STIFEL | Healthcare

The State of Biotech

November 13, 2026



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Politics and Macro



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The macro backdrop is mixed for biotech

Yields remain below October levels, but inflation keeps pressure on rates.

4.98%

U.S. 10-year Treasury

November 10, 2026

+0.4%

October CPI, month over month

Core CPI: +0.3%; released November 10

House + Senate

Democratic midterm wins

New Congress convenes in January



Inflation remains a constraint

October CPI rose 0.4% versus 0.6% in September. Core prices rose 0.3%. October year-over-year CPI is unavailable because October 2025 survey data were not collected.

Yields still below October levels

The 10-year is 29 bps below 5.27% on October 6, but rose after the latest CPI release. Rate volatility remains a risk for biotech valuations.

Oil remains a swing factor

Easing geopolitical disruptions could reduce energy inflation. That is an upside scenario, rather than an assured outcome.

Divided government brings oversight

Major legislation may be harder to pass. Expect scrutiny of drug pricing, tariffs and FDA leadership as existing policies take effect.

Watch inflation, oil and the Fed: the financing backdrop remains sensitive to rates.

Sources: BLS October CPI release (Nov. 10, 2026); U.S. Treasury (Nov. 10, 2026); Reuters. Implications reflect market interpretation.

A Blue Wave, With More Healthcare Oversight Ahead

2026 U.S. midterms and the outlook for healthcare



House + Senate
Democrats win both chambers

7+ Senate seats
Democratic flips

Voter frustration with high costs helped drive the result.

What it means for healthcare

Drug pricing
IRA and MFN deals likely stand. Expect hearings on MFN terms. PDUFA VIII could carry bipartisan PBM or patent reform.

FDA and HHS
Vaccine policy and staffing face scrutiny. Overton's nomination is the near-term test for FDA leadership.

China licensing
Watch manufacturing and data security. Broad licensing restrictions look less likely.

Hospitals and insurers
HCA rose about 10% and Centene about 13% on Nov. 4. ACA and Medicaid relief still require legislation.

Biotech and 2028
We expect M&A and FDA leadership to matter more for biotech. A left-leaning Democratic win in 2028 is a downside risk we view as unlikely.

Sources: AP election coverage, BioPharma Dive, KFF Health News, 24/7 Wall St. and Nov. 6 biotech note.

Trump on 60 Minutes After the Midterms

November 8, 2026 broadcast



2026 Midterm Defeat

Trump acknowledged voter anger over high gas prices and the Iran war. He also pointed to economic messaging, turnout and candidates.



Immigration

Trump said deportations may have been 'too tough' in some cases and had hurt him politically. He defended his border record.



Healthcare and Pharma

Drug pricing, affordability and MAHA received little attention in the broadcast.



Foreign Policy and Iran

Trump defended U.S. military action against Iran and said he was not looking to escalate.

Source: CBS News, 60 Minutes interview and transcript, November 8, 2026.

U.S. Biopharma Policy in 2027

Oversight and implementation will shape launch and supply decisions



MFN pricing deals

26 drugmakers, about 90% of the U.S. branded market.

Watch global launch order and possible 2028 renegotiation.



Section 232 tariffs

100% headline tariff on patented drugs.

Country caps, exemptions and onshoring can lower rates.



Divided government

Democrats won the House and Senate.

Expect hearings on pricing and policy implementation.



Medicare negotiation

More drugs enter IRA negotiations each year.

Exposure rises for large franchises.



FDA leadership and PDUFA VIII

Leadership transition tests policy continuity.

User-fee reauthorization deadline: September 2027.



BIOSECURE Act

Federal procurement restrictions target companies of concern.

Watch CDMO diversification, costs and timelines.

Political risk remains a factor for U.S. pharma

Affordability is a top voter concern

Voters are deeply concerned about the cost of living, including prescription drug prices. Both parties have incentives to deliver visible relief.

Democratic gains raise scrutiny

Expect more scrutiny of drug pricing, PBM practices and Medicare negotiation.



The biggest risk is the 2028 election

A left-leaning Democrat winning the presidency could bring more aggressive drug pricing policies. We view that outcome as unlikely.

A centrist poses less risk

A centrist Democratic president would pose less risk to the industry. Near-term attention remains on executive action and existing pricing policies.

Healthcare costs weigh on the 2026 midterms

Exit polling highlights affordability concerns and a sharp divide in voter priorities.

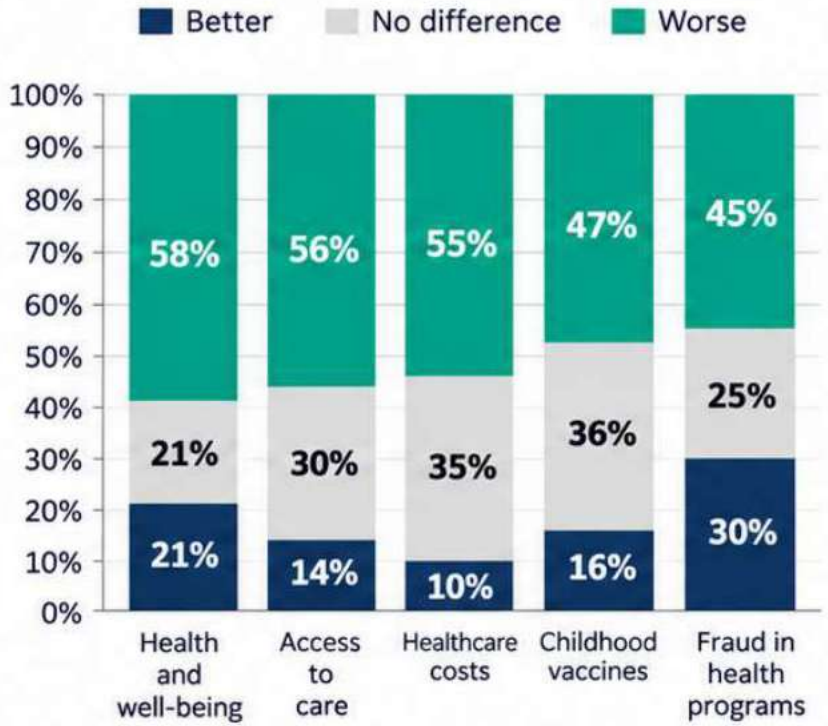


55%

said administration policies made their healthcare costs worse

Most voters see worsening healthcare

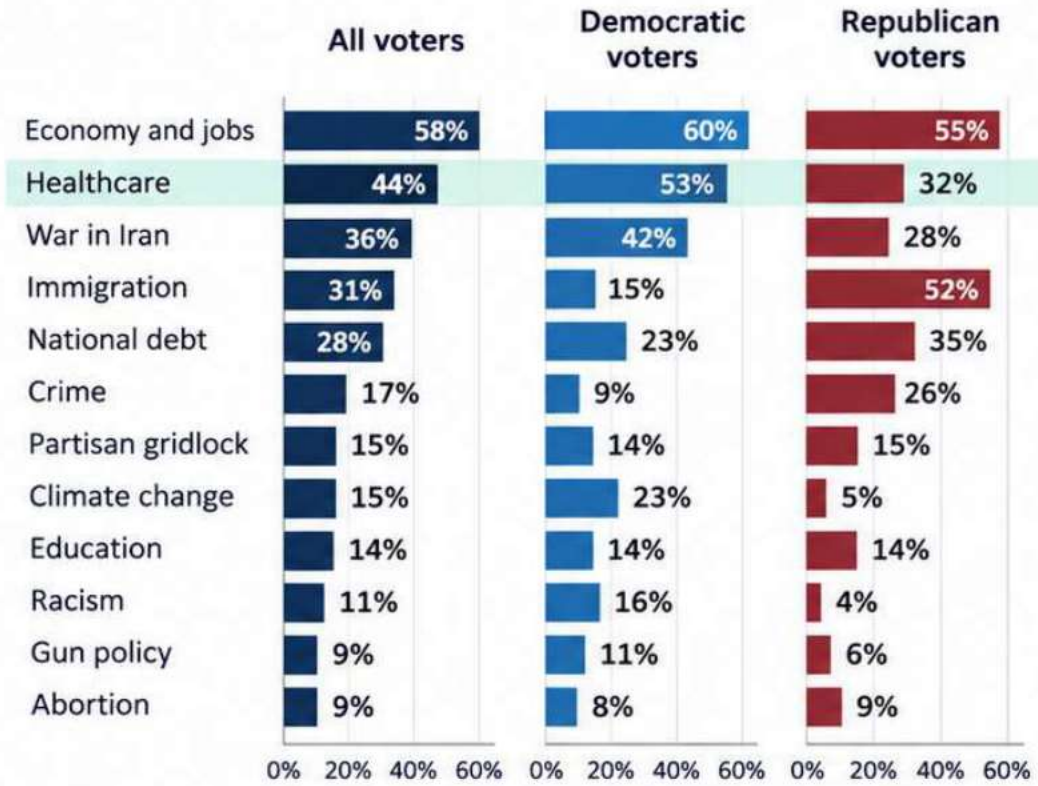
Effect of Trump administration policies



Percentages may not total 100 due to rounding.

Healthcare ranks second overall

Issues voters identified as most important



Party groups reflect vote for House candidate.

Source: KFF, Health Care in the 2026 Midterm Election.

kff.org/public-opinion/health-care-in-the-2026-midterm-election/

BIO Proposed Plan for U.S. to Improve Bioleadership

The November BioAdvance plan recommends seven steps



01 White House Office of Biotechnology

Create a permanent, funded office to coordinate national strategy, align agencies and track global competitiveness.



02 Faster first-in-human studies

Modernize early-stage pathways, centralize trial approvals and contracting, and reduce cost and administrative delays.



03 Streamlined drug development

Modernize development, evaluation and approval at every stage so innovative medicines reach patients sooner.



04 Broader clinical trial access

Lower barriers for patients, clinicians and health systems to participate in trials nationwide.



05 Sustained biomedical research

Provide predictable, merit-based federal funding through NIH, FDA, NSF, BARDA and ARPA-H; attract top global scientific talent.



06 Stronger U.S. manufacturing

Expand contract manufacturing, resilient supply chains, reshoring incentives, faster permitting, workforce training and shared infrastructure.



07 IP protection and access to capital

Strengthen intellectual property and targeted tax incentives; reduce regulatory burdens to help emerging U.S. biotechs secure capital and grow.

A coordinated national strategy to strengthen innovation, investment, resilience and security.

Source: *BIO, An Action Plan for the American Biotech Century, November 4, 2026.*

BIO CEO on the new BioAdvance Plan

John F. Crowley | President and CEO, BIO | November 10, 2026

“Today’s biotech race is our generation’s Space Race.”

— John F. Crowley, November 10, 2026

A national competitiveness imperative	China’s biotech ambitions threaten a pillar of U.S. economic strength and national security.
Coordinate the entire ecosystem	A permanent White House Office of Biotechnology would align agencies, public–private efforts and national priorities.
Sustain research and investment	Predictable, merit-based research funding, stronger patents and private-investment incentives would help emerging biotechs grow.
Develop and manufacture at home	Faster, risk-based clinical pathways, reshoring incentives, streamlined permitting and workforce training would strengthen U.S. capacity.



John F. Crowley
President and CEO
Biotechnology Innovation Organization

Source: *John F. Crowley, “American biotech needs a coordinated plan to beat China — now,” editorial, November 10, 2026. Portrait: BIO.*

Europe Biopharma Policy Update

Regulatory reform reshapes protection, development and regional licensing



EU pharma reform

Council adoption: September 28, 2026.

Entry into force follows Parliament adoption and official publication.



Protection and incentives

Eight years of data protection plus one year of market protection.

Additional protection rewards qualifying innovation, comparative trials and early EU filing.



Biotech Act proposals

Proposed 12-month SPC extension for biotech products and advanced therapies.

Clinical-trial modernization and regulatory sandboxes are also proposed.



Exclusivity and IP strategy

Protection capped at 11 years; 12 with a transferable exclusivity voucher.

Eligibility remains contested; industry is pressing for stronger protection.



Policy support for scale-up

Proposed two-year “capital booster” pilot.

EESC calls for a permanent late-stage financing tool through the European Investment Bank.



Regional licensing implications

EU launch incentives may conflict with U.S. MFN pricing considerations.

Vouchers and potential SPC extensions add valuation and licensing questions.

Source: Supplied Europe policy summary; Council of the EU, European Commission, EFPIA and EESC. Proposed measures remain subject to adoption and eligibility conditions.

Biotech Market Update

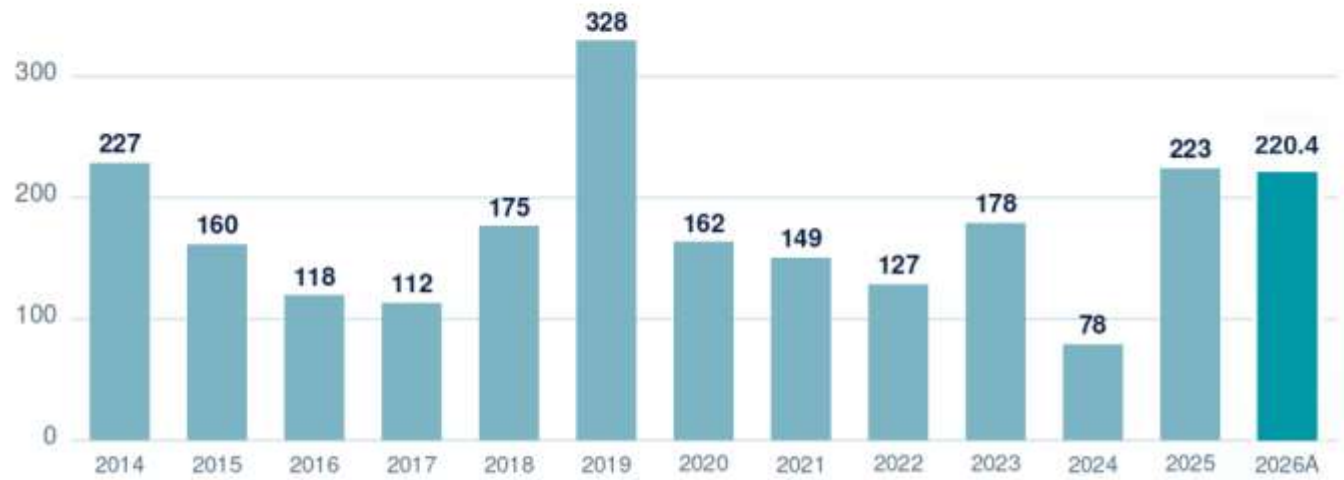


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2026: A Strong but Selective Recovery

Capital markets and M&A rebounded • Data through November 10, 2026

Biopharma M&A volume ($bn, worldwide)



Worldwide M&A reached $189.6bn through Nov. 10, an annualized pace of $220.4bn, approximately level with 2025.

2026 at a glance

Metric	2026
Global biopharma financing (Nov. 10)	$132.9bn YTD $154.5bn annualized
Global biopharma IPOs (Nov. 10)	44 deals / $10.3bn
$1bn+ biopharma M&A (Nov. 10)	46 deals
China-origin licensing (Nov. 9)	$134.1bn / $8.0bn upfront
China share of large-pharma upfronts	63% (Nov. 9)
FDA novel approvals (Nov. 10)	48 (2025: 46, 2024: 50)
XBI price return YTD (Nov. 10)	+27.2%
10-year U.S. Treasury (Nov. 10)	4.98%

The Set-Up for 2027

Deals
patent-cliff M&A and China licensing remain the two engines of value creation

Policy
U.S. pricing and trade rules largely set – risk shifts to implementation, oversight, global pricing and 2028

Capital
open for data-rich Phase 2/3 stories; early-stage and European scale-ups still constrained

Sources: Stifel November 2026 Biopharma Market Outlook, DealForma, FDA CDER and U.S. Treasury. Financing excludes convertibles and public debt. China licensing covers the deck's large-pharma licensee universe, including Hong Kong. Total deal value includes contingent payments.

XBI is up 24.0% in 2026

XBI share price ($)



$151.20

November 12, 2026 market close

$169.55

2026 closing high

Daily closing prices
Price return; excludes dividends.

Source: Yahoo Finance daily closing prices; Stifel Investment Banking Analysis. Through November 12, 2026. YTD from December 31, 2025.

