Engagement Capital Markets Advisor	 Ongoing Engagement Capital Markets Advisor	 Ongoing Engagement Capital Markets Advisor	 Ongoing Engagement Capital Markets Advisor	 \$20,600,000 PIPE Co-Placement Agent September 2024	 \$4,000,000 Registered Direct Co-Placement Agent September 2024
 Completed Engagement Capital Markets Advisor September 2024	 Completed Engagement Capital Markets Advisor August 2024	 Completed Engagement Capital Markets Advisor August 2024	 \$6,400,000 IPO Sole Bookrunner July 2024	 \$10,000,000 Registered Direct Co-Placement Agent July 2024	 \$5,000,000 Registered Direct Co-Placement Agent June 2024	 \$110,000,000 Merger Financial Advisor June 2024	 \$8,000,000 PIPE Financial Advisor April 2024
 Completed Engagement Capital Markets Advisor April 2024	 Completed Engagement Capital Markets Advisor April 2024	 \$6,600,000 PIPE Financial Advisor April 2024	 Undisclosed Secondary Sale Introducing Agent April 2024	 \$3,000,000 PIPE Exclusive Placement Agent April 2024	 \$50,000,000 PIPE Financial Advisor March 2024	 \$75,000,000 Follow-On Financial Advisor March 2024	 \$69,000,000 IPO Sole Bookrunner February 2024

Investment Banking Team & Contact Information

William B. Buchanan, Jr. 646.248.5085 bill.buchanan@brooklinecapmkts.com	Michael Fontaine 646.248.5091 michael.fontaine@brooklinecapmkts.com	Scott A. Katzmann 646.681.4668 scott.katzmann@brooklinecapmkts.com	Graham A. Powis 646.762.0826 graham.powis@brooklinecapmkts.com
Patrick Sturgeon 646.681.4651 patrick.sturgeon@brooklinecapmkts.com	Samuel Wertheimer, Ph.D. 646.462.4718 sam.wertheimer@brooklinecapmkts.com	Charles E. Mather, CFA 646.681.4624 charlie.mather@brooklinecapmkts.com	Dimitre Genov 646.807.4124 dimitre.genov@brooklinecapmkts.com
Chris Harris 689.710.6289 chris.harris@brooklinecapmkts.com	Michael D. Rhea 646.807.4125 michael.rhea@brooklinecapmkts.com	Eric Solash 917.509.0875 eric.solash@brooklinecapmkts.com	Joseph Rudick, M.D. 646.603.6716 joe.rudick@brooklinecapmkts.com
Robert Donohue 646.681.4650 robert.donohue@brooklinecapmkts.com	Zak Ross-Nash 646.462.4681 zak.rossnash@brooklinecapmkts.com	Scotty Katzmann 646.248.5091 scotty.katzmann@brooklinecapmkts.com	Hayden Edwards 646.248.7801 hayden.edwards@brooklinecapmkts.com

Sales & Trading Team & Contact Information

Harris Lydon 646.248.5185 harris.lydon@brooklinecapmkts.com	Michael Dean 917.873.6651 michael.dean@brooklinecapmkts.com	Ashley Helm 631.566.1157 ashley.helm@brooklinecapmkts.com	Noah Uzal 646.603.6719 noah.uzal@brooklinecapmkts.com
Jake Ward 646.248.5184 jake.ward@brooklinecapmkts.com	Drew Crovello 646.603.6720 drew.crovello@brooklinecapmkts.com	Melissa D'Elia 646.603.6718 melissa.delia@brooklinecapmkts.com	Jake Hanley 646.248.6718 jake.hanley@brooklinecapmkts.com

Equity Research Team & Contact Information

Kemp Dolliver, CFA 781.258.0240 kemp.dolliver@brooklinecapmkts.com	Kumar Raja, PhD 662.694.1446 kumar.raja@brooklinecapmkts.com	Tyler Bussian, PhD 815.275.4056 tyler.bussian@brooklinecapmkts.com	Leah Rush Cann 646.934.6976 leah.cann@brooklinecapmkts.com
Will Hidell 804.402.2069 will.hidell@brooklinecapmkts.com			

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