

J.P.Morgan

# Q3 2024 Biopharma Licensing and Venture Report

October 2024

Fueled by

**DEALFORMA** 



# Executive summary

## Biopharma venture investments and IPOs tracked higher through Q3 2024 with both estimated to beat full-year 2023 numbers.

Biopharma deal activity finished the third quarter of 2024 with sustained bullish signals—offering cautious optimism for the rest of the year. Venture investment returned with high-dollar rounds in Q3 focused on advanced companies whereas M&A activity remained volatile quarter over quarter.

Licensing deals continued to see a smaller share of deal economics in committed upfront payments as deal terms shifted towards milestones. Upfront payments now make only 5% of total announced deal values.

Here are a few highlights from our Q3 2024 report:

- **Venture investment in therapeutics:** \$20.8 billion invested in 2024 YTD in 319 rounds. \$6.6 billion was raised in Q3 2024, down from \$6.9 billion in Q3 2023, but with a full-year 2024 estimate showing upward momentum.
- **Biopharma licensing partnerships:** \$115 billion in total announced deal value for biopharma licensing deals signed through Q3 2024.
- **M&A:** 21 M&A transactions totaling \$8.9 billion for biopharma therapeutics and platform companies were announced in Q3 2024.
- **IPOs:** \$3.0 billion raised across 16 biopharma IPOs on NASDAQ and NYSE through Q3 2024. This compares with \$2.7 billion raised from 13 IPOs for FY 2023.

J.P. Morgan is committed to your success. Our relationships, capital and skilled team of bankers and specialists dedicated to the life sciences and healthcare sectors reflect our conviction in the pivotal contributions these clients add to their stakeholders—society, shareholders and employees alike.

Our bankers' expertise ranges from advising companies at the earliest stage of formation to the most graduated, complex M&A and capital markets transactions. Regardless of the size or stage of your company, we are prepared, equipped and enthusiastic about advising and enabling you to meet your strategic, financial and technical objectives.

Thank you for taking the time to read this report. We look forward to supporting you.

Kathryn McDonough  
Head of Life Sciences  
Innovation Economy, Commercial Banking  
J.P. Morgan

Skip Kelly  
Head of Healthcare VC Coverage  
Innovation Economy, Commercial Banking  
J.P. Morgan

### Parameters

Biopharma companies are defined as firms developing therapeutics and technology platforms engaged in drug discovery, clinical R&D and commercialization.

Therapy areas, development stages, modalities and deal structures are segmented per the DealForma database.

Financials are based on disclosed figures curated by DealForma. Multiple tranches of the same Series are counted as one together.

Data as of 9/30/2024

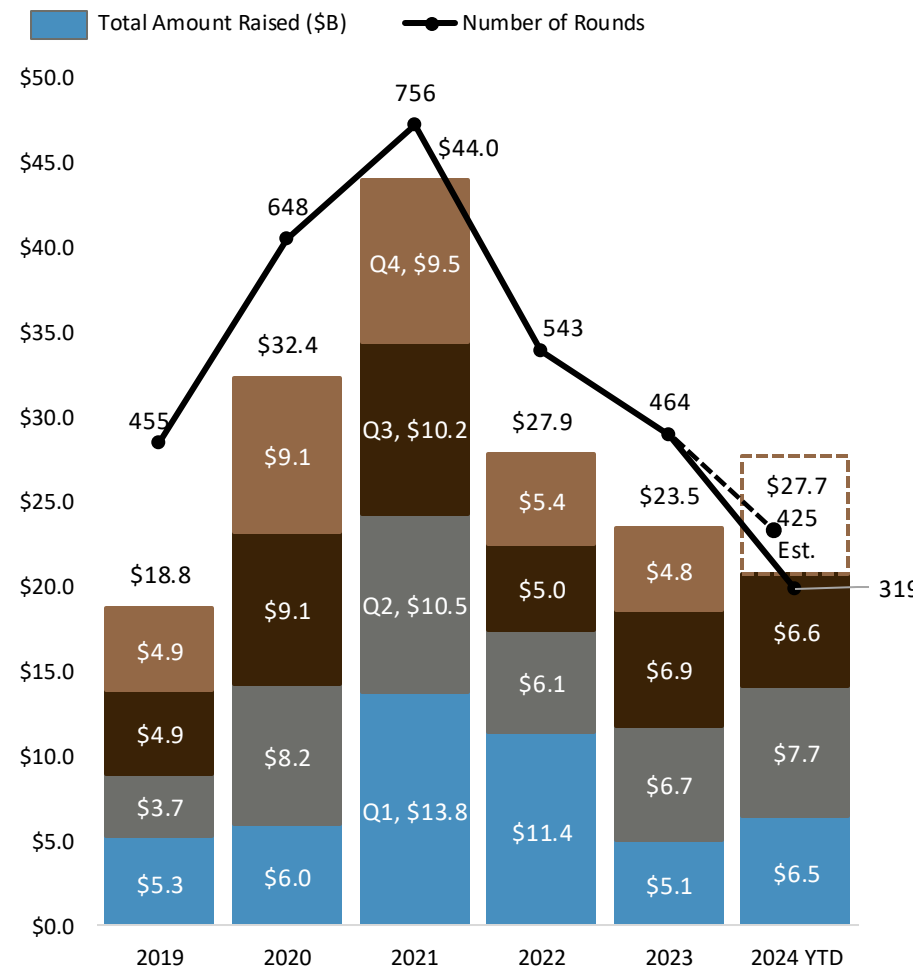
# 2024 biopharma venture investment dollars on track to beat 2023

Biopharma venture dollar volume through the first three quarters of 2024 is at \$20.8 billion and signaling an estimated \$27.7 billion for the full year to break a two-year down-trend. This was on fewer rounds, however, as larger investments went into fewer companies.

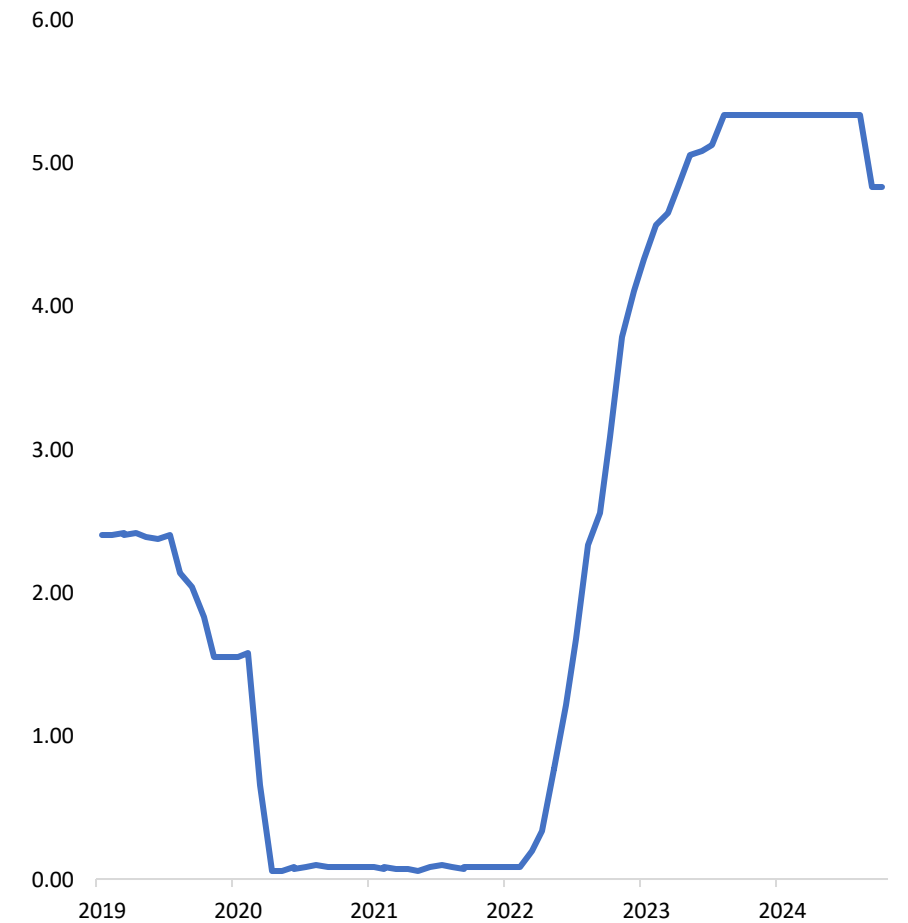
- \$6.6 billion was raised in private funding rounds in Q3 2024, down slightly from \$6.9 billion in Q3 2023. Q1 and Q2 each beat respective previous quarters in dollar value.
- At the peak in 2021, biopharma saw \$44.0 billion across 756 venture rounds.
- Interest rates were cut by a half point in September as JPM economists expected. Rates have correlated with deal activity in the past, so we may see biopharma deal and funding activity increase through Q4 2024. We currently anticipate a pickup in public market activity in Q1 2025.