Hang Seng biotech is up 6.3% in 2026

Hang Seng Biotech Index



15,073.45

November 12, 2026
market close

16,768

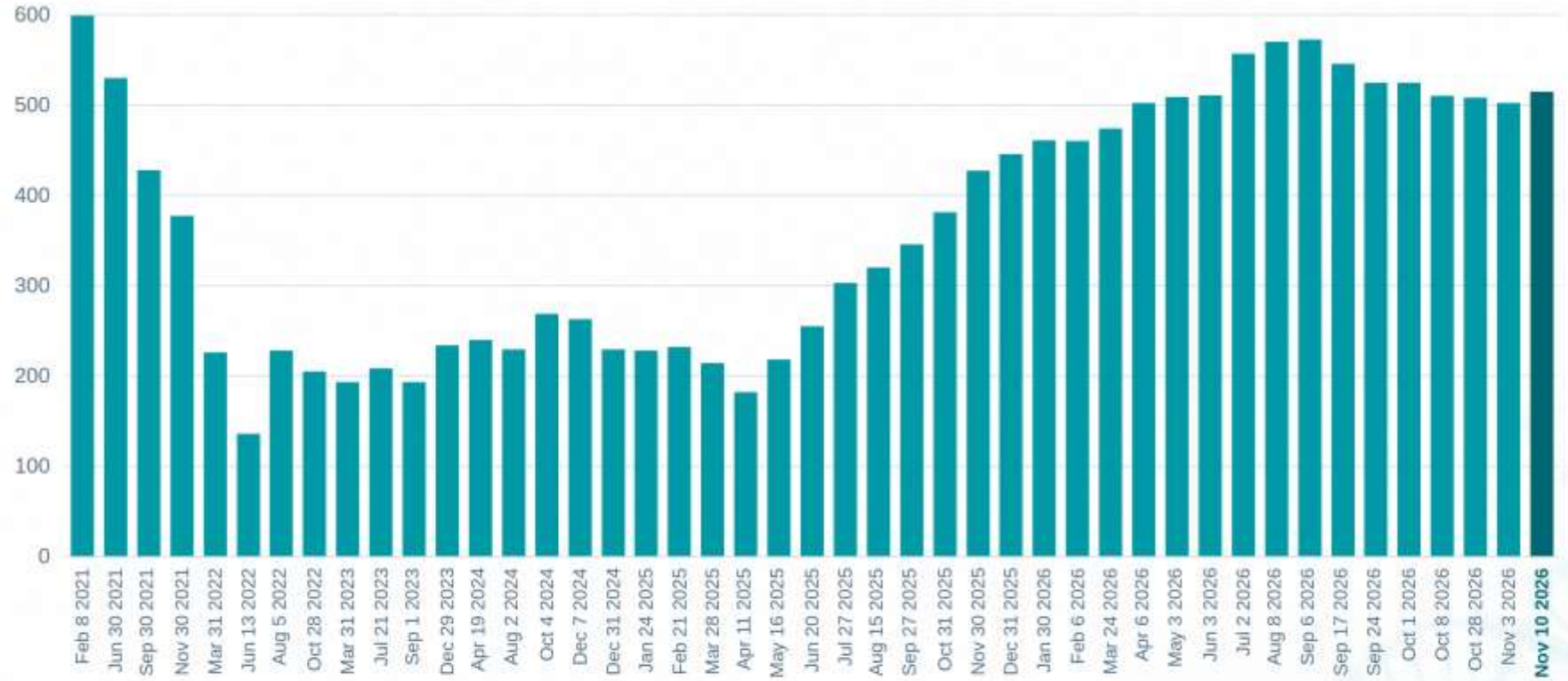
2026 closing high

Note: Over 400 Chinese biotech companies are rumored to be attempting to go public on the Hong Kong Stock Exchange; flat returns in 2026 combined with government processes have made this difficult.

Source: Hang Seng Indices Company daily price-index closes; Stifel Investment Banking Analysis. Through November 12, 2026. YTD from December 31, 2025.

Global biotech is up 15.5% this year

Total enterprise value of publicly traded global biotech ($bn), addition / exit adjusted



$514bn

Total sector enterprise value
November 10, 2026

10.1% below September peak

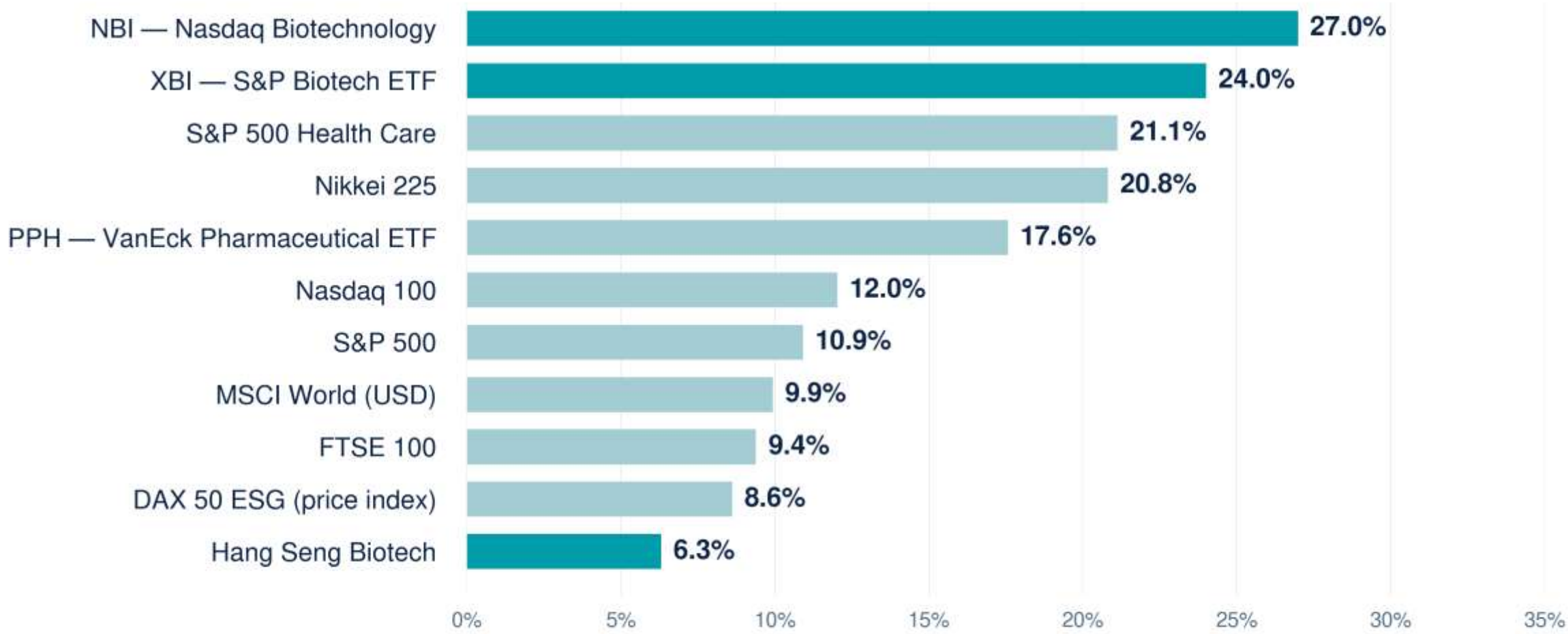
The sector reached $572bn on September 6, 2026.

EV rose $69bn from $445bn at year-end 2025.

Source: Capital IQ. Biotech includes publicly traded therapeutics companies without an approved product.

Biotech leads most major equity benchmarks

2026 YTD price returns • Market closes on November 12, 2026



Closes: November 12, 2026, for all markets. Returns from the final 2025 trading close.

Price returns exclude dividends. Local currencies; MSCI World in USD.

Sources: Yahoo Finance, Nasdaq, S&P DJI, VanEck, Hang Seng Indexes, Nikkei, LSEG, MSCI and STOXX; Stifel Investment Banking Analysis.

Equity Markets Show Resilience Amid AI Volatility

November 13, 2026: Broader leadership, weekly gains and sustained AI demand

Equal-Weight S&P 500 Hits a Record [1]

Record reached last week. Approximate 2026 YTD returns





Broader participation supports market resilience.

Major Indexes Advance This Week [2]

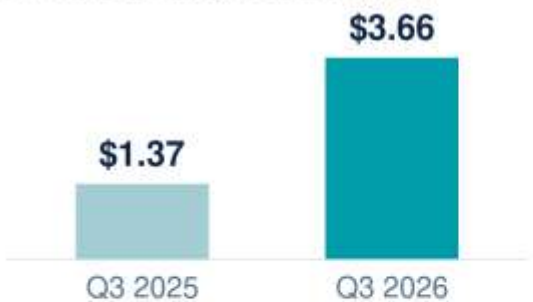
Week to date: November 6 close to November 12 close



All four major U.S. indexes higher for the week.

AI Demand Continues to Grow [3]

CoreWeave quarterly revenue ($bn)





+168%

year-over-year revenue growth

$132.5bn

reported revenue backlog

Strong demand; funding and execution still matter.

Markets Absorb the Nvidia Shock [4]

November 12 daily moves. Huang exits; Kress named interim CEO



Rival chips rally; broad-index decline remains modest.

Notes: [1] Rounded YTD figures reported Nov. 12. [2] Weekly price returns through Nov. 12. [4] Daily price returns on Nov. 12. Backlog requires future delivery.

Sources: [1] Reuters, Nov. 12; [2] Associated Press, Nov. 12; [3] CoreWeave Q3 results, Nov. 10; [4] Reuters/MarketScreener and NVIDIA, Nov. 12.

Stifel Investment Banking Analysis

Illustrative images: NVIDIA and NYSE

Many biotech investors are waiting for 2027

Existing positions and a focus on near-term returns constrain new buying.



Waiting for M&A

Investors want a post-election return of meaningful deal activity to recycle capital into the sector.

Already invested

Many funds built substantial positions through follow-ons and PIPEs in spring and summer 2026.

A high bar for new ideas

New stocks need a clear path to near-term returns. Unrealized losses make portfolio rotation difficult.

A 2027 reset

Many funds are protecting year-end marks and deferring participation in new issues until 2027.

Biotech investor sentiment: positive, but guarded

Strong fundamentals support optimism, while near-term trading remains cautious.



Positive Data Punished

Investors sell on positive news, indicating weak overall investor support

M&A below expectations

Expectations remain high, but recent announced deal activity has been relatively modest.

Year-end pressure

Volatility and sharp declines in some specialty pharma holdings have left several funds with meaningful losses.

Fundamentals hold up

Attractive valuations, encouraging clinical catalysts and solid launches sustain a positive sector view.

AI Sector Leads to Hedge Fund Headaches in H2 2026

−10.7%

Total value since late June 2026

"The gross market value of long-short stock funds declined 10.7% since late June … The figure shows the scale of the pullback among global investors, who have been hit hard by a rout in artificial intelligence stocks that gathered steam following the recent US mid-term elections."

Bloomberg, November 10, 2026



Nov 10th Economist Story: Understanding Degrossing

Tight pod loss limits can turn market volatility into mandatory portfolio cuts

In an article entitled “Lessons from a miserable month for hedge funds,” the *Economist* notes that Multi-strat funds allocate capital to separate trading teams (“pods”) under one central risk policy.

#1 Different pods can share the same risks

Teams may pursue separate trades but still depend on AI, momentum or other common market factors.

#2 Leverage brings loss limits closer

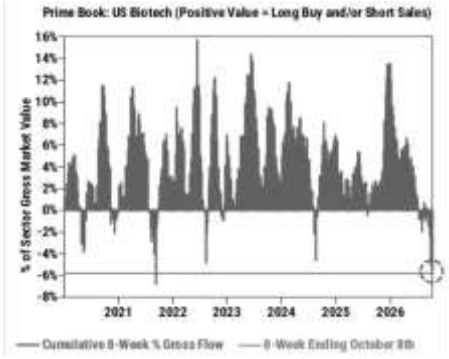
Small adverse price moves can produce meaningful Losses, forcing managers to reduce positions.

#3 Central risk controls require cuts

Pods sell long positions and cover shorts. The platform can reduce allocations or shut down a team.

#4 Selling can spread beyond the original shock

Selling can hit other holdings with unchanged fundamentals. Crowded exits can deepen losses and trigger further cuts.



≈5%

Pod losses can trigger mandatory position reductions

>7.5%

Pod losses can lead to team closure and liquidation

$2.2tn

Gross assets at 10 large multi-strategy funds

Biotech market: Portfolio shrinkage can overwhelm positive company news and generate selling unrelated to fundamentals.

Source: The Economist, November 10, 2026.

Positive biotech data faces a tougher market

Investors increasingly sell the news, even after favorable clinical readouts.

Good data, weaker returns

Investors rewarded positive data in the first half of 2026. The one-day response turned negative in Q3 and remained negative in Q4 to date.

−3.8%

Q4 one-day return after positive data

−13.9%

Q4 ten-day return after positive data*



Q4 includes 24 readouts. Ten-day returns are available for 16 events.

Mean share price performance after positive data

Through November 10, 2026



Possible explanation

Hedge fund short-sellers can be more influential when long-only funds and generalists are out of the biotech market. This may explain share-price declines despite positive newsflow.

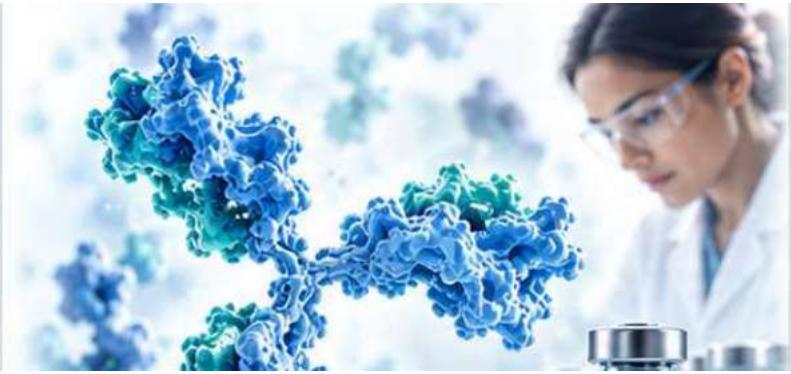
** The ten-day mean share price return reflects data from 16 events that occurred in October.*

Source: Stifel analysis, Biomedtracker, Wall Street research, FactSet and company disclosures. Updated through Nov. 10, 2026.

U.S.-listed biopharma with pre-data market caps of $50M–$10B. Material programs with topline or interim data. Excludes preclinical, post-hoc and programs under FDA review.

Investors interpret data readouts through multiple lenses

Not all positive data readouts are so “positive”. Investors look at commercial and pipeline factors that drive ultimate market uptake.


Investor question	Why it matters	Illustrative investor concern
Did results exceed expectations?	A positive endpoint may already be priced in.	Non-inferiority versus superiority make a big difference in a data readout – will the drug be reimbursed?
Is the product competitive?	Future rivals can change the value of today’s launch.	The improvement of a new drug candidate has to be assessed both vs. SOC and pipeline
Will patients receive treatment?	Diagnosis, eligibility and access narrow the market.	Drugs that work in subsets or that require precision approaches may be commercially challenging.

Clinical success creates the opportunity. Adoption and cash flow determine commercial value. Mapping the data to commercial key.

Source: Stifel Investment Banking Analysis, Note: Investor debates are intended to be illustrative and do not establish the causes of any specific observed stock-price reactions.

Key investment factors for the next decade

Positives

Pharma grows faster than the economy

Room for more $50bn drugs

A strong innovation base

Continuing M&A demand



Risks

Competition

Macro backdrop

Budget pressure

Political risk

Upcoming Biopharma Industry Catalysts







December 2026 to H1 2027

Dec 2026 **BIOSECURE list**

OMB's initial list of biotechnology companies of concern is due Dec. 18.

Jan 2027 **New Democratic Congress**

Congress convenes and receives PDUFA VIII. Expect hearings on pricing, FDA turnover and tariffs.

Feb 2027 **Medicare price resets**

Jan. 1 prices take effect for 15 Part D drugs, including semaglutide. By Feb. 1, CMS names up to 20 Part B or Part D drugs for 2029 pricing.

Q1 2027 **Retatrutide filing**

Lilly targets a U.S. filing. Base case is an early 2028 launch, with late 2027 possible under priority review.

Apr 2027 **Section 232 pharma tariffs**

Commerce recommendation due on extending tariffs to generics and biosimilars.

H1 2027 **FDA leadership and EU pharma rules**

If still pending, Overton's nomination goes to the new Democratic Senate. Diamantas acting since May 2026. EU pharma package enters into force.

H1 to November 2027

H1 2027 **Ivonescimab global survival test**

Summit plans interim overall survival analysis in HARMONi-3's squamous cohort. Ivonescimab + chemo vs. Keytruda + chemo in first-line lung cancer.

Jun 2027 **BIOSECURE implementation**

OMB guidance expected, followed by FAR rulemaking in 2027–28.

2027 **U.S. loss of exclusivity**

Xtandi and Trulicity.

Sep 2027 **PDUFA VII expires**

Sep. 30 user-fee reauthorization deadline. Main must-pass vehicle for policy riders.

Q4 2027 **Fed funds rate outlook**

Futures price about 4.7% by Oct. 2027 vs. 3.88% in early Oct. 2026.

Nov 2027 **Medicare prices for 2029**

CMS publishes negotiated prices for the 2029 drug cohort by Nov. 30.

2028

Jan 2028 **Part B pricing and Part D PBMs**

First negotiated Part B prices (Botox, Cimzia, Orencia, Entyvio) and first renegotiation (Tradjenta). Part D PBM delinking and 100% rebate pass-through begin.

Feb 2028 **Medicare selections for 2030**

CMS names up to 20 drugs for 2030 pricing by Feb. 1.

Apr 2028 **Generic Eliquis**

Earliest U.S. generic entry on Apr. 1.

2028 **MFN agreements**

Base case assumes agreements hold. Renegotiation is possible.

Nov 2028 **U.S. presidential election**

Nov. 7 outcome shapes renewal of MFN deals and their tariff relief, which runs through Jan. 20, 2029.