## Biopharma Therapeutics and Discovery Platforms Deal Activity vs. Federal Funds Rate

**Total Deal Activity (\$B)**



**Federal Funds Effective Rate**



Source: DealForma.com database; Fed rate: fred.stlouisfed.org  
Financials based on disclosed figures. Data through 9/30/2024.

# Venture mega rounds are up while total deal count continues to trend down

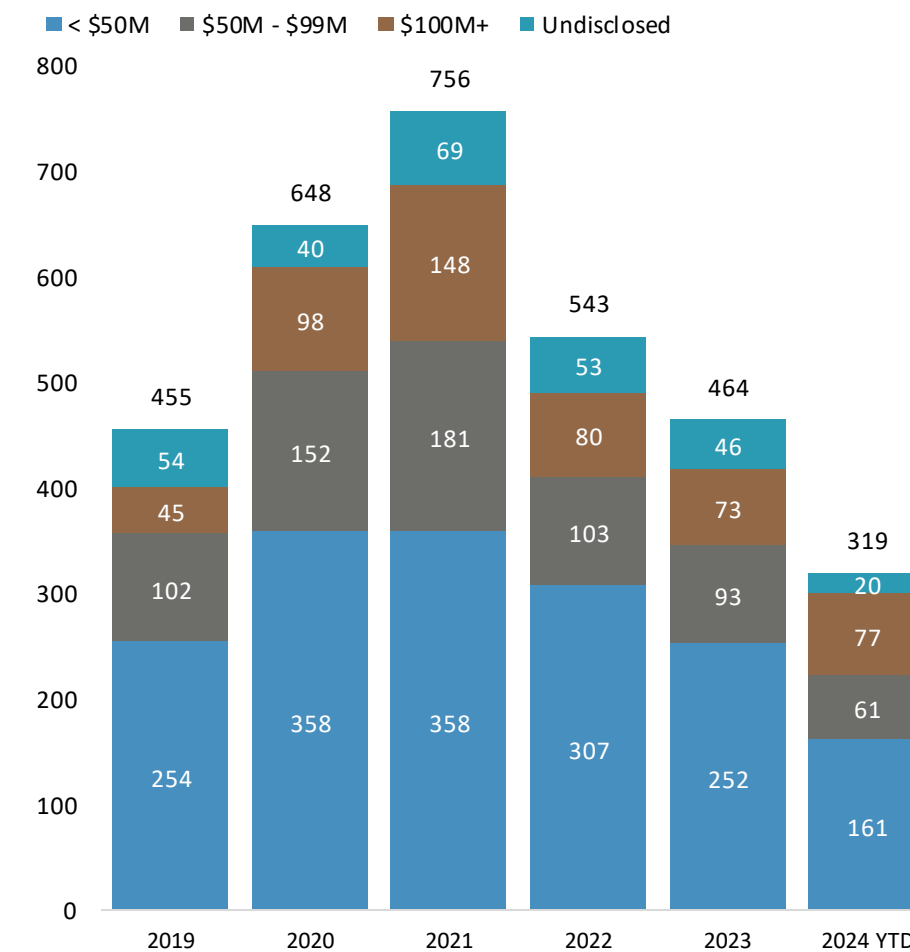
Venture investment activity returned to biopharma with a greater focus on companies with more robust prospects.

- Since 2021, the number of venture investments has declined YoY. 2023 saw 464 total rounds and 2024 has seen 319 rounds YTD.
- 77 biopharma companies raised venture rounds of \$100 million or more through Q3 2024, surpassing the full year 2023 total of 73.
- 16 licensing deals through Q3 2024 saw \$100 million or more in disclosed upfront payment terms. Notable transactions included Prime Medicine/BMS and Generate Biomedicines/Novartis.
- Noteworthy Q3 2024 biopharma venture rounds over \$100 million include Candid Therapeutics' \$370 million private round announced in September, ArsenalBio's \$325 million Series C in September and GondolaBio's \$300 million private round in August 2024.
- The largest disclosed licensing upfront cash and equity terms in Q3 2024 include CureVac/GSK with \$432 million signed for Phase II mRNA vaccines and Dren Bio/Novartis with \$150 million for bispecific antibodies.

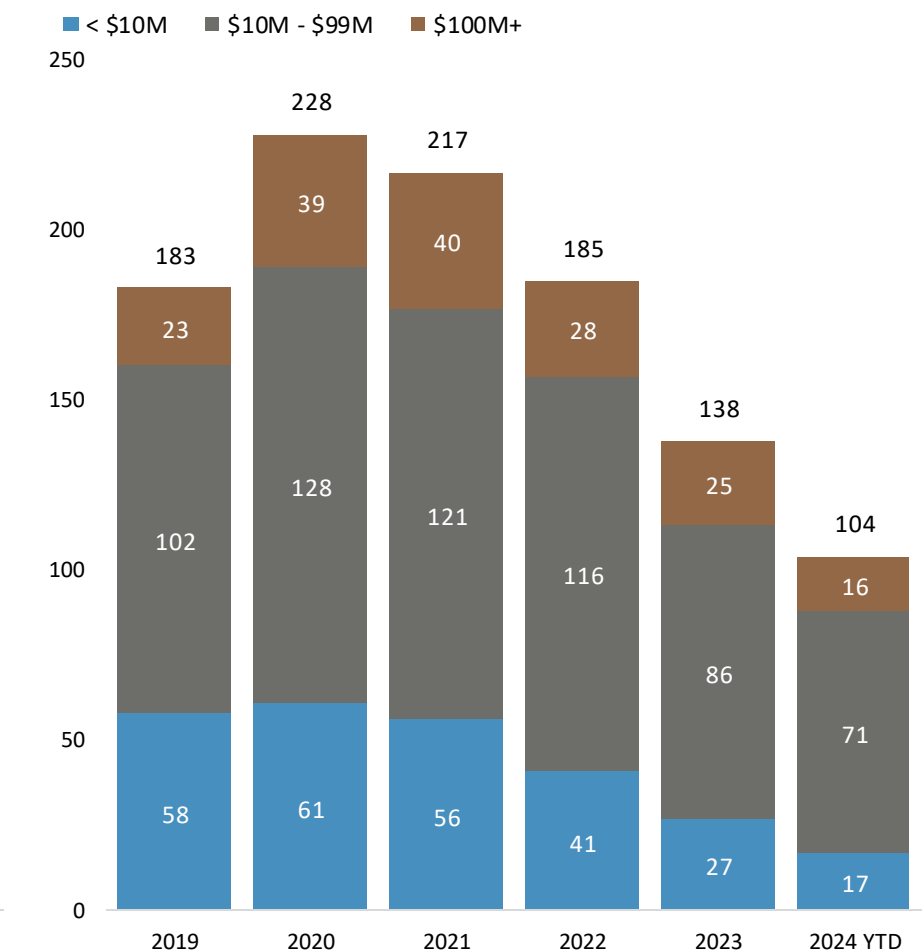
Source: DealForma.com database  
Financials based on disclosed figures. Data through 9/30/2024.

## Biopharma: Total Number of Venture Rounds and R&D Partnership & License Deals by Value Upfront

### Number of Venture Investments by Round Size



### Number of R&D Licenses by Disclosed Upfront

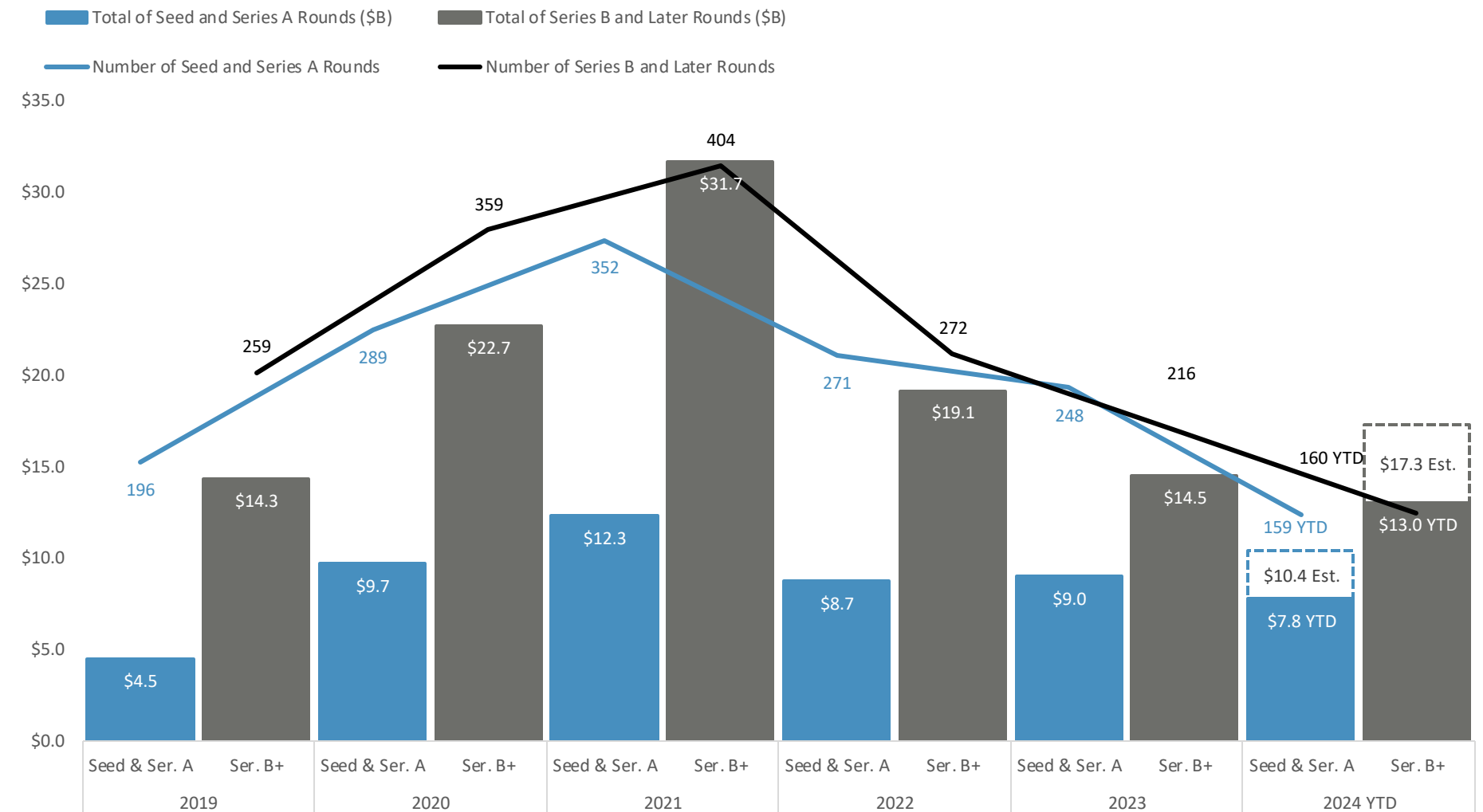


# Seed and Series A investment expected to eclipse FY2022 and FY2023

Seed and Series A funding into biopharma companies totaled \$7.8 billion across 159 rounds through Q3 2024.

- The largest biopharma seed and Series A rounds in Q3 2024 include Third Arc Bio's \$165 million Series A in July and Borealis Biosciences' \$150 million Series A in August.
- The annualized 2024 Series A estimates imply a growth rate of 15% over 2023.
- Some of the most prolific Series A investors include RA Capital, ARCH Ventures and Versant Ventures.