End-2028 **U.S. loss of exclusivity**

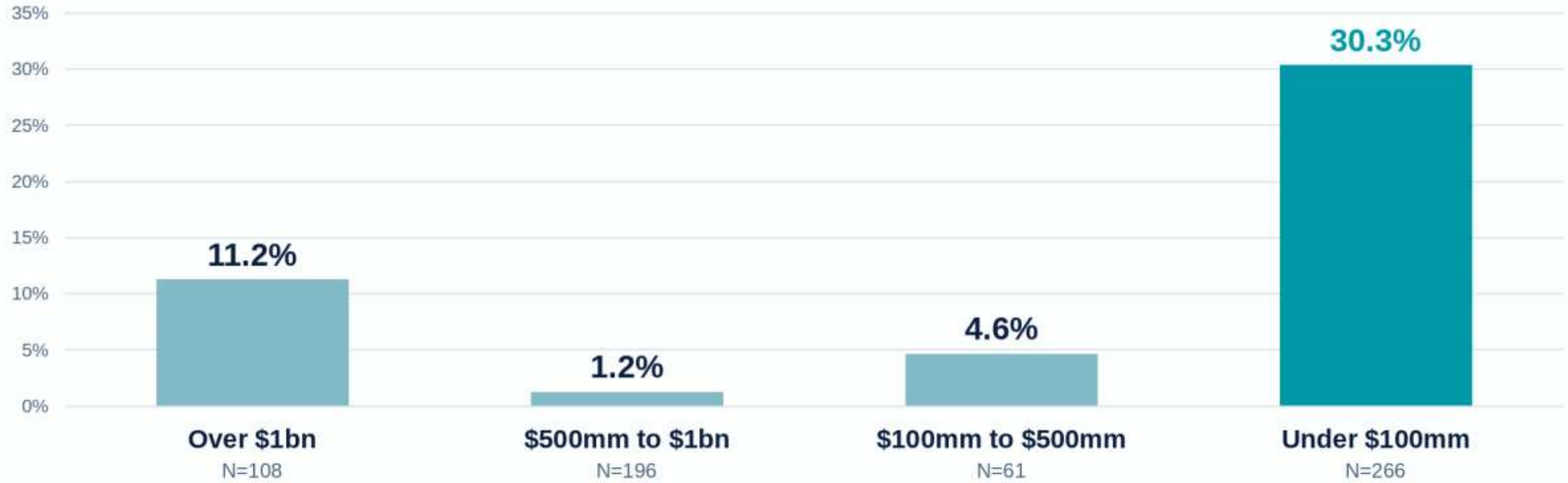
Keytruda and Opdivo.

Major Revival of Small Cap Biotech in 2026

Biotechs valued below $100mm gained 30.3%, nearly three times the gain of any other cohort.

Change in Global Biotech Valuations

Dec. 31, 2025 to Nov. 10, 2026 • Percent change in aggregate cohort value



Market cap as of Dec. 31, 2025

Source: Capital IQ. Biotechs are publicly traded therapeutics companies without an approved product.

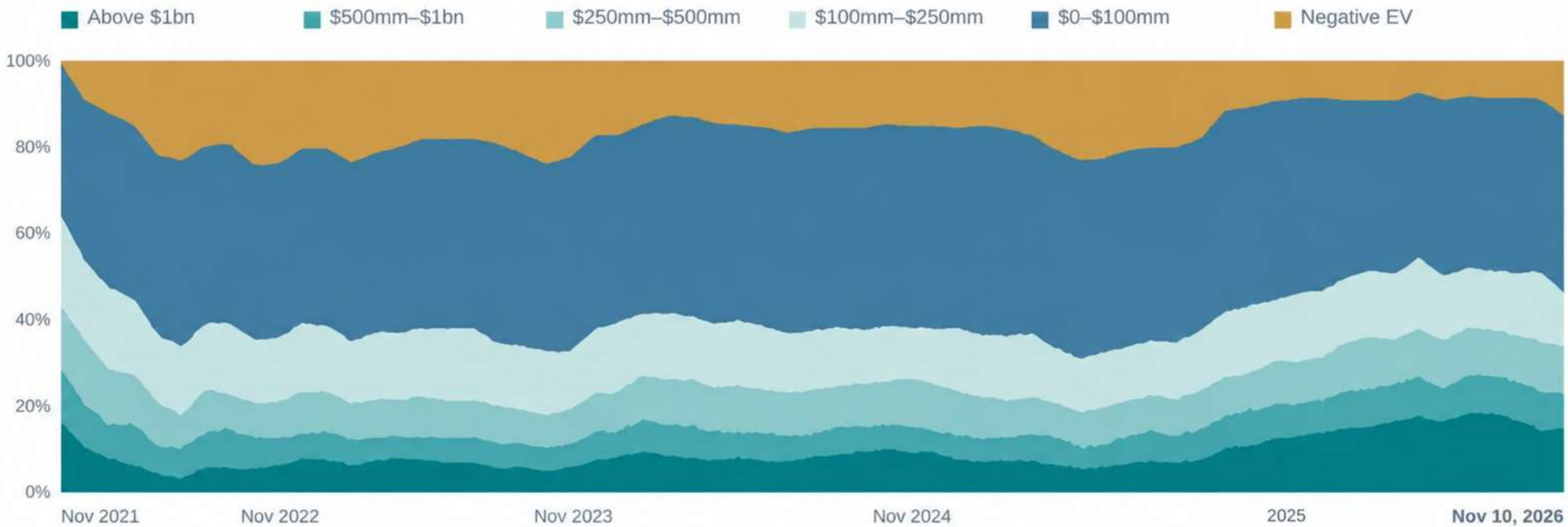
Global Biotech Neighborhood Analysis

Share of publicly traded global biotechs by enterprise value • November 2021 to November 2026

91 to 96 in the last month
Biotechs above $1bn EV

Negative EV
Company count rose in the last month

$100mm–$250mm EV
Company count fell substantially in the last month



Source: Capital IQ and Stifel Investment Banking Analysis. Biotech includes listed therapeutics companies without an approved product.
Callouts describe the change in company counts over the last month.

Early-Stage Biotech Valuations Fell Most Since Midyear

Average enterprise value of U.S.-listed biotechs by development stage (US$ millions)



Source: Capital IQ and Stifel Investment Banking Analysis. Development stage is based on the release of at least some efficacy data from that stage.

Biotech Valuations Fell Across Every Data Quality Tier

Average enterprise value by quality of clinical efficacy data (US$ millions, U.S. exchanges, N=314)



The average EV of a company with very good data was 25× that of a company with medium data, versus 24× on July 2.

Source: Capital IQ and Stifel Investment Banking. Stifel classified companies by the quality of clinical efficacy data for their lead asset.

Life Sciences Sector Gained $600 Billion in Value in the Last Month

Enterprise value by subsector • November 9, 2026

$11.75T Total sector enterprise value

Commercial pharma drove most of the monthly gain

The source attributes the move to a rotation into large, cash-generative healthcare companies.

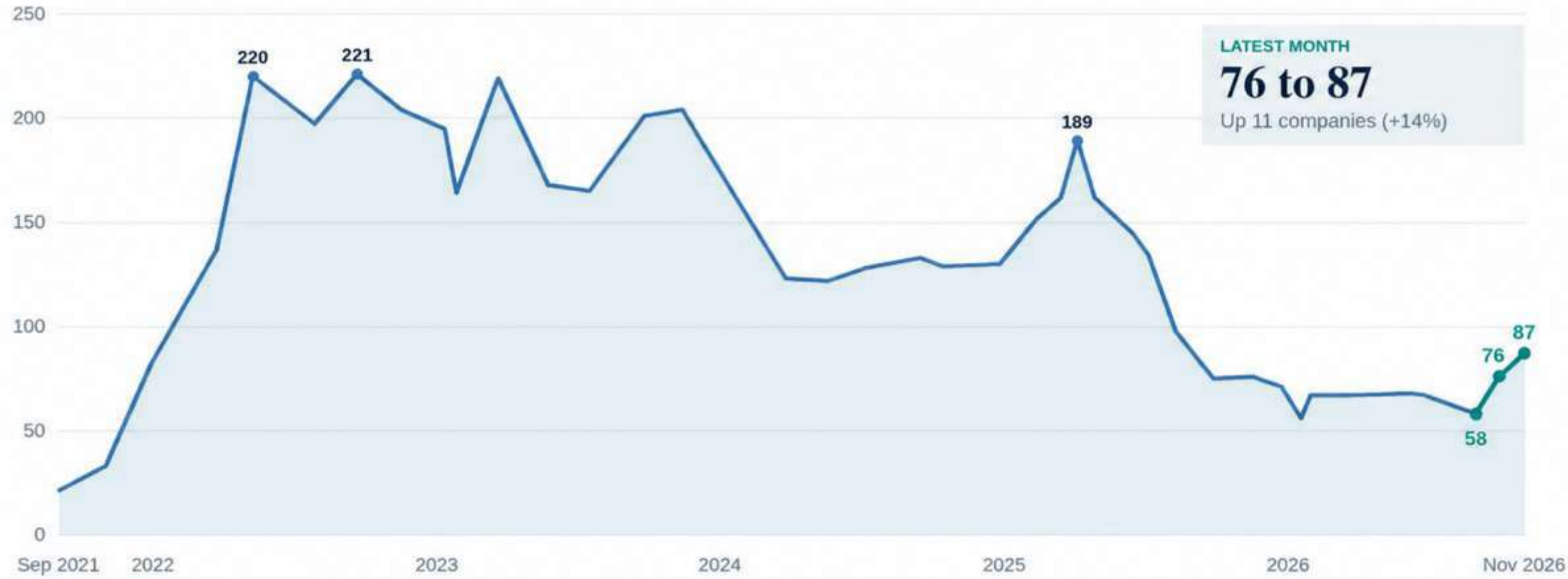
Sector	Firm count	Enterprise value ($MM)	Last week	Last quarter	Last year
API	77	$120,464	5.1%	3.8%	19.4%
Biotech	617	$331,144	5.0%	8.7%	−5.1%
CDMO	35	$172,961	3.6%	2.2%	5.3%
Diagnostics	72	$297,851	−5.1%	10.8%	12.3%
OTC	27	$21,681	−0.2%	−4.3%	0.9%
Commercial Pharma	**672**	**$8,192,429**	**−0.1%**	**6.5%**	**25.8%**
Pharma Services	38	$248,348	3.1%	15.8%	29.5%
Life Science Tools	46	$793,621	0.7%	11.6%	23.5%
Medical Devices	164	$1,559,021	−2.8%	−2.7%	−10.9%
HCIT	7	$14,533	1.1%	−13.2%	−40.9%
Total	**1,755**	**$11,752,052**	**−0.2%**	**5.6%**	**18.4%**

Source: Capital IQ and Stifel Investment Banking Analysis.

Measure of Sector Distress

Count of Negative Enterprise Value Life Science Companies Has Risen in Last Month

Worldwide • September 2021 to November 2026



Historical observation dates are approximate.
Source: S&P Capital IQ and Stifel Investment Banking Research.

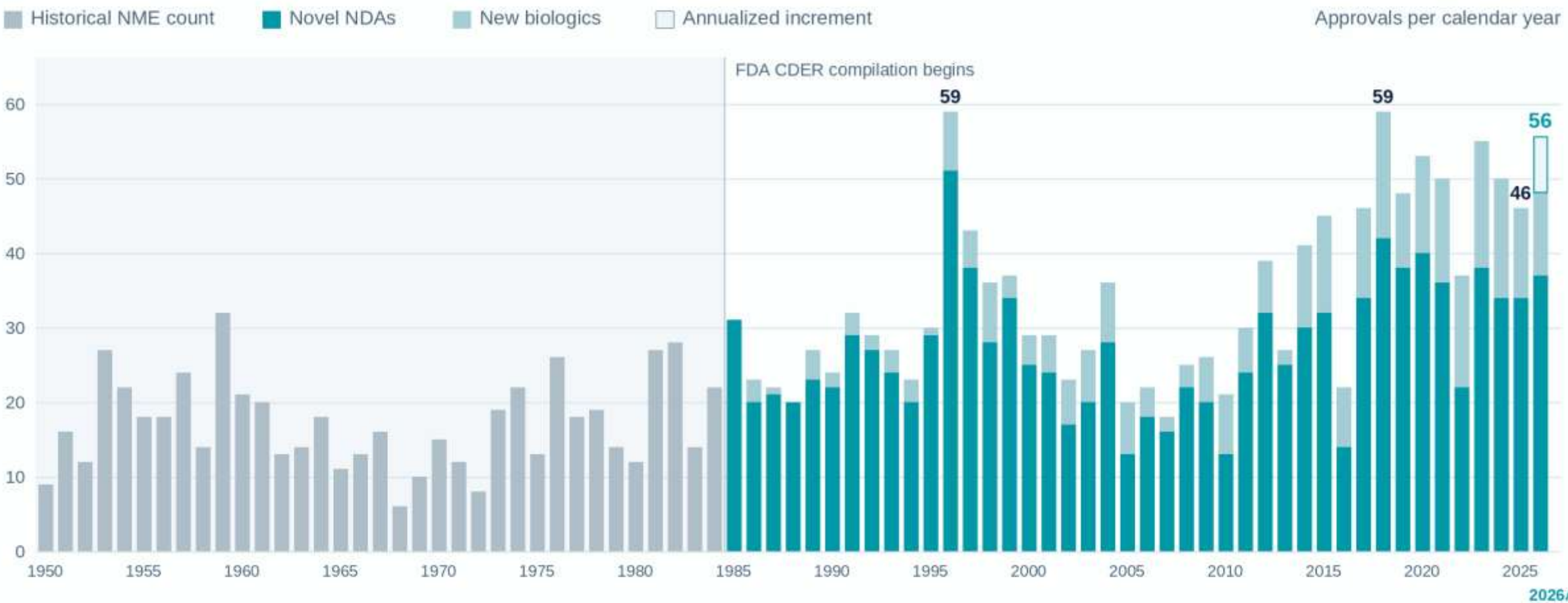
FDA Performance Update



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FDA Novel Drug Approvals Since 1950

2026 is on pace for 56 novel approvals, the most in eight years



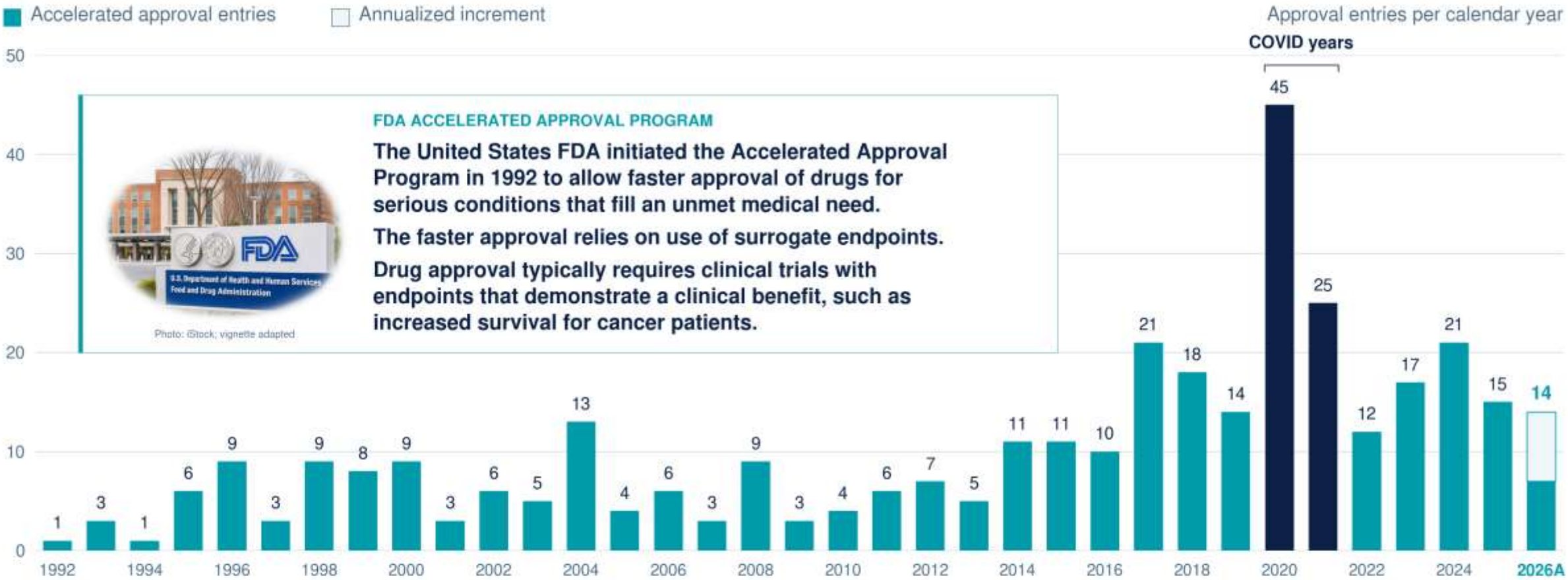
Sources: Philipson et al., Table A3 (1950–1984); FDA CDER NME and New Biologic Approvals compilation (1985–2025); FDA 2026 Novel Drug Approvals.

2026A = annualized through Nov. 11 (315 days): 37 novel NDAs and 11 biologics observed, multiplied by 365/315. CDER series excludes CBER approvals.

Novel NDA counts follow FDA review classifications. FDA uses a separate statutory definition for new chemical entity exclusivity.

FDA Accelerated Approvals by Year

2026 is on pace for 14 accelerated approvals, based on 7 in the first half



Source: FDA CDER, Accelerated Approvals as of June 30, 2026; Stifel Investment Banking Analysis.

2026A = 7 approvals through June 30 × 12 / 6 = 14. Earlier years show actual full-year counts.

Counts follow all 350 FDA table entries, including supplemental indications and formulations; these are not unique-drug counts.

FDA Expedited Review Programs

72% of CDER's 2025 novel drug approvals used at least one expedited program

1. What expedited review means

FDA programs that speed development and review of therapies for serious conditions.