## Seed and Series A vs. Later Series Venture Totals in Biopharma Therapeutics and Discovery Platforms



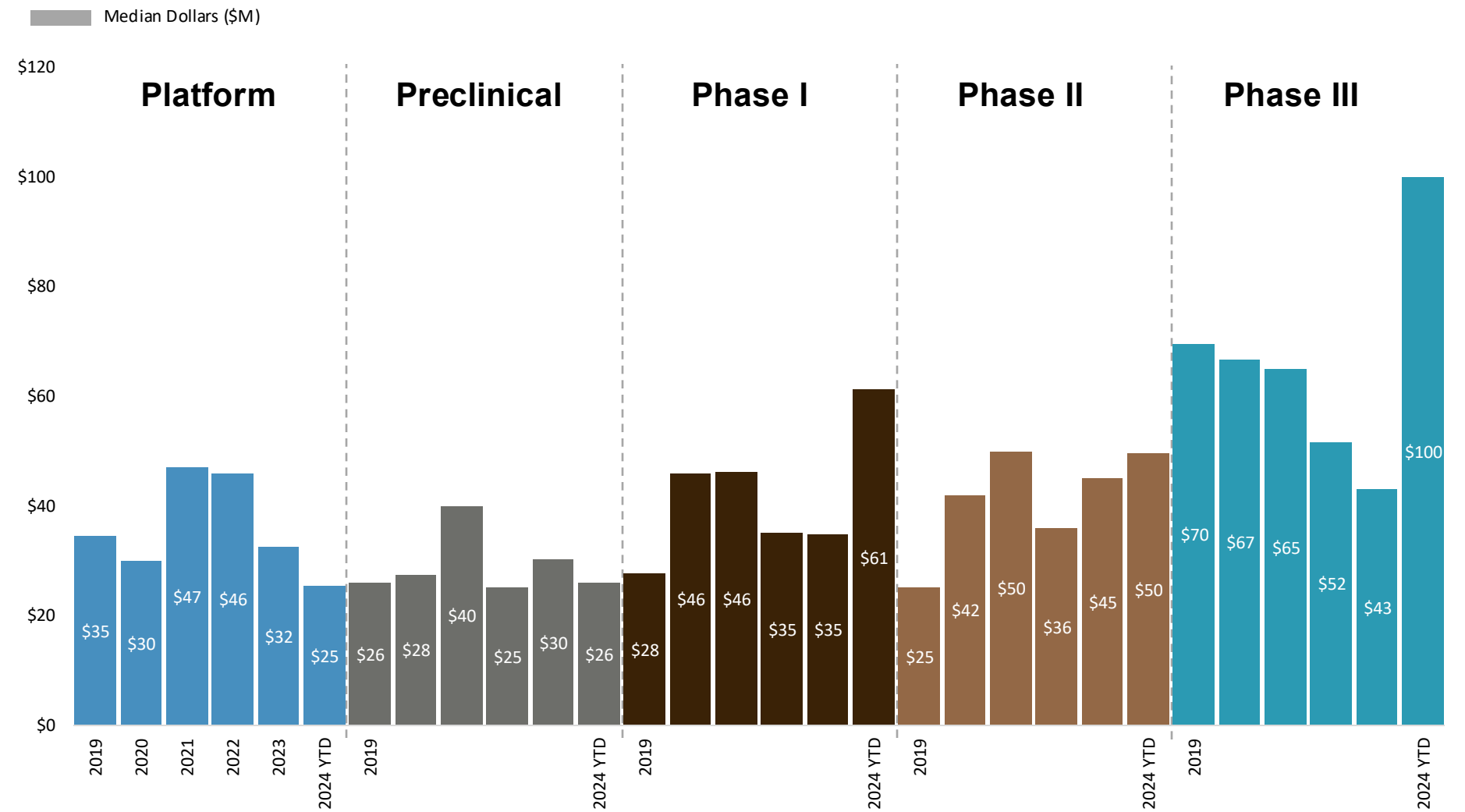
Source: DealForma.com database  
Financials based on disclosed figures. Data through 9/30/2024.

# Median venture rounds rose for clinical stage companies

Biopharma companies with their lead programs in Phase I, II or III saw median investment rounds increase across the board through Q3 2024. Platform and preclinical companies continue to have smaller rounds compared to previous years.

- Phase I biopharma companies saw an increase to \$61 million in median funding rounds through Q3 2024.
- 57 companies disclosed Phase I funding rounds through Q3 2024 ranging from \$1.8 million to \$325 million (ArsenalBio Series C). There were 20 rounds at \$100 million or more.
- Phase III biopharma companies saw \$100 million in venture round medians through Q3 2024, more than double the full-year 2023 median.
- 11 companies disclosed Phase III funding rounds through Q3 2024 ranging from \$10.8 million to \$372 million (Formation Bio Series D)

**Biopharma Therapeutics and Platforms: Median Venture Rounds by Company Stage at Funding**



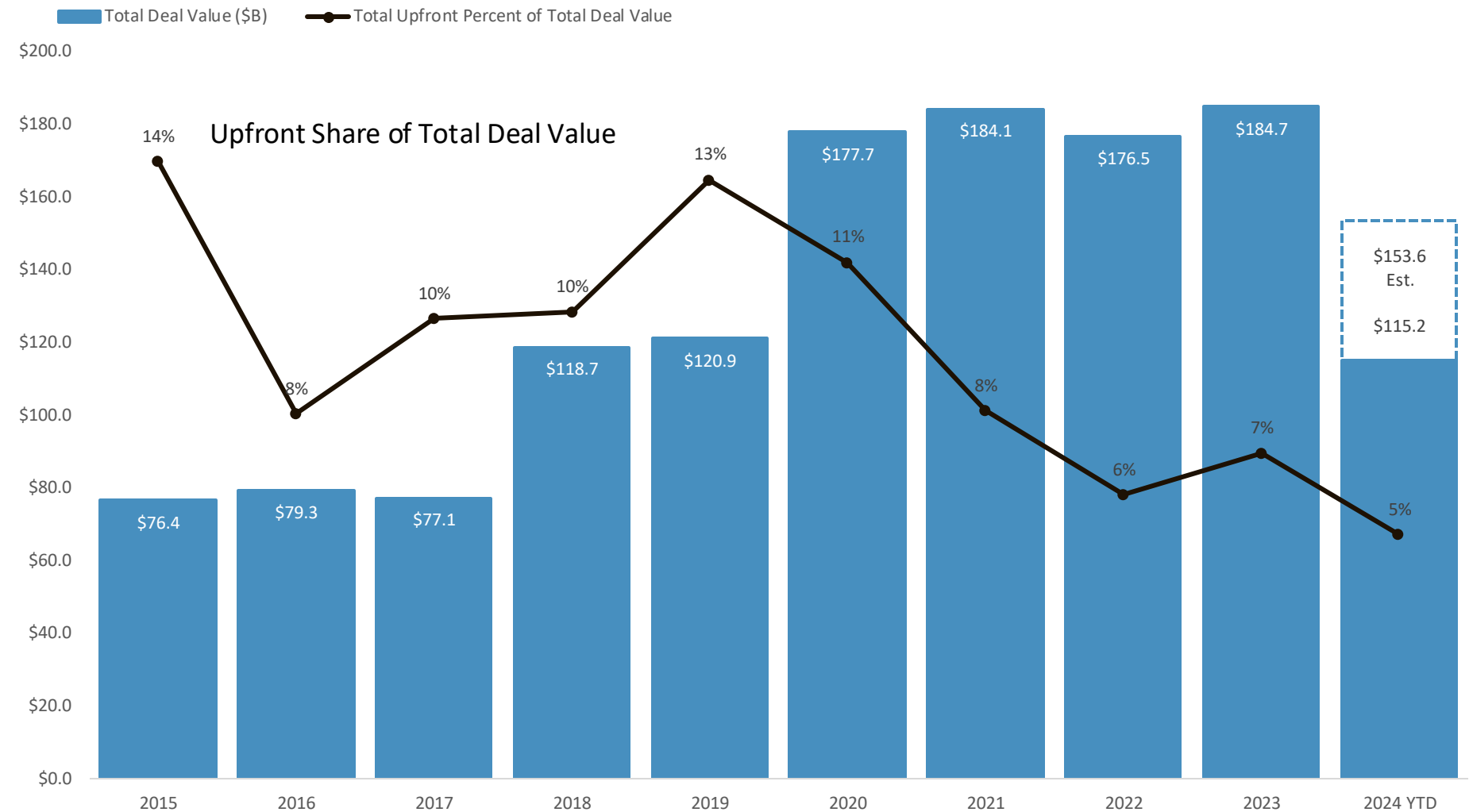
Source: DealForma.com database  
Financials based on disclosed figures. Data through 9/30/2024.

# Licensing deal upfront payments decreased to 5% of total deal value

Despite biopharma licensing and partnership total announced deal values holding steady while deal activity dropped since 2020, the share of upfront payments declined significantly. A larger share of deal value has been pushed to milestones as in-licensing partners mitigate deal economic risk.