Fast Track / Breakthrough Therapy
Earlier, closer FDA guidance during development

Priority Review
6-month action goal vs. 10 months for standard review*

Accelerated Approval
Earlier endpoints with required confirmatory studies

At least one program



2025 CDER novel drugs

2. National Priority Voucher pilot

Commissioner's National Priority Voucher (CNPV)

1–2 months target review period
Pilot launched June 2025

Nontransferable vouchers for selected national priorities
Advance submissions and coordinated FDA review
Same approval standards as other applications

Nov. 12: Reuters reports no new vouchers since May.
HHS says the pilot remains ongoing.

3. Review times in recent years

Median receipt-to-first approval, original NDAs/BLAs (months)



*2023–25 estimates. Includes all review cycles and sponsor response time.

4. Revolution Medicines: Rasonque

Daraxonrasib for metastatic pancreatic cancer

40 days from completed NDA receipt to FDA approval

NDA received July 17, 2026 **Approved August 26, 2026**

Full approval followed Phase 3 survival benefit.
CNPV, Priority Review and Real-Time Oncology Review (RTOR)
RTOR enabled data submission ahead of the full NDA.

For previously treated adults, or those unsuitable for multiagent therapy.

Sources: FDA CDER New Drug Therapy Approvals 2025 (p. 6); FY2025 PDUFA Performance Report (Fig. 2); CNPV website/FAQ; Rasonque approval/letter.
Reuters (Nov. 12, 2026). Stifel Investment Banking Analysis. *6-/10-month goals for NME NDAs and original BLAs start after the 60-day filing period.

Long-Term Pharma Industry Upside



STIFEL



The Case for Pharma Optimism

This section makes several points. Despite hand-wringing from so many quarters about pricing pressure over recent decades, the amount of money spent on medicines has risen disproportionately with wealth. And wealth has gone up twentyfold in real terms in the U.S. in the last century.

At the present moment where pessimism about pricing remains widespread we are seeing unprecedented value accretion in pharma. The top pharmas alone have gained over $1 trillion in value this year and biotech is up substantially as well despite some wobbles in the specialist fund sector caused by “degrossing.”

While no one expects wealth to rise twentyfold again in the next century there is substantial cause for optimism about the growth of the pharma sector. We note that one of the effects of modern medicine is to extend lifespans. As this happens people have more earning years which feeds wealth accretion. Also, ultimately, as we age the demand for medicines rises as we need them to deal with various chronic conditions that arise.

Technological advancement also matters greatly — both in the world of AI — which is also feeding wealth accretion (albeit unequally) and in the biosciences where knowledge and understanding of disease is growing exponentially with positive implications for patients.

One of the effects that we expect to see in time is more giant drugs. It was not so long ago that a billion-dollar “blockbuster” was extraordinary. Now, we are seeing $50 billion drugs emerge for the first time. Because of the buildup of wealth and biotech advances we expect to see more of these very successful drugs.

Four Sources of Industry Upside

01
Long-term demand growth



02
The effect of AI on healthcare demand



03
Acceleration of bioinnovation

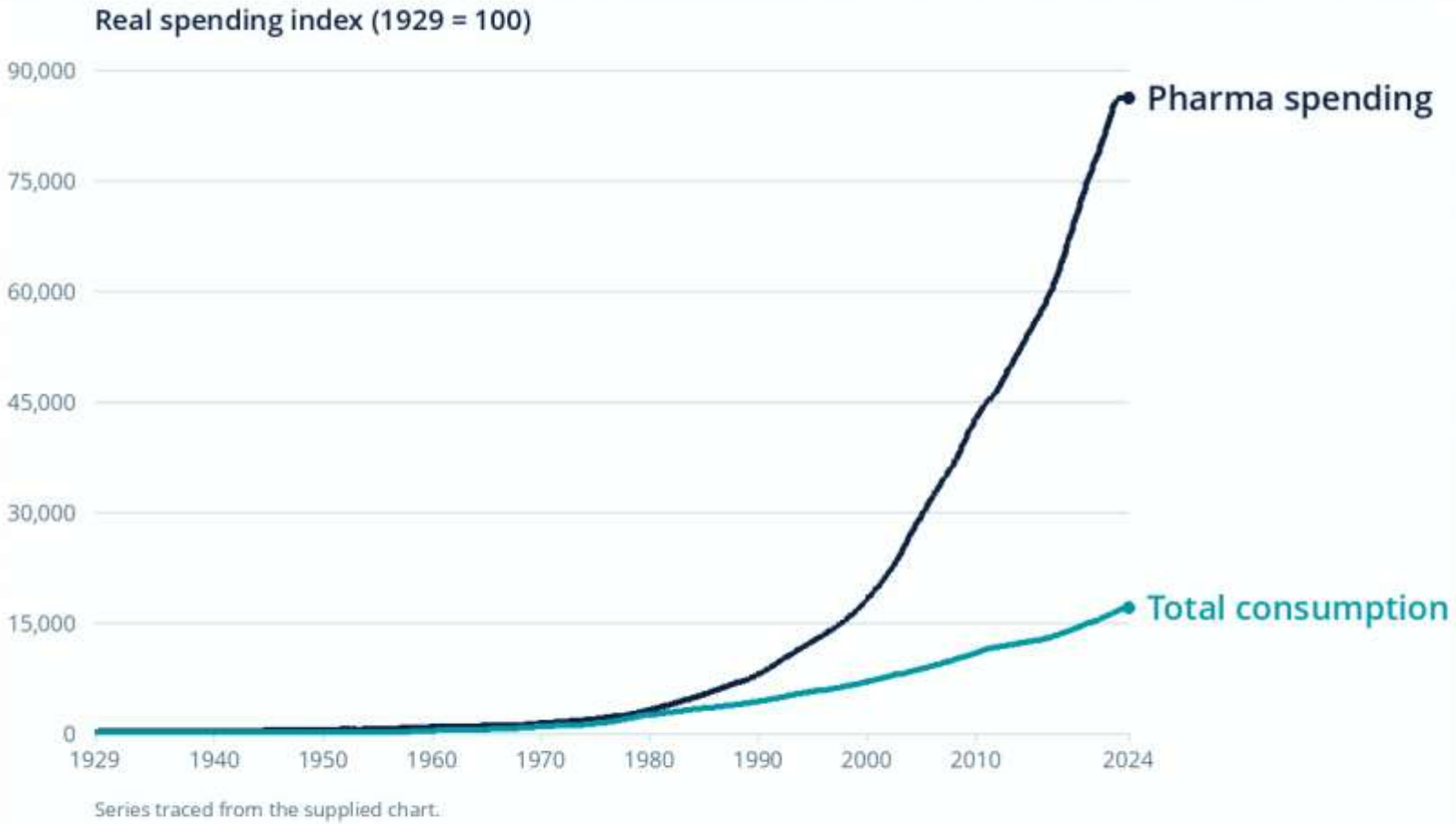


04
Ever more large scale drugs



Pharmaceutical spending outpaces consumption

Inflation-adjusted U.S. consumer expenditures and pharma spending, 1929–2024 (1929 = 100)



Series traced from the supplied chart.

>500%

Increase in pharmaceuticals' share of the consumer wallet since 1930



The share has risen faster since 1990.

More expensive drugs for life-threatening diseases, particularly biologics, and broader employer and government reimbursement likely contributed.

Source: Bureau of Economic Analysis, National Income and Product Accounts. Data through 2024.

Real growth over the last hundred years

100×
Pharma economy

>1
Income elasticity of pharmaceutical spending

20×
U.S. economy



As the world gets wealthier, more gets spent on medicines.

The Virtuous Cycle

The double dividend of medicines: longer life, greater prosperity and, ultimately, more use of medicines







More spending on medicines → **Longer, healthier lives** → **More years to work and save**

Greater prosperity supports more spending on medicines

The AI dividend supports healthcare demand

#1
Better AI

#2
Better productivity

#3
More wealth

#4
More pharma demand



AI can absorb investment dollars in the near term.

The longer-term thesis is higher economic growth and stronger pharma demand.

Extending USDA ERS's projected 2.7% annual real global GDP growth rate over a century implies a 14.4-fold rise in real global income — perhaps AI can add two to three turns to that.

Source: USDA ERS, EB-43 (2025), 2025–34 projection; century extrapolation and AI commentary: Stifel Investment Banking Research.

AI Is Made for Medicine

Four large opportunities in health and AI



Foundation models for biology

Purpose-built models for biology and medicine—from molecular insights to predicting kidney function.



AI Driven Labs

Fully AI driven wet labs that can go from molecular target to in vivo pharmacology rapidly, at much lower cost than traditional methods.



Massively better healthcare

Better differential diagnosis and care models, with optimized pathways to improve outcomes.



AI agents in the back office

Automate paperwork, insurance claims and routine administrative work.

AI can improve pharma’s capital productivity

Operating gains can create value before better clinical success rates are established



Clinical operations

Patient and site selection, enrollment forecasting and data cleaning can shorten execution.

Regulatory work

Submission drafting and medical writing can reduce administrative work and free expert time.

Capital productivity

Lower costs and earlier decisions can fund more R&D or support margins as savings emerge.

Savings improve earnings only to the extent companies retain them rather than reinvest them

Source: Stifel Investment Banking Analysis.

Why BioInnovation is Getting Better and Faster

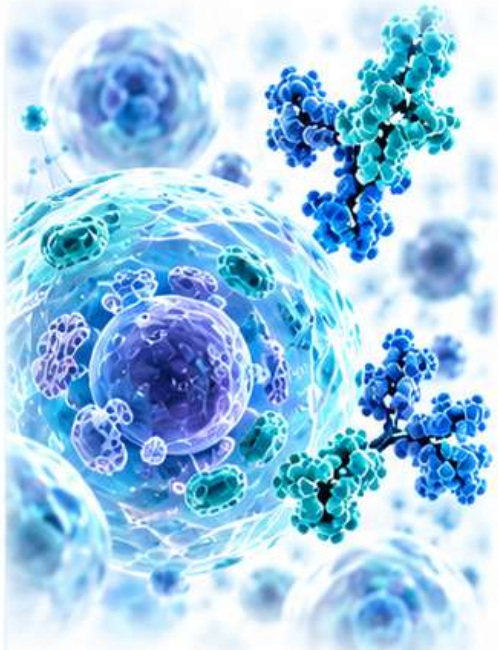


Better at Genetics

Can solve multi-gene diseases

Can handle somatic mutations

Can solve many more problems



Better at Biology

Single-cell insights

Insights from omics

Powerful new tools

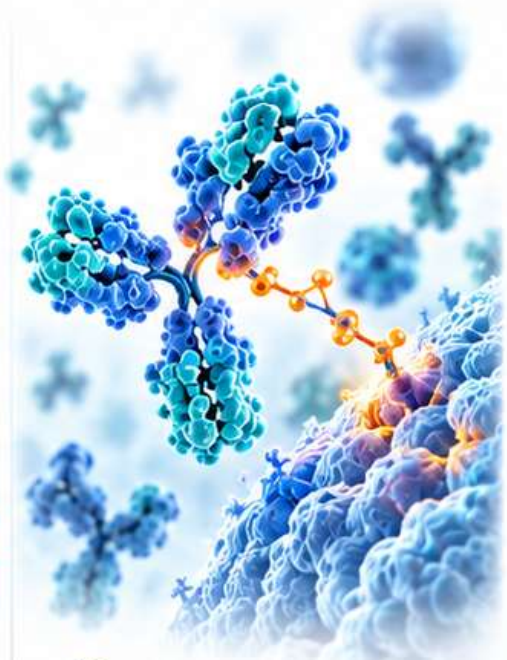


Better Information

Open science movement

Low-cost access to quality bioinformatics

AI to interpret data



Better Design

Target specific tissues (e.g., ADCs)

Control drug release

Program drug behavior



Better Execution

Organizational diversity

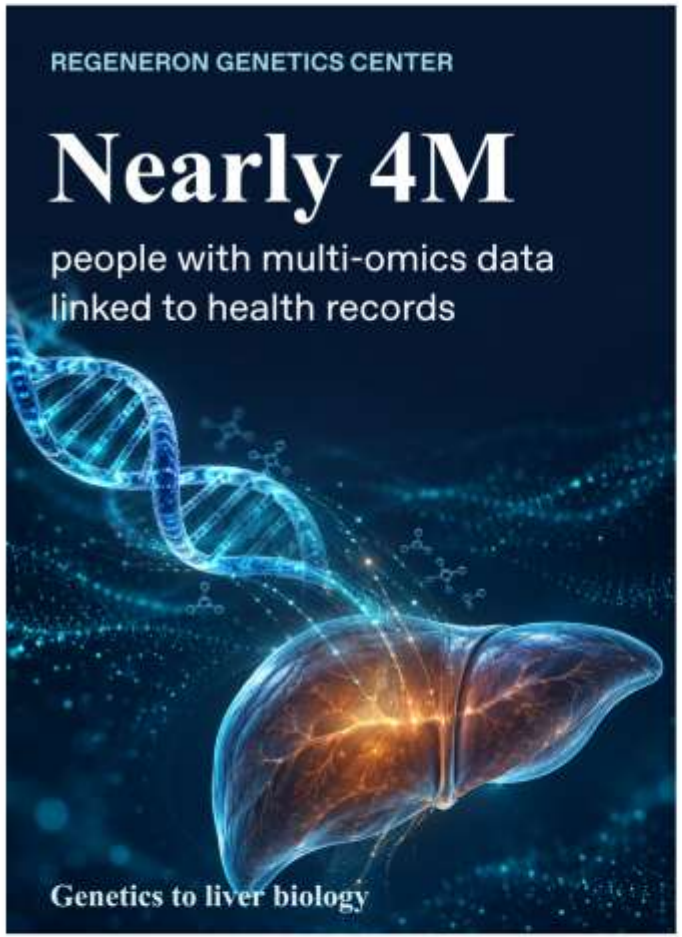
Geographic diversity (e.g., China)

Vastly improved outsourcing

Regeneron Shows the Power of Genetic Scale

Larger cohorts reveal rarer protective variants and help identify new drug targets

REGENERON®



HSD17B13

2018 publication

~46,000
samples in initial study

~1 in 3
variant carriers*

16% lower risk of MASLD

CIDEB

2022 / 2026 publications

540,000
samples in initial study

1–2M samples in the 2026 confirmation

~1 in 500
variant carriers*

43% lower odds of MASLD/MASH

22% lower liver fat

FNIP1

2026 publication

>1 million
samples in initial study

~1 in 5,000
variant carriers*

68% lower liver fat

61% lower composite cardiometabolic risk†

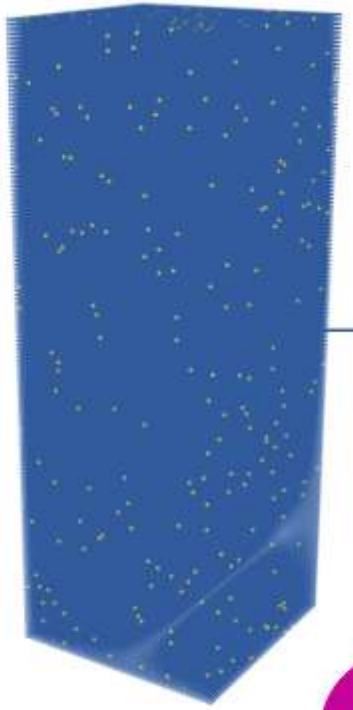
Genetic scale helps identify protective biology and prioritize new MASH targets

Source: Stifel Investment Banking Analysis, based on Regeneron Roundtable, MASH + RGC, November 10, 2026, slides 4, 9 and 22–23.
Associations in loss-of-function carriers, not drug-treatment effects. Endpoints differ. Years indicate publication. *Carrier frequencies: most recent publication.
MASLD = metabolic dysfunction-associated steatotic liver disease. †Composite: myocardial infarction, type 2 diabetes, metabolic dysfunction-associated liver disease and cirrhosis.

RGC discovery that genetic loss of CIDEB led to protection of liver disease has translated to clinical proof-of-concept

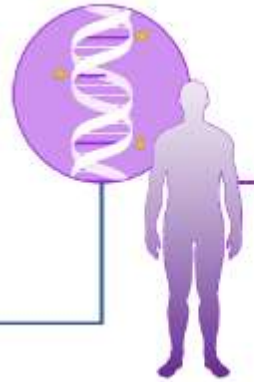
Proof-of-concept results with our CIDEB-silencing siRNA support the target as a potential medicine for the growing MASH patient population

Analysis of millions of individuals



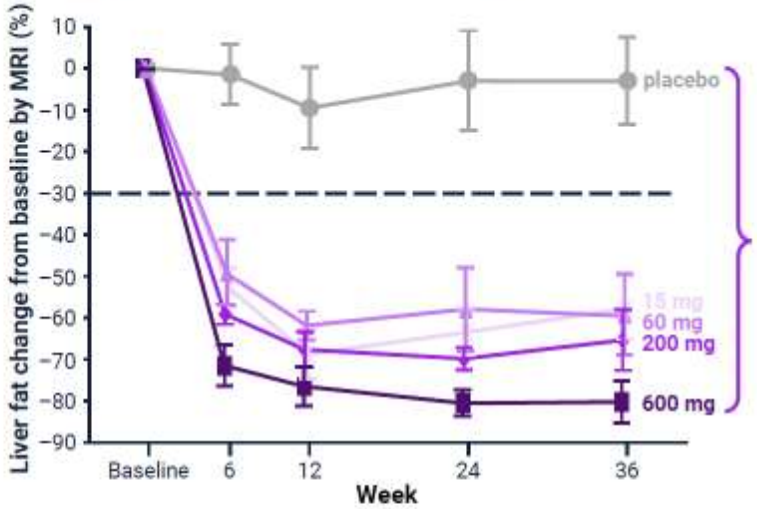
1 person out of ~500 carries the protective allele

CIDEB loss-of-function (LOF) mutations



Carriers of rare protective CIDEB LOF variant have less liver fat, lower serum ALT and a 43% lower risk of developing MASLD/MASH

Single dose of CIDEB^{siRNA} induced rapid, deep, and long-lasting normalization of liver fat in patients with MASLD*



up to 80%
reduction in liver fat from baseline

Clinical benefit with CIDEB^{siRNA} validates our genetics-driven target-discovery approach

RGC has developed a new MASH proteomics assay that can replace invasive liver biopsy

References:
Verweij N et al. N Engl J Med. 2022
Norton T et al. N Engl J Med. 2026
ALT – Alanine transaminase; *Part A of ongoing FIH trial NCT06836609; N=40

REGENERON

This slide contains investigational drug candidates that have not been approved by any regulatory authority.

Where Biopharma Is Creating Value

Four scientific advances to watch in 2027



Next-wave obesity drugs

Orforglipron brings an oral GLP-1 to market.

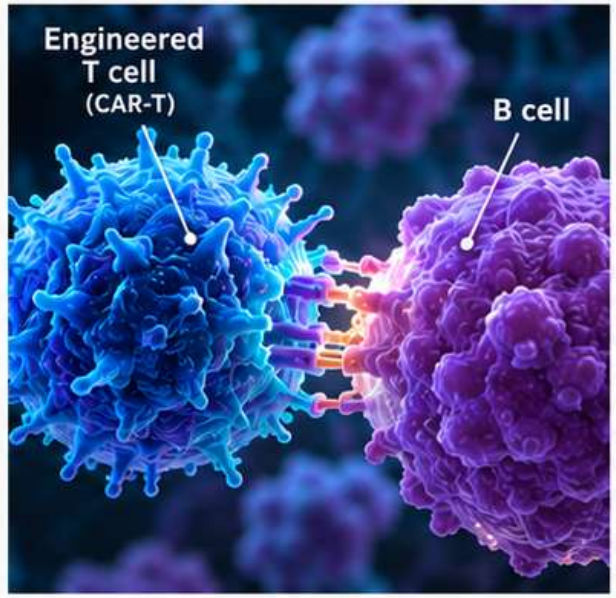
2027 test: dosing, tolerability and muscle preservation.



In vivo gene editing

Intellia reported an 87% drop in monthly HAE attacks in Phase 3.

2027 test: payer adoption of one-time therapies.



Cell therapy in autoimmunity

Serious infections sharpen the safety bar.

2027 test: safer, simpler approaches, including in vivo CAR-T.



AI drug discovery

Insilico advanced rentosertib into Phase 3.

2027 test: clinical results, IP and data ownership.

BCG: New Modalities Driving an Increasing Share of Pharma Value

Conventional therapies drove pipeline growth as the outlook for newer modalities diverged.

Five-year forward pipeline value

$198B

Projected for new modalities
Roughly flat year over year

Share of projected value



Where the outlook diverged

Antibodies mature commercially

Projected value for marketed monoclonal antibodies rose $24B.
ADC pipelines expanded, led by companies in China and South Korea.

Gene editing and nucleic acids advance

Gene editing forward value grew at a 21% CAGR from 2020 to 2026.
DNA and RNA therapies expanded while mRNA forecasts fell.

Cell therapy and radiopharma diverge

CAR-T gained commercial validation, while its clinical pipeline value fell.
Radiopharmaceuticals posted the fastest product-count growth.



New Modalities Driving Dealmaking

$127B

Reported value across 50 new-modality deals
by the top 20 biopharmas, H2 2025–May 2026

~50%

Share of those companies' 2026 YTD
new-modality deal value from China-origin assets

$1B–$5B

Market-cap range where BCG sees a clinical
inflection point for cell and gene therapy M&A

Source: Boston Consulting Group, New Drug Modalities 2026, October 22, 2026. Pipeline values reflect analyst forecasts.

The transition to more $50 billion drugs



The past

Low prices, big markets

A few blockbuster drugs for broad populations. High prices were also used for small markets such as rare diseases.



The specialty shift

High prices, small markets

Specialty and rare-disease drugs created substantial value in smaller patient populations.



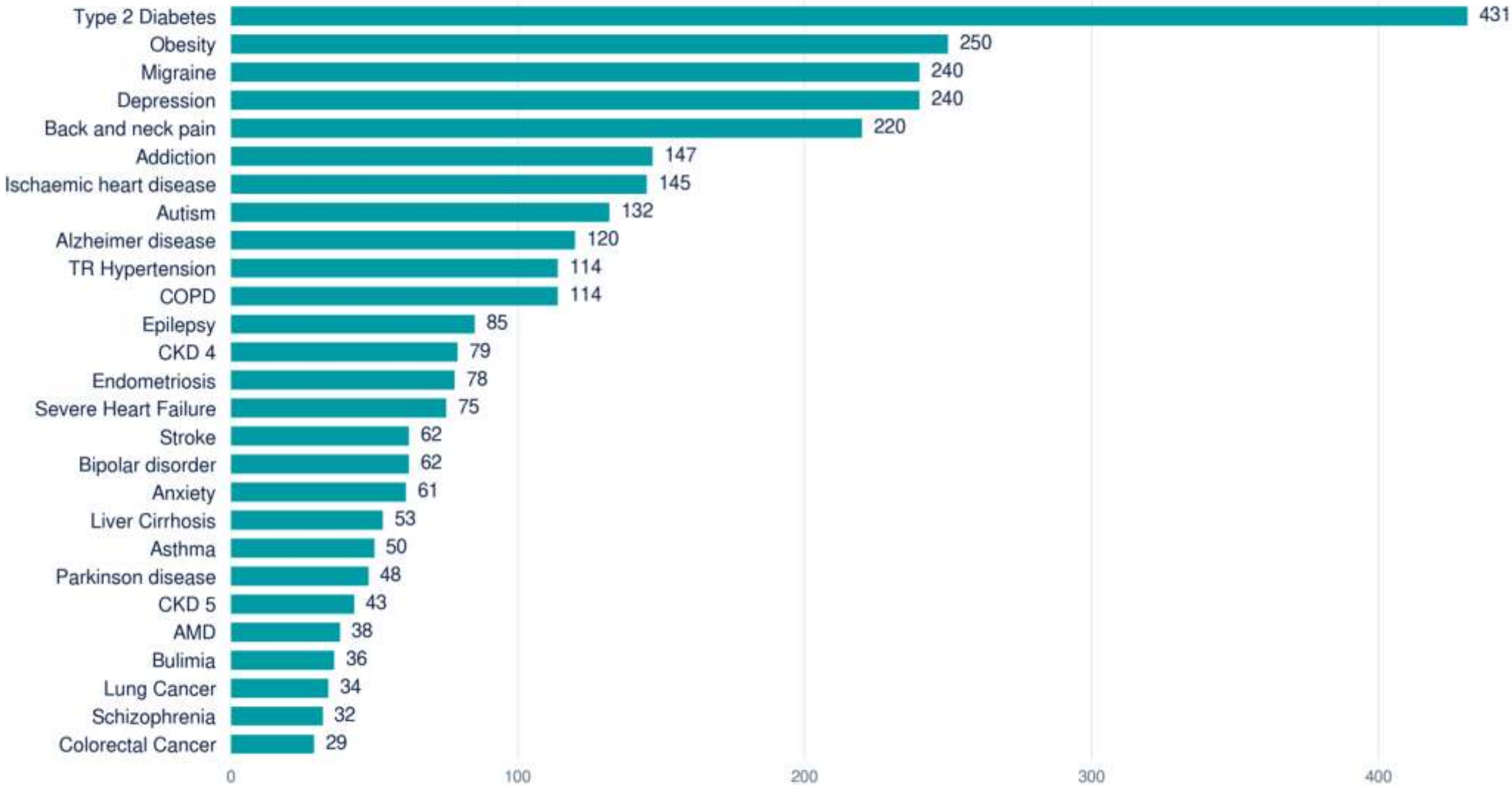
The future

Medium prices, huge markets

Millions of patients expand total addressable markets and create scope for much larger valuations.

Large markets at medium prices

Selected indications with large patient populations. Total addressable market ($bn).



Source: Stifel Investment Banking analysis based on U.S. prevalence/incidence and pricing tolerance in the same or similar diseases.

Biotech vs. the S&P 500 Since 1993

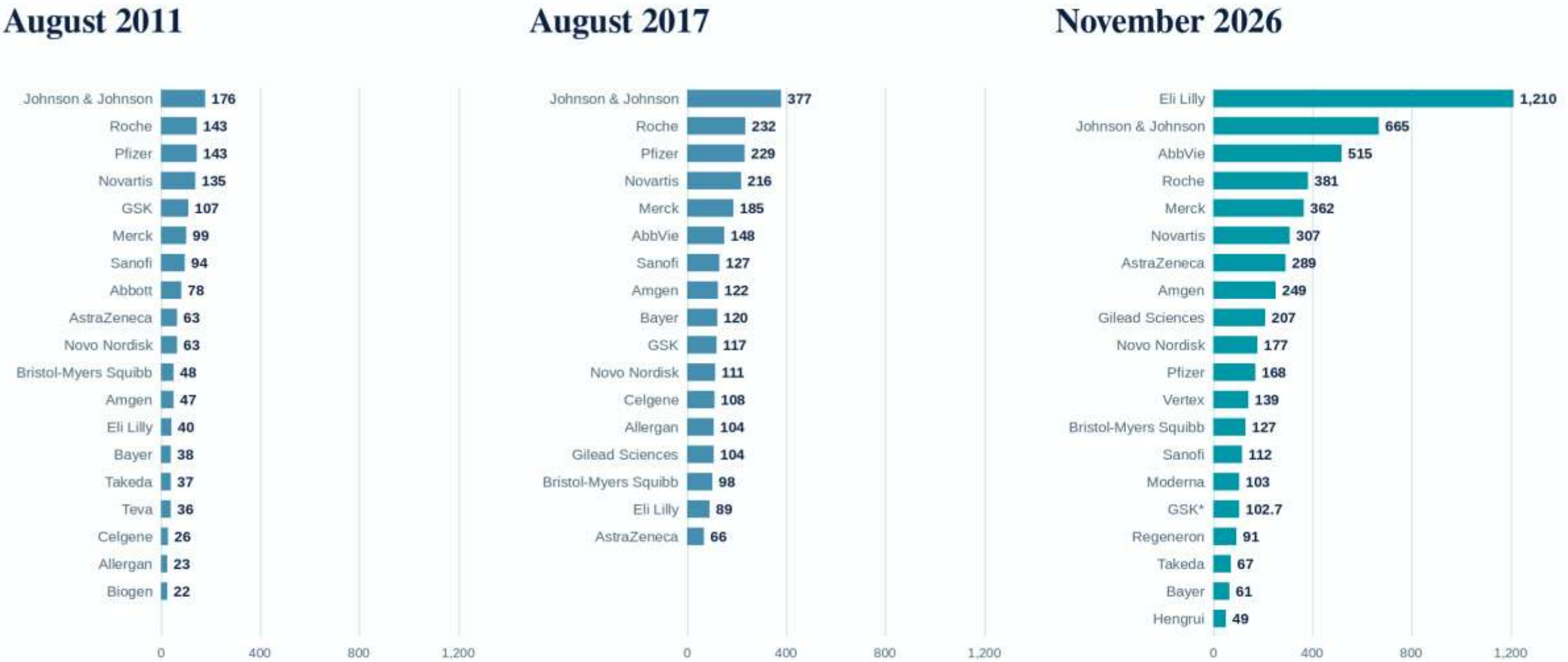
Cumulative price return • November 1, 1993 to November 10, 2026



Source: Yahoo Finance historical index closes (^NBI, ^GSPC). Monthly closes plus the November 10, 2026 close.
Both lines start at 0% using the November 1, 1993 closing levels. Price returns exclude dividends.

Pharma Market Capitalizations Across 15 Years

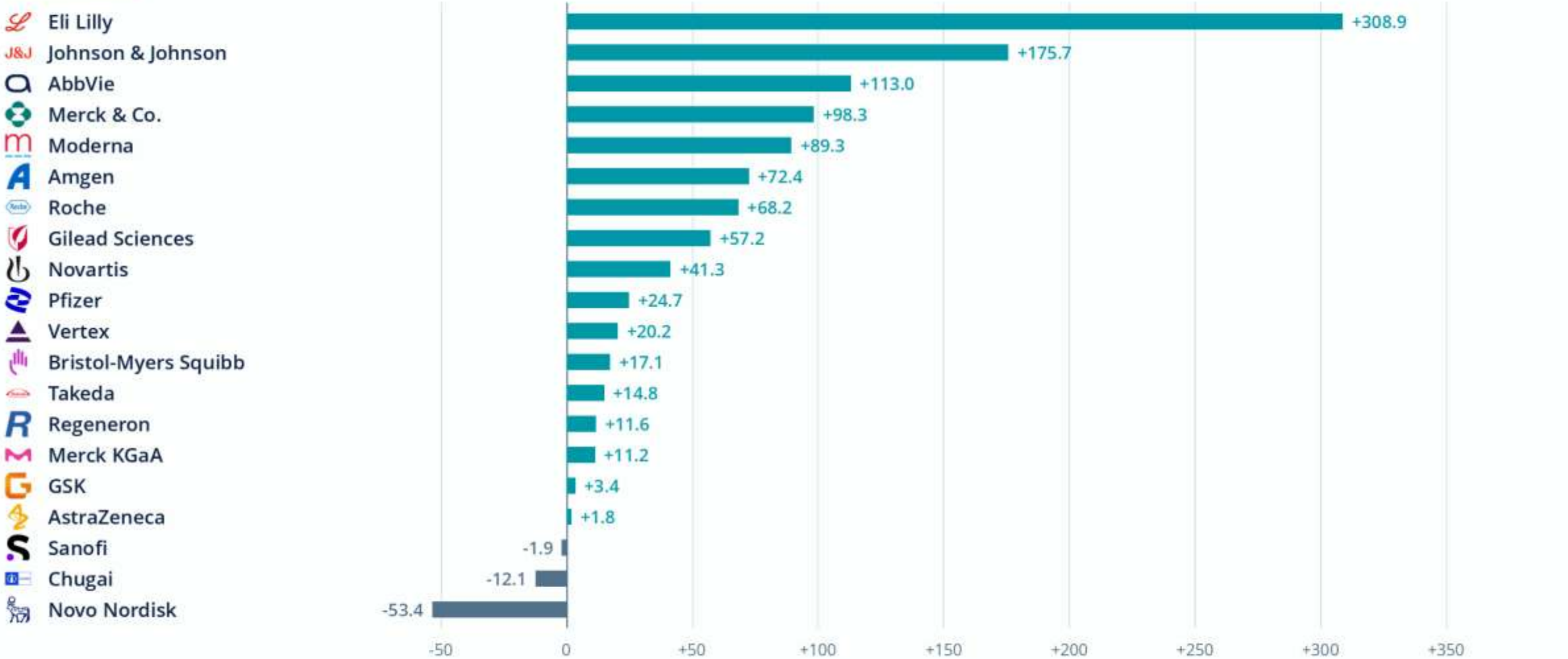
Market capitalization of selected listed biopharma companies (US$ billions)



Sources: Historical market-cap chart, Stock Analysis (November 6, 2026), and Wise (CNY/USD). * GSK uses the November 10 CompaniesMarketCap snapshot. Company lists differ across dates.

Market Cap Changes Across the Top 20 Pharmas

Dollar change in market capitalization, Dec. 31, 2025 to Nov. 10, 2026 (US$ billions)



Sources: CompaniesMarketCap year-end 2025 market caps and November 2026 snapshots, Yahoo Finance, and Stock Analysis.

Cohort ranked by Nov. 10 market cap. Excludes pharmacy retailers and contract manufacturers. Local listings use estimated Nov. 10 USD values.

McKinsey: Pharma Performance Tied to Decision-Making on Portfolio Renewal

McKinsey & Company

November 2026 study of 16 biopharma companies

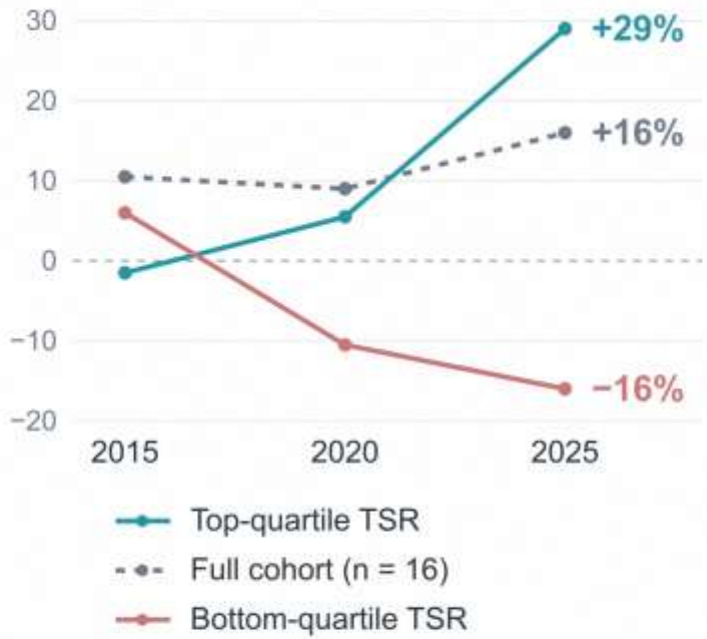
Value Creation Diverges

Enterprise value (US$ trillion)



The Portfolio Renewal Premium

Implied future R&D (% of enterprise value)



Six Dimensions of Decision Quality

Stewardship. CEOs own decision rights, escalation paths and time for challenge, including AI model governance.