- 5% of the \$115.2 billion in biopharma licensing total announced deal value in 2024 YTD was in upfront payments, down from the 2019 peak of 13%.
- Milestones have been making up a growing share of announced deal totals, with the largest portion often coming from sales-based milestones across multiple potential programs.
- 2 of the largest licensing deals of 2024 include Argo/Novartis and Prime Medicine/BMS.

**Biopharma Therapeutics and Platforms: R&D Licensing Totals (\$B) and Percentage Upfront**



Source: DealForma.com database  
Financials based on disclosed figures. Data through 9/30/2024.

# Biologics and small molecules lead early-stage investment and licensing deal values

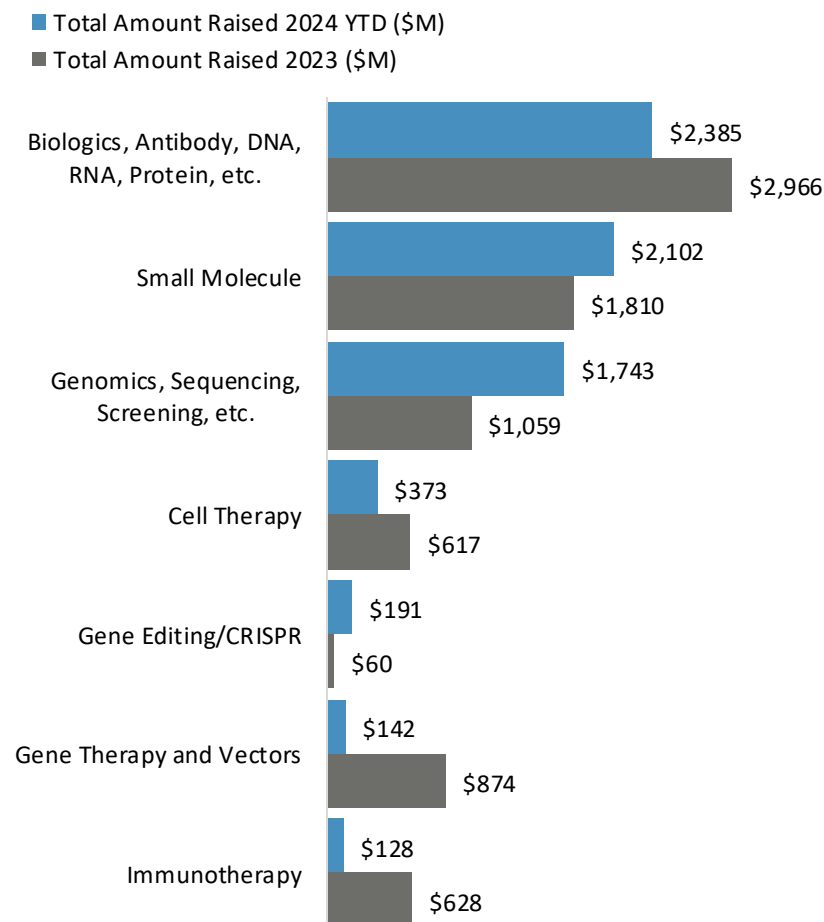
The top biopharma modalities for investment and licensing deal flow continue to be biologics and small molecules followed by more advanced modalities, such as cell and gene therapies. Both venture investments at seed to Series A and licensing upfront payments tracked lower for biologics, however, from 2023 to 2024 YTD.

- Looking at the 21-month period in aggregate, \$5.3 billion in seed and Series A investments were made in biologics from 2023 to Q3 2024 and, during the same period, \$3.9 billion were made in small molecules.
- \$10.5 billion in total announced upfront cash and equity for biologics from 2023 to Q3 2024 and \$4.0 billion for small molecules.

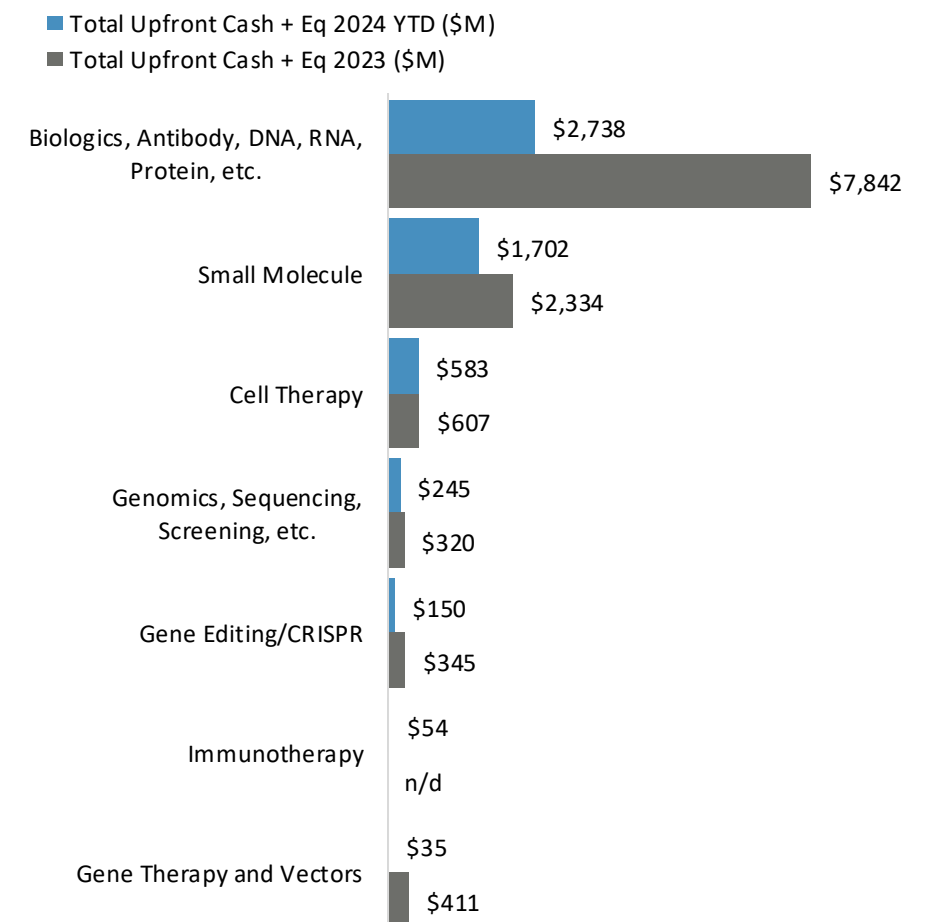
Source: DealForma.com database  
Financials based on disclosed figures. Data through 9/30/2024.