Standards. Testable hypotheses and triggers. AstraZeneca's 5R raised candidate-to-Phase III success from 4% to 19%.

Processes. A decision calendar sequences choices. Progression gates resolve the uncertainties most material to value.

People. Reward well-justified terminations, not just phase transitions. Teams challenge AI outputs.

Ecosystem. Stress-test "the science" with external input and engage patients and payers early in development.

Capital agility. Move capital across programs, BD and M&A toward differentiated opportunities. Bottom-quartile firms spent more on acquisitions and created less value.

Top-quartile enterprise value grew roughly sixfold over 2015–2025. Bottom-quartile enterprise value remained broadly flat.

Note: Cohort ranked by total shareholder return (TSR). The implied value of undisclosed future R&D reflects market expectations for portfolio renewal and is not a direct measure of decision quality. Underlying sources: S&P Capital IQ, company filings and Evaluate archives.

Source: McKinsey study, November 2026; nature.com/articles/d41573-026-00173-8; Stifel Investment Banking Analysis.

Biopharma M&A to Continue



STIFEL

M&A on pace for $220.4bn in 2026

Worldwide M&A value ($bn); 2026 annualized through November 10



$220.4bn

2026 annualized value

$189.6bn YTD

× 365 / 314 elapsed days

Below the 2019 peak

2019: $328bn

2014: $227bn

2025: $223bn

The current run rate is approximately level with 2025.

Sources: S&P Capital IQ / DealForma; Stifel Investment Banking Analysis.
2026 includes M&A and asset sales; excludes Shionogi's minority Viiv investment.
A = annualized, based on January 1–November 10 (314 days).

M&A Has Slowed Down in the Second Half of 2026

The spring acquisition wave gave way to a quieter third quarter

2026 acquisition value by quarter ($bn)



Momentum moderated

−56%

Q3 value versus Q2

$7.4bn

October value, up from $2.4bn in September

Q4 is a partial period.

Do not compare it with a full quarter.

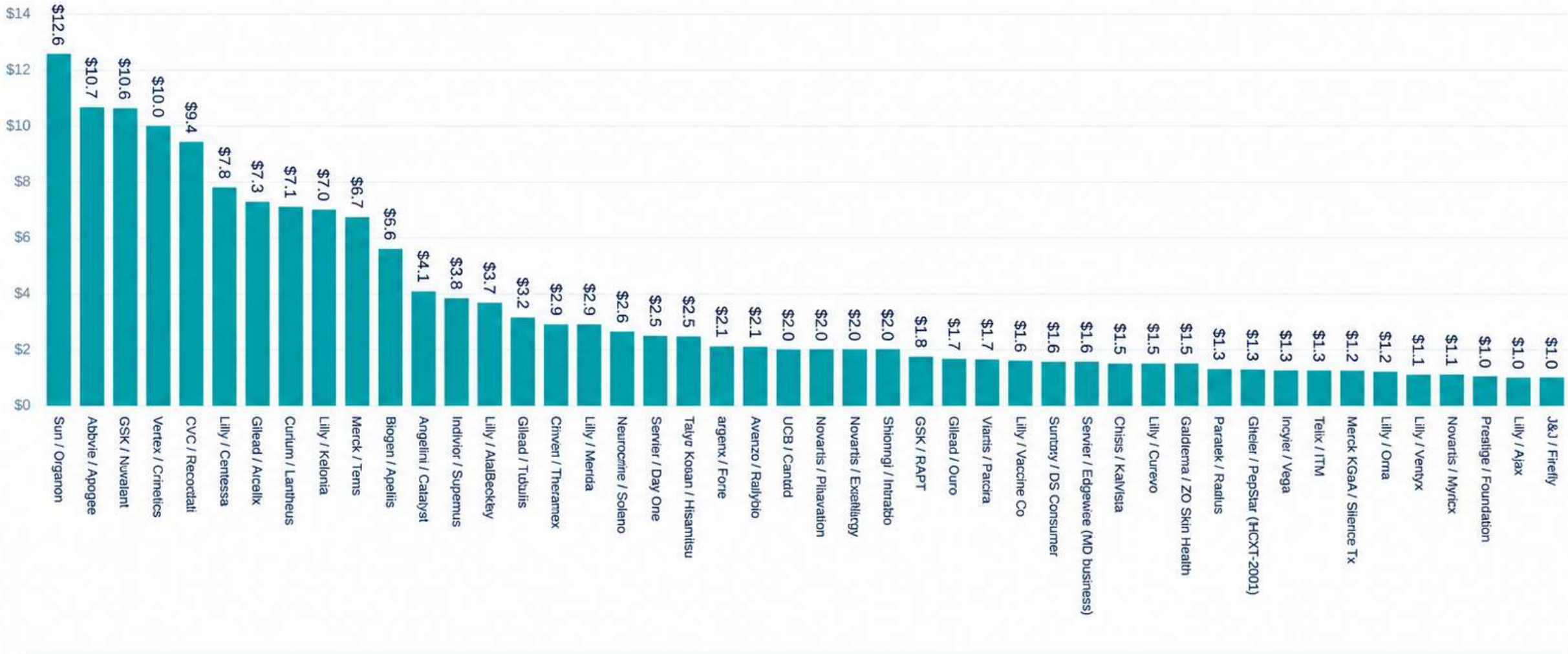
Recent improvement has not yet restored the pace of the spring acquisition wave.

Source: DealForma

Values include disclosed contingent consideration. 2021–2025 are full years; 2026 is through November 10. Undisclosed values excluded from value statistics.

Forty-six $1bn+ M&A Deals in 2026

Recorded deal value ($bn), January 1–November 10, 2026



Annualized pace: 53.5 deals, based on 314 elapsed days.

Source: Stifel Investment Banking Analysis; Biopharma Events worksheet, through November 10, 2026. Values rounded.
Includes acquisitions and announced mergers / reverse mergers; excludes the announced GSK / ViiV investment.

Forty Selected Biopharma Companies Can Deliver $220 Billion in 2034 Revenue (S&P CapitalIQ Analyst Consensus Estimates)

These companies have an enterprise value today of slightly more than $500 billion — trading in total for 2.5 times revenue.

Market capitalization range: approximately $0.8bn–$60.7bn (November 11, 2026 close)



Source: S&P CapitalIQ analyst consensus estimates, November 2026. Bar heights and labels are approximate, reproduced from the supplied chart.

Private companies and pipeline assets gain share

Buyers commit more capital before commercialization

Private-company acquisition value



Share of M&A value: 32% to 39%

Phase II acquisition value



Share of M&A value: 14% to 32%

Discovery and preclinical value



21 transactions in each period

Approved assets' share of value



Value mix shifts toward development programs

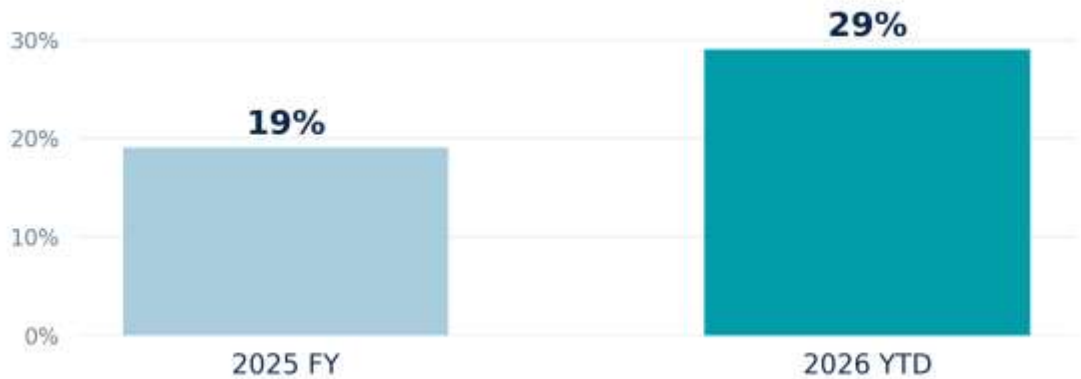
Source: DealForma export, November 10, 2026. Biopharma sellers; excludes terminated deals and acquisition options.

Values include disclosed contingent consideration. 2021–2025 are full years; 2026 is through November 10. Undisclosed values excluded from value statistics.

The buyer base broadens as priorities sharpen

Midsized buyers gain share; oncology and immunology attract more capital

Midsized public buyers gain share



Disclosed value: $28.7bn to $51.2bn

Buyer categories can overlap in multi-buyer deals.

Selected therapeutic areas ($bn)



Oncology: 36% of 2026 value

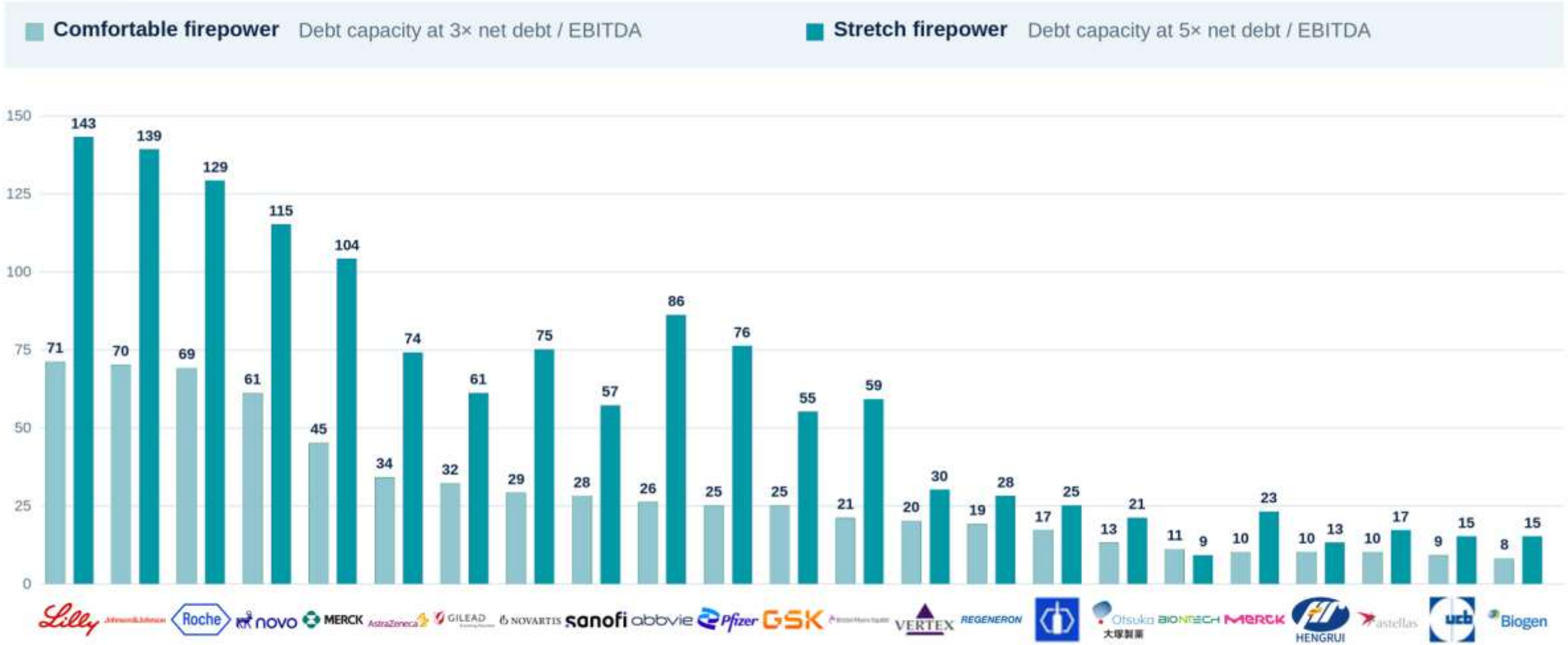
Autoimmune / inflammation: 13%

Top ten deals: 49% of 2026 value, down from 60% in 2025 and 74% in 2023.

Source: DealForma export, November 10, 2026. Biopharma sellers; excludes terminated deals and acquisition options.
Values include disclosed contingent consideration. 2021–2025 are full years; 2026 is through November 10. Undisclosed values excluded from value statistics.

Top Pharmas Have $1.5 Trillion of M&A Firepower

November 2026 • 23 biopharma companies • US$ billions



Source: S&P Capital IQ and Stifel Investment Banking Department analysis, as shown in the supplied chart.

The source reports $1.5T of stretch firepower. The displayed company values sum to $1.369T for stretch and $663B for comfortable firepower.

M&A Priorities of Top Biopharma Acquirors

2026 strategic priorities and enterprise values

Lilly — EV $1.25T
Active acquirer. Expanding beyond cardiometabolic into oncology, neuroscience, immunology and infectious disease.

Johnson&Johnson — EV $694B
Favors early assets in oncology, immunology, neuroscience, CV, surgery and vision. Open to larger deals.

abbvie — EV $570B
After Apogee, priorities include immunology, neuroscience, oncology and aesthetics. Selective interest in obesity.

Roche — EV $380B[1]
Selective across stages. Building cardiometabolic alongside oncology, immunology and neuroscience.

AstraZeneca — EV $280B
Serial bolt-ons and licensing. Focus on oncology, cardiometabolic, rare disease and respiratory.

MERCK — EV $400B
Building ahead of Keytruda's patent expiry. Focus on oncology, immunology, cardiometabolic and infectious disease.

NOVARTIS — EV $310B
Favors sub-$2B bolt-ons. Larger deals face a high bar. Priorities include CV, immunology, neuroscience and oncology.

AMGEN — EV $292B
Early-stage deals and licensing in oncology, inflammation, rare disease and cardiometabolic. Open to larger deals.

Boehringer Ingelheim — EV ~$225B[2]
Favors options and licenses, mostly early-stage. Targets immunology, oncology, cardio-renal-metabolic and mental health.

Pfizer — EV $233B
Prioritizes Metsera integration and deleveraging. Licenses over large M&A. Focus on oncology, obesity, I&I and vaccines.

GILEAD — EV $230B
Builds in oncology, inflammation and HIV. Recent deals emphasize cell therapy, ADCs and T-cell engagers.

novo nordisk — EV $183B
Favors bolt-ons. Building cardiovascular, liver, blood and endocrine franchises, with fewer obesity targets.

Bristol Myers Squibb — EV $160B
BD is a top capital priority. Pursues multiple deal structures across oncology, hematology, immunology, neuroscience and CV.

GSK — EV $115B
Targets $2–4B deals. Focus on oncology, respiratory and allergy, immunology and liver.

sanofi — EV $115B
Targets late-stage and marketed assets in the $500M–$5B range, plus bolt-ons. Focus on immunology, rare disease and vaccines.

VERTEX — EV $125B
Selective deals that add new disease areas. Crinetics expands its reach into rare endocrine disease.

Takeda — EV $92B
Near-term focus on launches and restructuring. Large M&A is a lower priority.

Bayer — EV $93B
Debt limits deal capacity. Selective in oncology, cardiology, neurology and immunology.

MERCK — EV $80B
Seeks de-risked specialty and rare disease assets, consistent with its specialty innovation strategy.

CSL — EV $72B
Restructuring favors external innovation. The Alentis license points to rare disease and nephrology bolt-ons.

[1] Roche includes Chugai. [2] Boehringer Ingelheim EV is implied from a revenue multiple. CV = cardiovascular. I&I = immunology and inflammation.

Source: Supplied biopharma acquiror analysis. Enterprise values are in U.S. dollars.

Pharma M&A demand should remain strong



$400bn+

Revenue exposed to patent expirations over five years, about 40% of industry sales

$1Tn+

Pharma industry buying capacity

Spotty internal pipelines

Current pipelines are not strong enough to offset the patent cliff, creating an urgent need for external acquisitions.

M&A Driver: Over $50 Billion a Year in Sales Exposed to Patent Expiries Through 2034

Stifel estimates by year of loss of exclusivity, 2026–2034

ANNUAL SUBTOTAL OF PEAK SALES ESTIMATES ($BN)



ESTIMATED PEAK SALES BY PRODUCT AND MARKETER ($BN)

2026		2027		2028		2029		2030		2031		2032		2033		2034	
Eliquis (Pfizer)	$6.1	Trulicity	$7.1	Keytruda	$35.0	Darzelex	$12.0	Farxiga	$9.5	Dupixent	$21.0	Semaglutide	$24.0	Skyrizi	$22.0	Tezspire	$4.3
Eliquis (BMS)	$6.1	Ocrevus	$7.1	Opdivo	$11.0	Cosentyx	$4.8	Verzenio	$8.1	Evenity	$3.4	Tagrisso	$13.0	Biktarvy	$18.0	Opdualag	$2.6
Prolia	$4.0	Xtandi	$6.3	Gardasil 9	$8.9	Enbrel	$5.0	Tafinlar	$3.0	Kisqali	$10.4	Entyvio	$8.0	Prevnar 20	$7.5	Nurtec ODT/Vydura	$4.0
Pomalyst	$2.3	Jardiance (Boehringer)	$4.5	Paxlovid	$5.0	Repatha	$4.4	Olumiant	$1.1	Kesimpta	$6.9	Trodelvy	$3.0	Austedo	$4.0	Pluvicto	$5.0
Xeljanz	$1.7	Jardiance (Eli Lilly)	$4.5	Yervoy	$2.5	Tresiba	$1.7	Krystexxa	$1.4	Cabenuva	$3.2	Tepezza	$2.9	Ajovy	$3.0	Leqvio	$4.5
Xolair (Roche)	$1.8	Ibrance	$5.4	Nplate	$2.8	Nucala	$2.9	Blincyto	$2.4	Tremfya	$9.6	Calquence	$4.4	Scemblix	$4.1	Fabhalta	$3.6
Xolair (Novartis)	$1.5	Lynparza	$2.5	Otezla	$2.1			Ojjaara	$1.6			Erleada	$4.0	Enhertu	$2.6	Imjudo	$1.2
Summadex	$1.8	Imfinzi	$6.1	Triumeq/Tivicay	$2.4			Dovato	$3.5					Padcev	$4.4		
Vynqadel	$6.4	Bexsero	$1.6	Jakafi	$3.0			Breztri	$1.9					Lorbrena	$1.8		
Fasenra	$1.2	Trelegy Ellipta	$4.2	Xifaxan	$2.0			Taltz	$3.8					Cobenfy	$3.7		
Perjeta	$3.3							Vraylar	$3.6					Reblozyl	$3.3		
Revlimid	$2.9																
Januvia	$2.5																
Orencia	$3.7																

Source: Stifel Investment Banking Analysis, Patent Cliffs workbook (Base Data). Figures use the workbook's Peak Sales column.
LOE timing is estimated.

Over $450 Billion in Pharma Revenue at Risk Through 2034

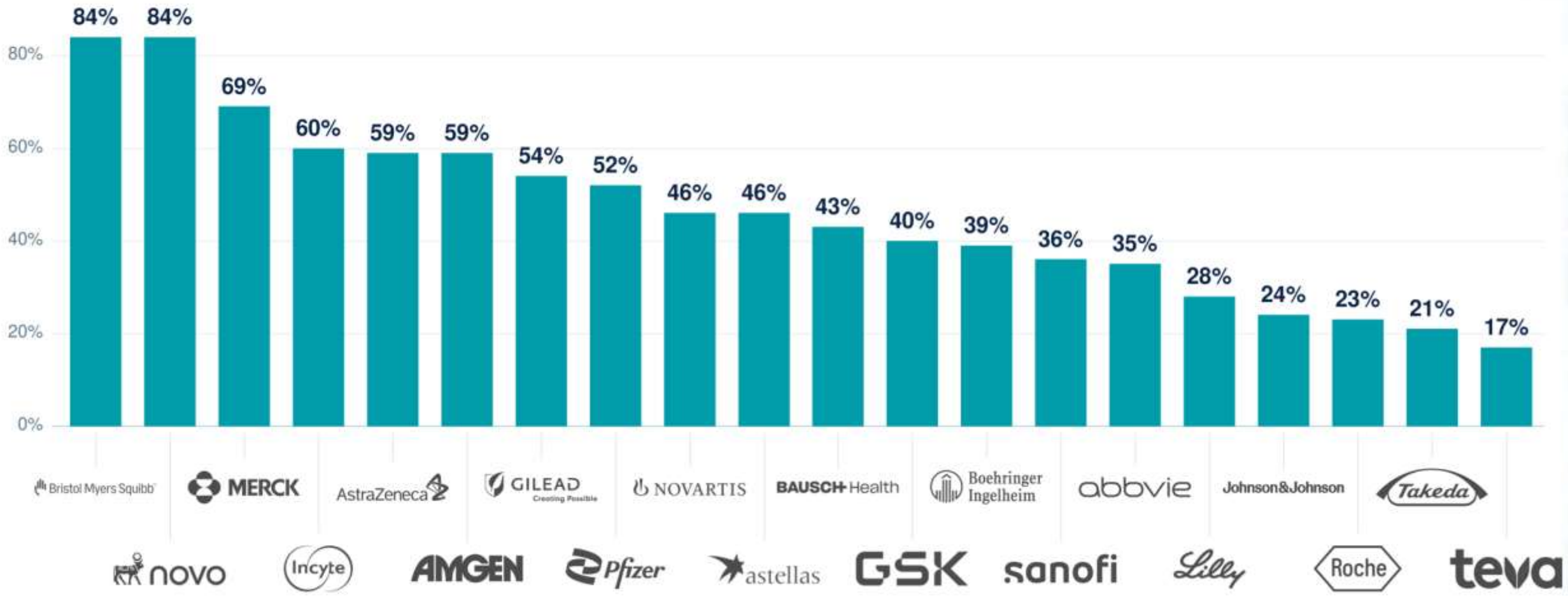
Sum of Peak Revenue ($bn) from Products with Expected Loss of Exclusivity, 2026 to 2034



Source: Stifel Investment Banking analysis of a worksheet that tracks LOE dates and peak sales estimates taken from brokerage reports, online databases and news stories.

High Variability in Exposure to Patent Expiries

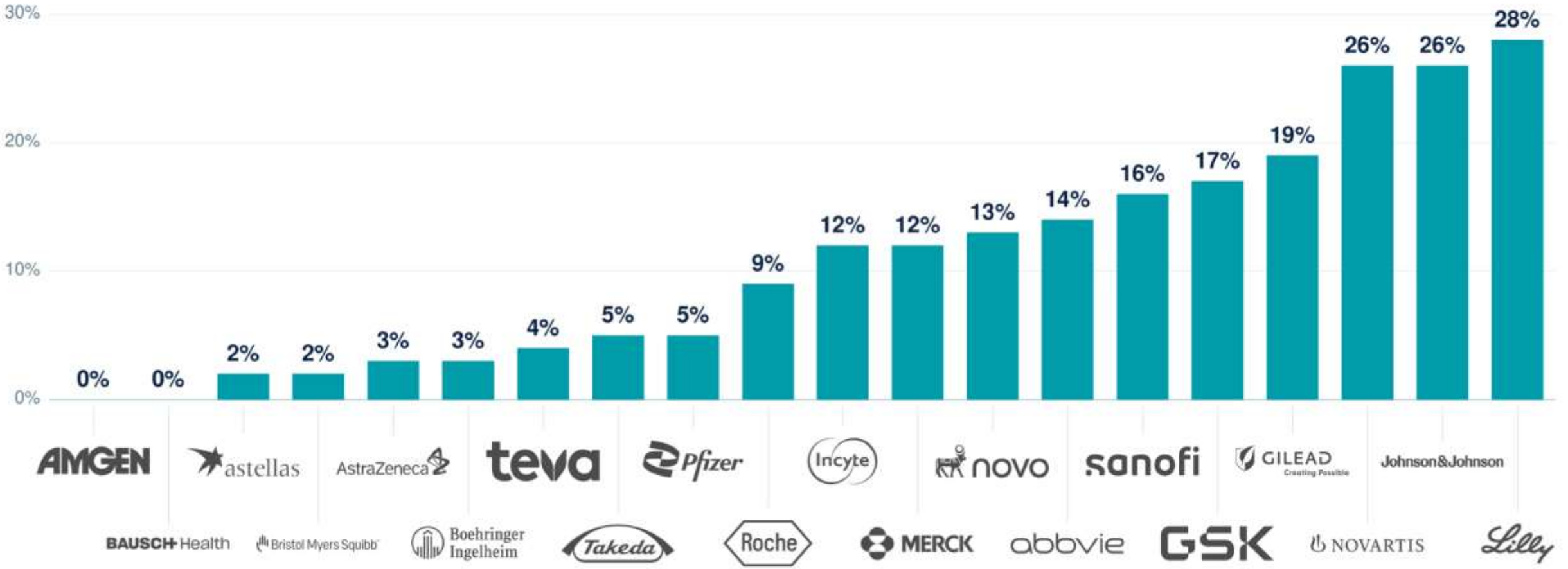
Share of 2025 Human Health Revenue from Products Losing Exclusivity, 2026 to 2034



Source: Stifel Investment Banking analysis of a worksheet that tracks LOE dates and peak sales estimates taken from brokerage reports, online databases and news stories.

Pharma Replaced Only 10% of Revenue at Risk via M&A and Licensing in the Jan 2024 to Oct 2026 Period

Revenue purchased (Jan 2024 to Oct 2026) divided by LOE exposure (2026 to 2034)



Note: Purchased revenue was computed using the sum of all amounts paid upfront in licensing and M&A deals by that buyer, divided by six, according to DealForma, between Jan 1, 2024 and Oct 31, 2026.

Observed Pharma Preferences on M&A Announcements

Because 2028 is an election year, M&A may be concentrated in 2027.



Avoid Getting Near Elections

Pharma companies appeared to reduce M&A announcements as the November 2026 election approached.

Large deals attract media and political attention. Critics such as Elizabeth Warren can use them to portray an administration as too close to pharma and too lenient on drug pricing.

Our interpretation: timing of M&A slowdowns is deliberate.



Avoid M&A in Periods of High Uncertainty

Large pharma deals slowed amid tariff announcements and pressure to reduce drug prices.

When policy is unsettled, buyers find it harder to assess future revenue, margins and valuations. Boards may delay major commitments until the rules become clearer.



Favorable Backdrop for M&A Activity in 2027

With presidential primaries beginning in January 2028, drug pricing is likely to become increasingly politically sensitive.

2027 offers a potential window for acquisitions before campaign scrutiny intensifies. Given the enormous need to replace revenue lost to patent expiries, we may see elevated M&A activity in 2027.

Sources: Author observations and outlook; Reuters, March 26, 2025; DNC, August 15, 2026.

M&A themes going forward

What we are hearing from buyers



2027 M&A outlook

Meaningful deals remain likely through the end of 2026. The tailwinds appear to be in place to support a high-volume year for biopharma M&A in 2027.

Lilly's GLP-1 dividend

GLP-1 cash generation should fund portfolio expansion through M&A. Larger deals are possible.

A broader buyer base

Medium-large pharma has become more active over the past 22 months. Telix / ITM is the latest example.

China looks overseas

Expansion should focus outside the U.S., especially Europe and Southeast Asia. Target scarcity is the main constraint.

China pharmas looking to go global

Amber Tong, *Bloomberg*, A DeepSeek Moment for Biotech, Nov 12, 2026 (excerpt)

"For years, Chinese drugmakers played the same role as Chinese manufacturers did in other sectors: churning out reliable, low-cost copies of old staples invented elsewhere. But following the trajectory of electric vehicles and clean energy in the country, its drugmakers have transformed themselves from fast followers into true innovators, and now industry analysts are asking: **Will the next Pfizer be Chinese?**

Michelle Xia, Akeso's co-founder and chief executive officer, says there's no reason her company's already approved treatments for cancer and auto-immune conditions, which have been prescribed to hundreds of thousands of patients across China, shouldn't be available internationally. **"We aim to go global, because the healthcare industry is a global one,"** she says. "When you create medicines, you are creating them for humanity."



Michelle Xia, CEO, Akeso

Source: Bloomberg; Stifel Investment Banking Analysis.
https://www.bloomberg.com/news/features/2026-11-13/chinese-drugmakers-like-akeso-have-their-deepseek-moment

Strategic crosscurrents

China, the consumer and emerging therapies.



China as an early R&D engine

Partnerships with companies such as Hengrui and Innovent are likely to continue through 2026–2028 as pharma seeks greater R&D productivity.

The health-conscious consumer

Demand increasingly extends beyond government reimbursement, including aesthetics, obesity and hair restoration. (see next page for a related event)

Emerging therapies

Cell therapy in autoimmune disease and Parkinson's; women's health; aging; T-cell engagers; transformative rare-disease treatments.

Themes from Stifel's Longevity Ride

Stifel and the U.S. Cycling Association ran a seminar and longevity ride in Menlo Park on Nov 6, 2026.

Stanford's Anne Friedlander and Fred St. Goar of El Camino Health led conversations on nutrition, wearables and healthier aging.



Muscle and nutrition

Sports nutrition has advanced rapidly. For everyday health, the discussion emphasized building muscle and maintaining adequate protein intake.



Wearables reshape health

Wearables and the information they generate are changing consumer health. An Oura representative discussed the growing role of personal health data.



Cardiovascular progress

Cardiovascular medicine is making major advances. New approaches to identifying and characterizing types of plaque were highlighted as an area of progress.



Aging science advances

Aging science is moving quickly in a promising direction, adding momentum to the broader discussion of healthier living and longevity.

Motivation matters

Olympic champion cyclist Kristen Faulkner closed the event with an inspiring talk on motivation.

Source: Notes from The Longevity Ride, November 6, 2026.

Biotech Capital Markets Update



STIFEL

Global public financing reaches $78.4bn

IPOs, public equity, PIPEs and convertibles • January 1–November 10, 2026



$78.4bn

943 recorded transactions
913 with disclosed values

$65.3bn

Equity issuance excluding convertibles

Financing route	Value	Deals
Public equity offerings	$37.9bn	433
PIPEs	$17.0bn	403
Convertible financings	$13.2bn	63
IPOs	$10.3bn	44

Convertibles represent 17% of public financing value. Public debt is excluded.

Source: Biopharma events worksheet, through November 10, 2026. USD bn. Excludes ATM/shelf announcements and cancelled/withdrawn deals.

Financing is on a $154bn annualized pace

Growth capital remains strong against the supplied historical series



2026 is on pace for the second-highest financing year ever.

$132.5bn recorded YTD, excluding convertibles and public debt.

Source: Biopharma events worksheet, through November 10, 2026. USD bn. Excludes ATM/shelf announcements and cancelled/withdrawn deals. Historical values retained from supplied deck. Definitions may differ from cleaned 2026 data. A = annualized at 365/314; not a forecast.

Financing has recovered, but access remains selective.

Aggregate issuance is an incomplete measure of access across the ecosystem.



$80bn

Global public issuance

IPOs, reverse PIPEs, follow-ons and convertible debt.

Volume has recovered.

Clinical data

Selective IPO access

Investors favor validated programs, clear regulatory paths and credible management.

The window remains selective.

Broader access

The next test

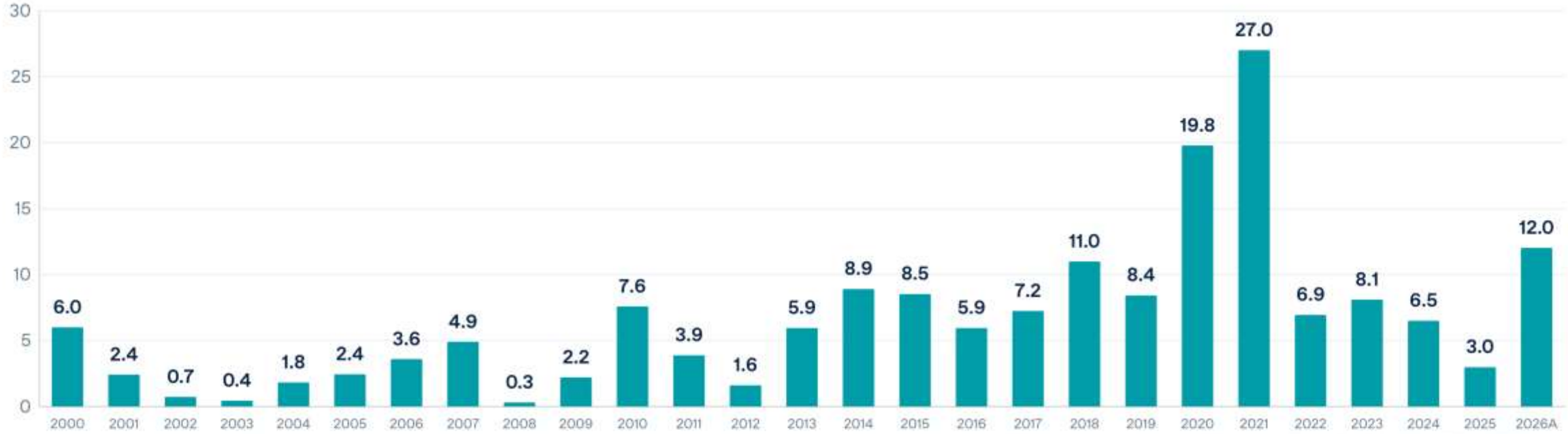
Watch first-time rounds, earlier-stage financings and the number of companies funded.

More dollars must reach more companies.

Source: Stifel Investment Banking Research, global biopharma capital raised to September 30, 2026.

Global IPOs are on a $12.0bn annualized pace

44 IPOs with $10.3bn of recorded value through November 10



The annualized pace ranks third in the supplied series, behind 2020 and 2021.

Source: Biopharma events worksheet, through November 10, 2026. USD bn. Excludes ATM/shelf announcements and cancelled/withdrawn deals. Historical values retained from supplied deck. Definitions may differ from cleaned 2026 data. A = annualized at 365/314; not a forecast.

IPO Market Update - November 2026

Biopharma IPOs are open, with the best aftermarket since 2021

28	+32.1%	12 of 28	~$292m
IPOs priced in 2026 YTD	Average aftermarket return	Trading above issue	Average IPO size

Bigger, later-stage and more disciplined

Average size	~$184m in 2020–2021 → ~$292m in 2026
Step-up from last crossover round	~1.6× → ~1.4×
2025 comparison	8 IPOs • 2 above issue • −1.3% average return

The size ceiling keeps rising

kailera — April — **$718.8m**
Largest since 2021

Parabilis MEDICINES — June — **$770.5m**
Includes overallotment option
Largest biotech IPO ever

Aftermarket performance drives the next wave

Early IPO successes support demand for subsequent offerings. At one point, 10 consecutive deals traded above issue.
As of the November update, 16 of 28 were trading below issue.