## Top Biopharma Modalities: Seed and Series A Venture Rounds and Total Licensing Upfront Value

### Top Modalities Seed-Series A (\$M)



### Top Modalities Licensing Upfront Cash & Equity (\$M)



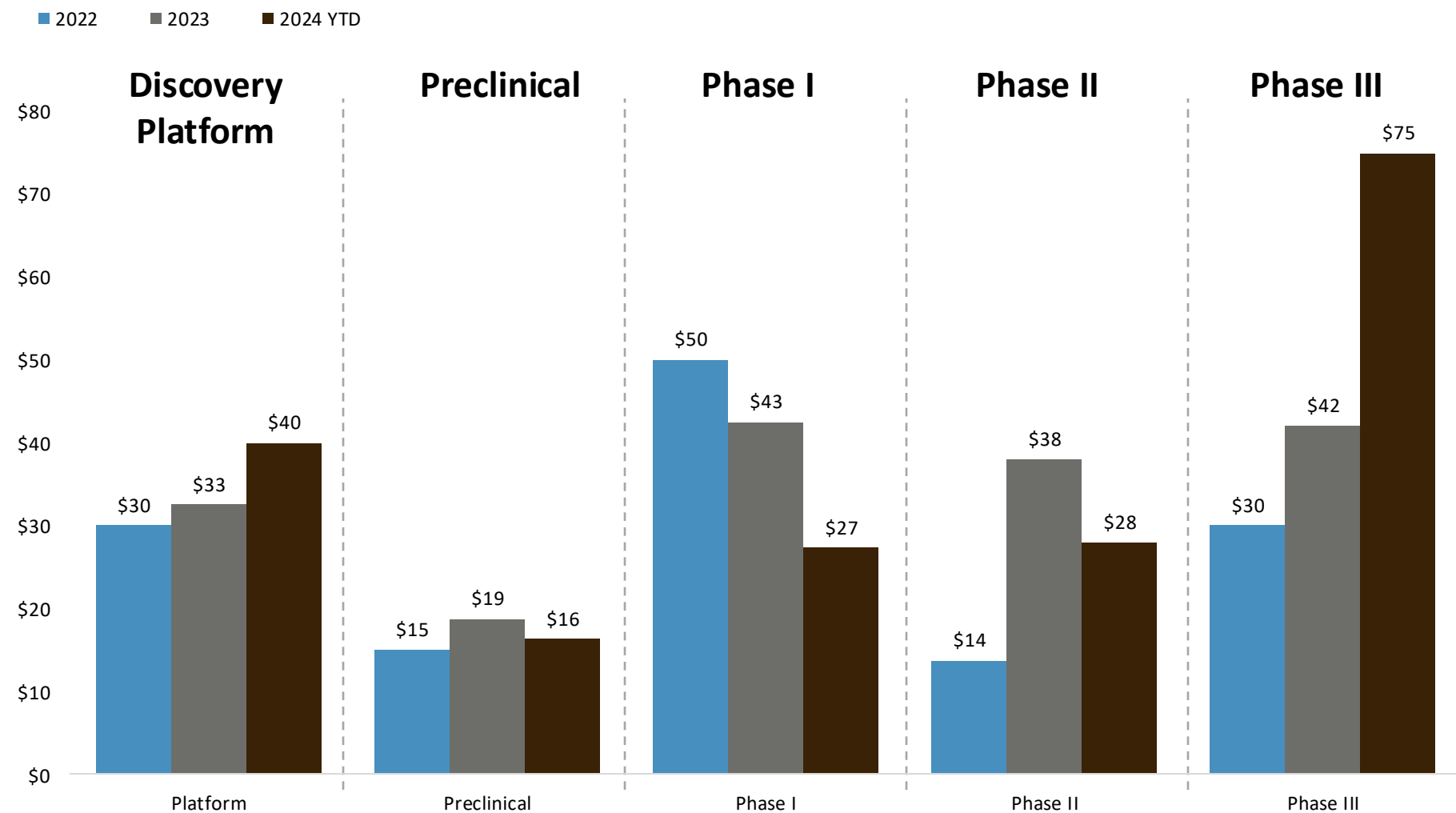


# Big pharma in-licensing has pushed more value to Phase III programs closer to approval

Large-cap biopharma (market cap of \$50 billion+) are focused on in-licensing later-stage clinical compounds to fill pipelines with therapies close to approval. The shift to later-stage clinical programs left Phase II and earlier-stage companies with smaller median licensing upfront payments in 2024 YTD.

- Median upfront cash and equity payments from Big Pharma were down for Phase II and earlier-stage deals signed in 2024 YTD: \$28 million for Phase II; \$27 million for Phase I; \$16 million for preclinical/IND and \$40 million for discovery platform programs.
- 5 Phase III deals were signed in Q3 2024 with the largest disclosed upfronts including Cloudbreak/Santen (\$91 million) and Capricor/Nippon Shinyaku (\$35 million). The largest Phase III licensing deal upfront in 2024 YTD was the Idorsia/Viatis deal with \$350 million up front plus undisclosed milestones and mid-single- to low-double-digit tiered royalties.

**In-Licensing by Big Pharma: Median Upfront Cash & Equity by Stage at Signing. 2022 to 2024 YTD**



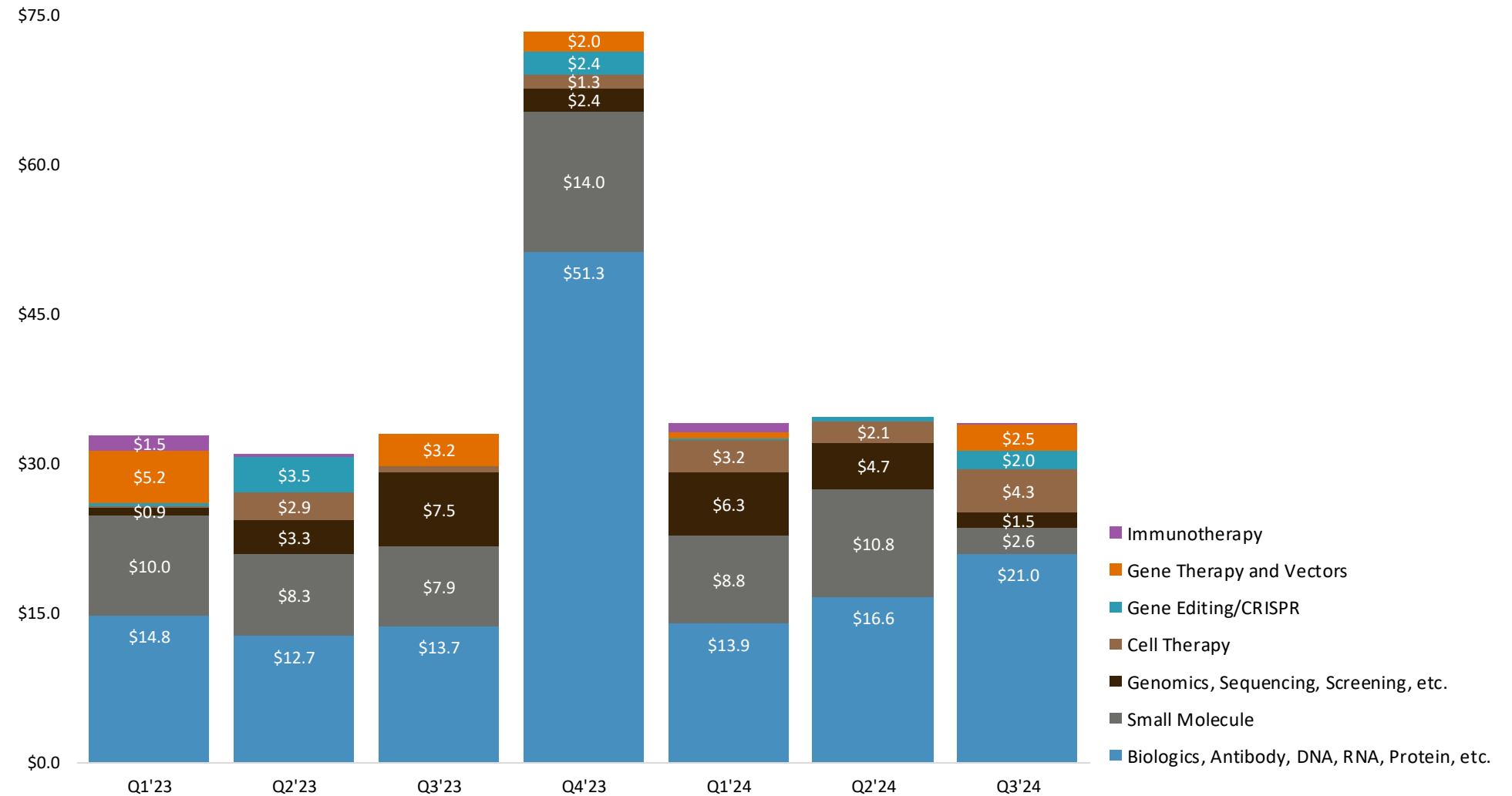
Source: DealForma.com database  
Financials based on disclosed figures. Stage of lead asset in multi-asset deals. Data through 9/30/2024.

# Antibody therapies drove biologics deal value higher while small molecule deals in Q3 decreased significantly

Antibody-based therapies and ADCs continued to see larger deal totals through Q3 2024, driving total announced partnership deal values higher. Cell and gene therapy deals increased in aggregate value.

- Biologics licensing deal values rose from \$16.6 billion in Q2 2024 to \$21.0 billion in Q3 2024. Antibody and ADC deals led with new deal upfronts and potential payment totals.
- \$115 billion in total announced deal value for biopharma licensing deals signed through Q3 2024.
- The Daiichi Sankyo/Merck deal announced in October 2023 for a Phase II ADC program has a total deal value of up to \$22 billion with \$4 billion of that upfront, driving the outlier performance.

R&D Partnerships for Top Biopharma Modalities: Total Announced Deal Value (\$B)



Source: DealForma.com database  
Financials based on disclosed figures. Data through 9/30/2024.

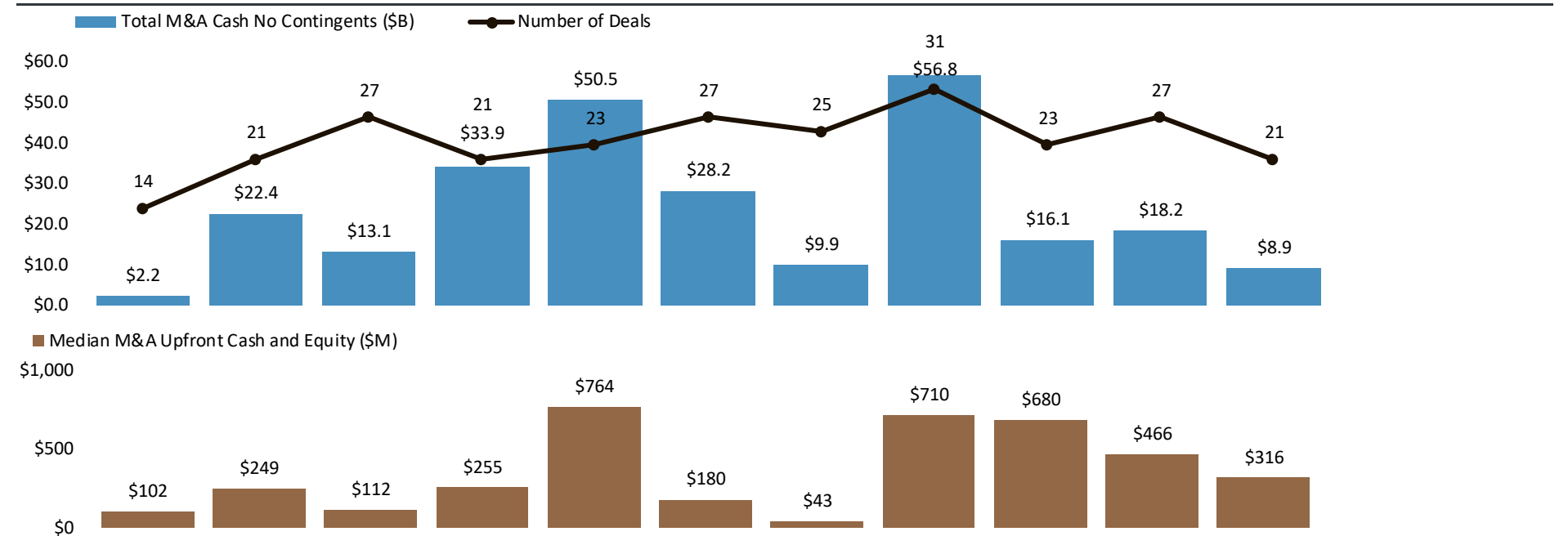
# Biopharma acquisition activity experienced a slowdown in Q3

Fewer biopharma companies were acquired in Q3 2024 and on smaller dollar totals. Dollar volume remains soft as does median upfront cash and equity payments. The market is on track to complete about 100 M&A transactions for 2024.

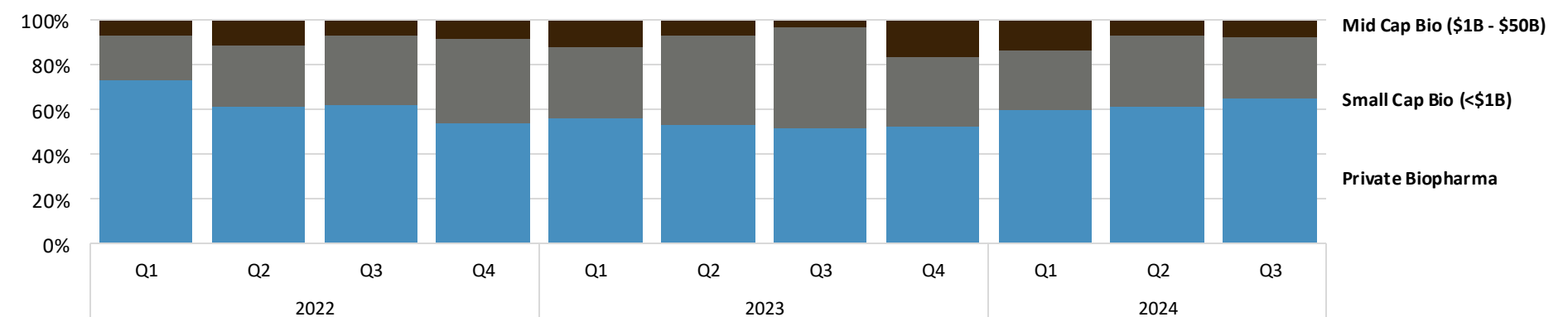
- 21 M&A transactions totaling \$8.9 billion for biopharma therapeutics and platform companies were announced in Q3 2024.
- The share of private biopharma acquisition activity increased slightly over small and mid-cap biopharma deals, accounting for close to 60% of all biopharma M&A.
- Median biopharma M&A through Q3 2024 was \$316 million. This is down from \$466 million from Q2.
- Notable clinical stage acquisitions in 2024 YTD include Vertex/Alpine Immune Sciences for \$4.9 billion and CymaBay/Gilead for \$4.3 billion.

Source: DealForma.com database  
Financials based on disclosed figures. Data through 9/30/2024.

### Biopharma M&A: Number of Deals, Total Deal Value (\$B) and Median M&A Upfront Cash and Equity (\$M)



### Number of M&A Deals by Acquired Company Type

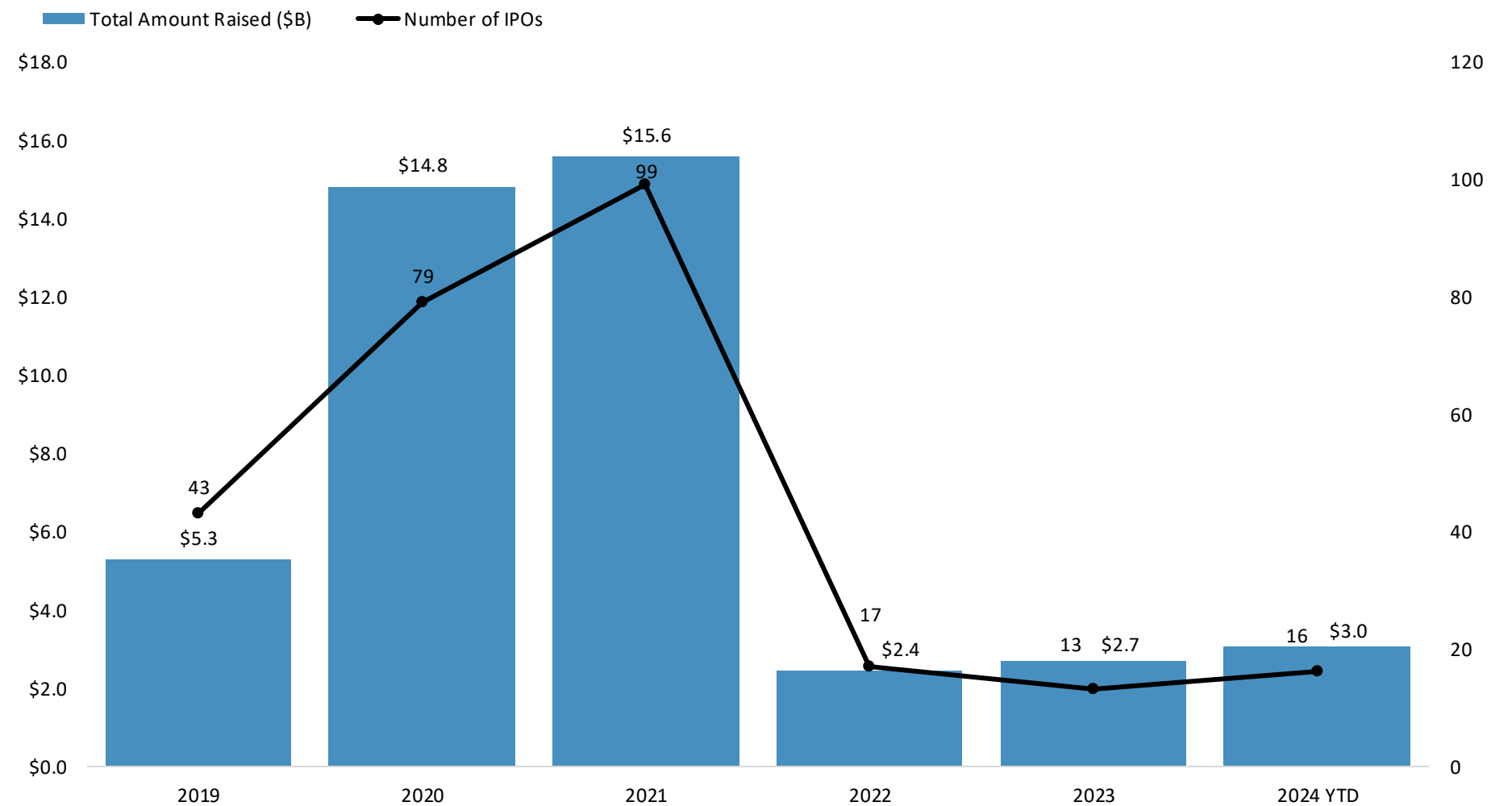


# Positive momentum in biopharma IPO activity

Q3 2024 had 6 biopharma IPOs completed on U.S. exchanges, compared to 3 in Q2 2024 and 7 in Q1 2024.

- \$3.0 billion across 16 biopharma IPOs on NASDAQ and NYSE, all completed through Q3 2024.
- All companies had clinical programs at IPO.
- The largest Q3 2024 IPOs include Bicara Therapeutics (\$362 million), Emcure Pharma (\$233.8 million) and BioAge Labs (\$227.7 million).
- Q3 2024 saw three biopharma companies price their IPOs all on the same day in September: MBX, Bicara, and Zenas.
- Since the writing of this report (through 10/14/2025), there have been several other IPOs, including Upstream Bio, Camp4 and Ceribell.

**NASDAQ and NYSE Completed IPOs in Biopharma Therapeutics and Platforms: Totals (\$B) and Count**



Source: DealForma.com database  
 Financials based on disclosed figures. IPOs over \$15 million. Excludes Kenvue, Inc. (Q2 2023, \$4.4B) and other OTC focused companies. IPOs by completion date. Data through 9/30/2024.

# Disclaimer

Chase, J.P. Morgan, JPMorgan, JPMorgan Chase, and Story by J.P. Morgan are marketing names for certain businesses of JPMorgan Chase & Co. and its affiliates and subsidiaries worldwide (collectively, "JPMC", "We", "Our" or "Us", as the context may require).

The information contained in this material is not advice on legal, tax, investment, accounting, regulatory, technology or other matters. You should always consult your own financial, legal, tax, accounting, or similar advisors before entering into any agreement for JPMorgan Chase products or services. In no event shall JPMorgan Chase or any of its directors, officers, employees or agents be liable for any use of, for any decision made or action taken in reliance upon or for any inaccuracies or errors in, or omissions from, the information in this content.

The information does not include all applicable terms or issues and is not intended as an offer or solicitation for the purchase or sale of any product or service. Products and services offered by Chase and its affiliates are subject to applicable laws and regulations, as well as our service terms and policies. Not all products and services are available in all geographic areas or to all customers. In addition, eligibility for particular products and services is subject to satisfaction of applicable legal, tax, risk, credit and other due diligence, JPMorgan Chase's "know your customer," anti-money laundering, anti-terrorism and other policies and procedures.

Products and services may be provided by banking affiliates, securities affiliates or other JPMorgan Chase affiliates or entities. In particular, securities brokerage services other than those that can be provided by banking affiliates will be provided by appropriate registered broker/dealer affiliates, including J.P. Morgan Securities LLC and J.P. Morgan Institutional Investments Inc. Any securities provided or otherwise administered by such brokerage services are not deposits or other obligations of, and are not guaranteed by, any banking affiliate and are not insured by the Federal Deposit Insurance Corporation.

Changes to Interbank Offered Rates (IBORs) and other benchmark rates: Certain interest rate benchmarks are, or may in the future become, subject to ongoing international, national and other regulatory guidance, reform and proposals for reform. For more information, please consult: <https://www.jpmorgan.com/IBOR>.

ABOUT THIS MESSAGE: © 2024 JPMorgan Chase & Co. All rights reserved. JPMorgan Chase Bank, N.A. Member FDIC. Deposits held in non-U.S. branches, are not FDIC insured. JPMorgan Chase Bank, N.A., organized under the laws of the U.S.A. with limited liability.