STIFEL

Source: Biopharma IPO data and market commentary, November 2026. YTD figures cover 28 IPOs.
The accompanying detailed table covers the latest 20 IPOs.

Today's IPO market is bringing high quality later-stage issuers to the market versus five years ago

Phase 2/3 issuers were 71% of 2026 IPOs versus 53% in 2020–2021

Development-stage mix of biotech IPOs, 2018–2026

Stage	2018	2019	2020	2021	2022	2023	2024	2025	2026
Preclinical	12%	13%	22%	24%	9%	0%	11%	0%	0%
Phase 1	15%	15%	26%	16%	36%	33%	28%	13%	25%
Phase 2/3	**63%**	**67%**	**48%**	**57%**	**45%**	**67%**	**61%**	**75%**	**71%**
NDA	6%	2%	1%	2%	9%	0%	0%	0%	4%
Marketed	4%	4%	3%	1%	0%	0%	0%	13%	0%
Total	**67**	**48**	**77**	**97**	**11**	**12**	**18**	**8**	**28**

Later-stage IPO mix in 2023–2026

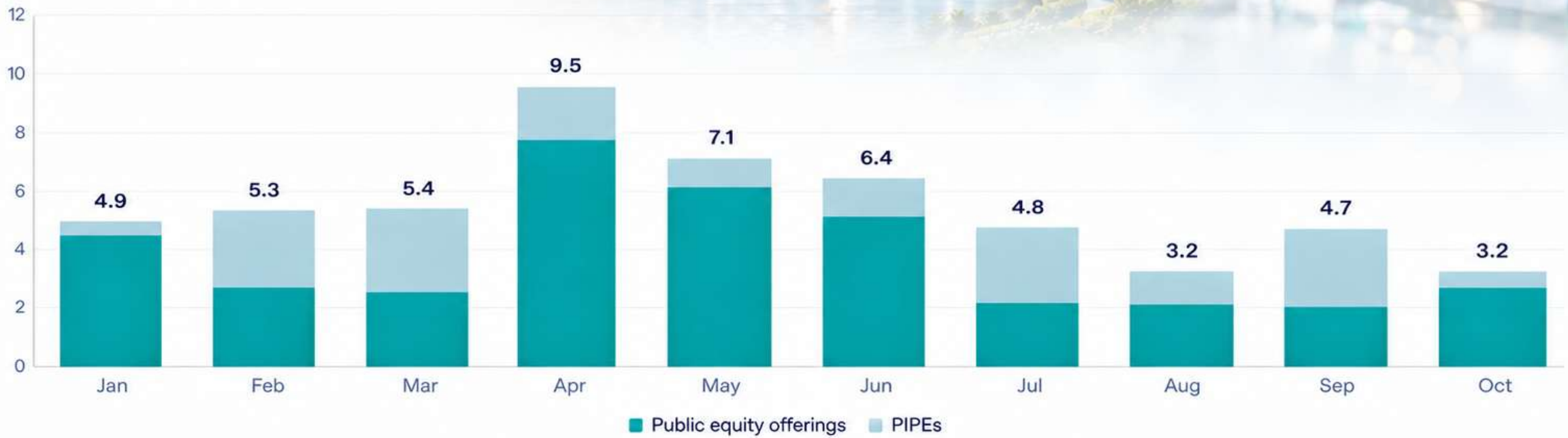
Source: Biopharma IPOs worksheet, Nov. 6, 2026. Stage categories use the workbook's standardized "Latest Stage" field.

Percentages are rounded and may not sum to 100%. 2026 figures are year to date.

Follow-on volume reaches $54.9bn in 2026

Public equity offerings plus PIPEs, excluding ATM/shelf announcements





Q2 averaged $7.7bn per month, versus $4.2bn in Q3 and $3.2bn in October.

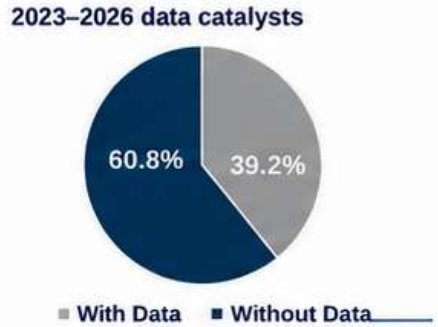
Source: Biopharma events worksheet, through November 10, 2026. USD bn. Excludes ATM/shelf announcements and cancelled/withdrawn deals.

PIPE Market Update - November 2026

Biopharma financing activity and aftermarket performance

PIPE issuance trends upward



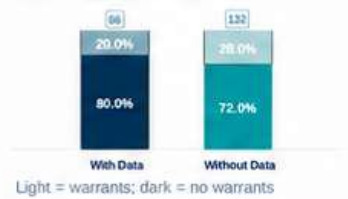


PIPE performance remains strong





Warrants and pricing





30 most recent biopharma PIPEs

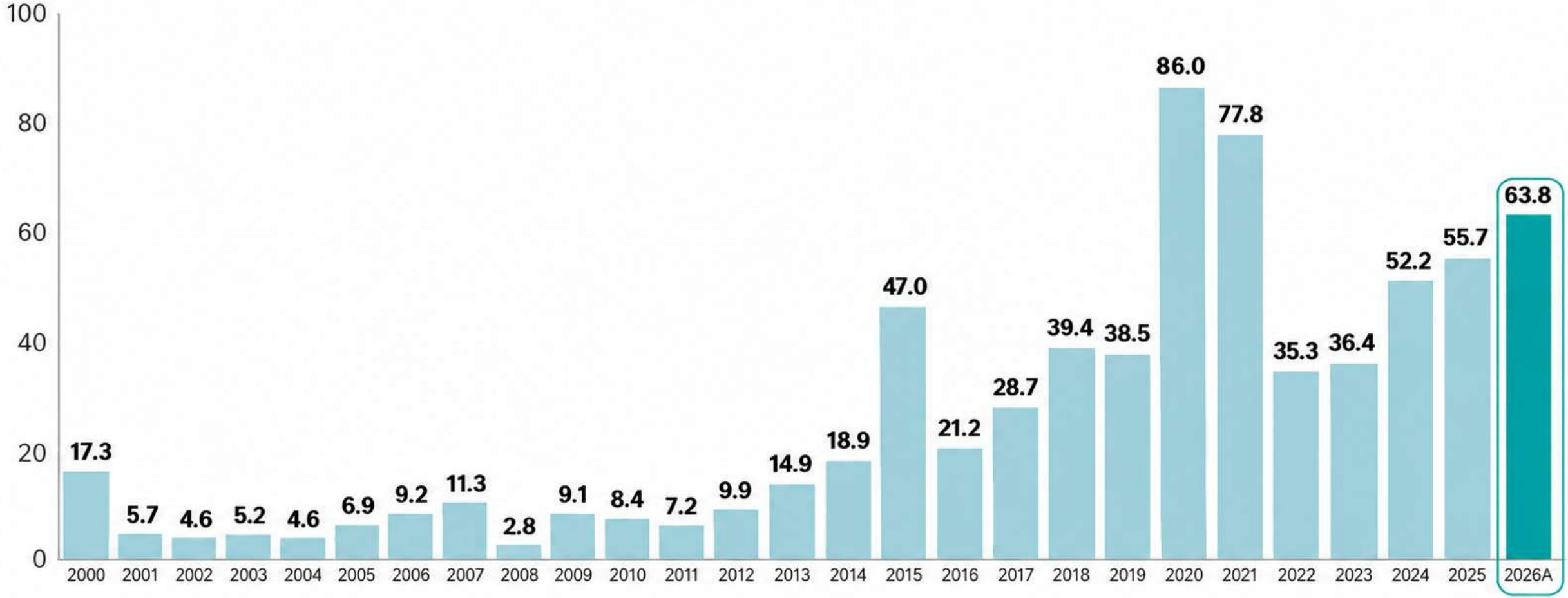
Announce Date	Company	Pre-Deal Market Cap ($mm)	Deal Size: Total ($mm)	Deal Size: As a % of Market Cap	Concurrent / Ahead of Event[4]	Pricing: Prem / (Disc)	Warrant Terms: % Coverage	Warrant Terms: Strike Prem. /(Disc.)	Warrant Terms: Term (Years)	Performance: Offer-to-1 Day	Performance: Offer-to-Current
11/4/26	Evommune, Inc.	$251.6	$30.0	13.9%	✓	-	-	-	-	5.5%	10.1%
11/4/26	Lyell Immunopharma, Inc.	263.9	80.0	30.3%	✓	-	-	-	-	43.3%	38.0%
10/22/26	Zai Lab Limited	2,753.5	249.9	9.1%		-	-	-	-	9.0%	15.6%
10/15/26	First Tracks Biotherapeutics, Inc.	1,219.5	200.0	16.4%		(4.0%)	-	-	-	10.0%	46.3%
10/8/26	ADC Therapeutics SA[2]	220.7	86.6	39.3%		-	-	-	-	12.0%	11.3%
10/8/26	Artium Therapeutics, Inc.[5]	136.7	50.0	36.6%		-	-	-	-	4.2%	5.2%
8/28/26	Quoin Pharmaceuticals, Ltd.[3]	10.4	30.8	295.8%	✓	(5.3%)	50.0%	25.0%	5.0	25.4%	(25.2%)
8/21/26	Gossamer Bio, Inc.[2][3]	76.6	25.0	32.7%		(9.7%)	50.0%	31.5%	0.5	8.8%	(14.1%)
8/13/26	MapLight Therapeutics, Inc.[3]	485.0	150.0	30.0%		-	-	-	-	1.8%	(39.1%)
8/6/26	Tarsus Pharmaceuticals, Inc.	2,681.7	126.0	4.7%	✓	(8.6%)	-	-	-	16.6%	22.5%
7/29/26	LB Pharmaceuticals Inc	997.4	150.0	15.0%		-	-	-	-	11.6%	20.2%
7/27/26	Entera Bio Ltd.[3]	193.2	275.0	142.3%		(0.5%)	-	-	-	92.2%	53.9%
7/24/26	MannKind Corporation	1,201.8	50.0	4.2%	✓	-	-	-	-	6.2%	0.3%
7/13/26	Agenus Inc.	139.5	50.0	60.9%		10.1%	238.5%	8.9%	5.0	65.9%	93.8%
7/9/26	Cue Biopharma, Inc.[3]	148.5	50.0	33.7%		(9.0%)	-	-	-	10.7%	(43.6%)
6/30/26	Pyxis Oncology, Inc.[3]	181.2	55.0	27.6%		(10.8%)	100.0%	28.9%	3.0	18.0%	(34.9%)
5/27/26	Q32 Bio Inc.	98.3	55.0	55.9%		12.8%	-	-	-	60.6%	15.6%
5/13/26	Whitehawk Therapeutics, Inc.[3]	187.9	87.5	46.6%		-	-	-	-	25.8%	(20.2%)
5/5/26	Cellectar Biosciences, Inc.[6]	13.5	30.7	227.8%		(6.4%)	300.0%	-	2.7	20.0%	(52.8%)
4/30/26	Cue Biopharma, Inc.[3]	42.3	30.0	70.9%	✓	(25.4%)	50.0%	-	5.0	176.5%	70.3%
4/30/26	Valneva SE	449.5	43.4	9.7%		2.5%	100.0%	27.0%	1.9	(1.5%)	0.9%
4/30/26	Climb Bio, Inc.	442.3	110.1	24.9%		-	-	-	-	(2.5%)	8.3%
4/16/26	Adial Nortye Ltd.	853.4	150.0	17.6%		-	-	-	-	3.3%	(22.4%)
4/16/26	Achieve Life Sciences, Inc.	192.2	180.0	93.7%		2.4%	100.0%	(3.4%)	0.3	32.3%	84.9%
4/13/26	ImogeneBio, Inc.	54.8	30.0	54.7%		6.1%	-	-	-	16.3%	(21.1%)
3/31/26	SCYNEXIS, Inc.	36.3	40.0	110.2%	✓	16.5%	100.0%	30.4%	5.0	(0.3%)	(32.4%)
3/30/26	Aprea Therapeutics, Inc.	8.7	30.0	343.6%	✓	18.3%	100.0%	(15.5%)	3.8	(8.5%)	(35.9%)
3/27/26	OnKure Therapeutics, Inc.[3]	65.9	150.0	227.6%		(9.6%)	-	-	-	(3.9%)	(31.0%)
3/27/26	Vor Biopharma Inc.	283.5	75.0	26.5%		3.5%	-	-	-	3.1%	41.5%
3/24/26	Karyopharm Therapeutics Inc.	95.6	30.0	31.4%	✓	1.9%	100.0%	47.4%	0.5	(19.8%)	(99.2%)
	30 Most Recent Biopharma PIPEs										
	Mean (n=30)	**$458.3**	**$91.0**	**71.1%**		**(0.5%)**	**117.1%**	**16.4%**	**3.0**	**21.4%**	**1.6%**
	Median (n=30)	**$190.1**	**$65.0**	**33.2%**		**-**	**100.0%**	**25.0%**	**3.0**	**10.4%**	**3.0%**

Source: FactSet and Dealogic as of November 6, 2026. Includes biopharma PIPEs ≥ $25m; excludes strategic investments, de-SPACs, reverse mergers and concurrent registered follow-ons.

Pricing hoe wards of announcement. (6): 200% differences of a discount, telegrony analysis concluding < $100m deals, 'company with Concurrent pon-clinical warrants and $100m warrant upon FDA NDA acceptance.

Follow-on equity is on a $63.8bn pace in 2026

2026 global public equity offerings (including PIPEs), Annualized in 2026 based on results from Jan 1 to Nov 10



The 2026 issuance run rate is 15% above that of 2025. We are tracking for the third busiest year of FO equity issuance.

Source: Biopharma events worksheet, through November 10, 2026. USD bn. Excludes ATM/shelf announcements and cancelled/withdrawn deals.
Historical values retained from supplied deck. Definitions may differ from cleaned 2026 data. A = annualized at 365/314; not a forecast.



Reverse mergers remain a key route to market in 2026

A public shell and committed financing can provide an alternative to an IPO

01

Public company

Cash, liabilities and listing status

02

Private biotech

Pipeline, management and valuation

03

Committed PIPE

Investor support and capital at closing

Reverse-merger PIPEs remain inside the PIPE total and are not separately identifiable.

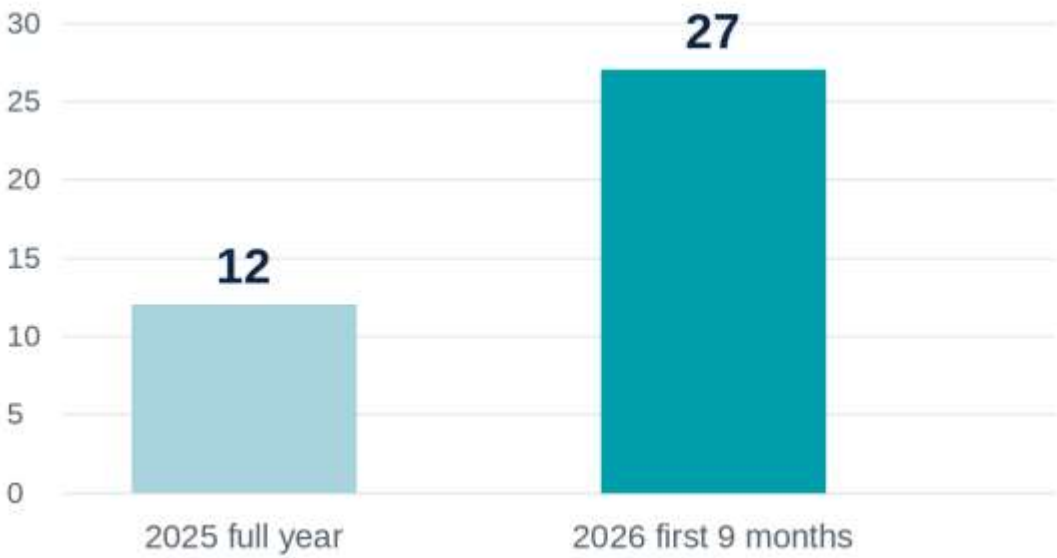
Source: Biopharma events worksheet, through November 10, 2026. USD bn. Excludes ATM/shelf announcements and cancelled/withdrawn deals.

Reverse mergers remain a key route to market in 2026

November 10 update • Latest comparable market benchmark through September 30

More transactions, more PIPE backing

2026 reverse merger cohort



2.25× as many reverse mergers in nine months as in all of 2025

Financing supports the route

19 of 27 2026 deals included a PIPE

vs. 3 of 12 in 2025

October activity continued

Selected transactions; concurrent financing

OCT 13

Velaris / Alaunos — $350m

OCT 23

Prana / Bolt — $120m

$470m combined financing in these two deals

Prana figure excludes up to $60m of contingent warrants.

PIPE-backed reverse mergers pair a public listing with capital to advance the pipeline.

Period note: The 27-deal benchmark is through September, not November 10. October examples are shown separately; they have not been added to that cohort. A complete November 10 count and updated valuation / PIPE medians were not verified.

Sources: Fierce Biotech, Oct 21, 2026 (J.P. Morgan); Alaunos, Oct 13, 2026; Bolt Biotherapeutics, Oct 23, 2026.

Venture equity financing reaches $45.6bn in 2026

Biopharma venture equity averaged approximately $1.02bn per week through November 10. There were 1,567 recorded placements, with values disclosed for 1,329 transactions.



Monthly venture equity financing ($bn) • January 1–November 10, 2026

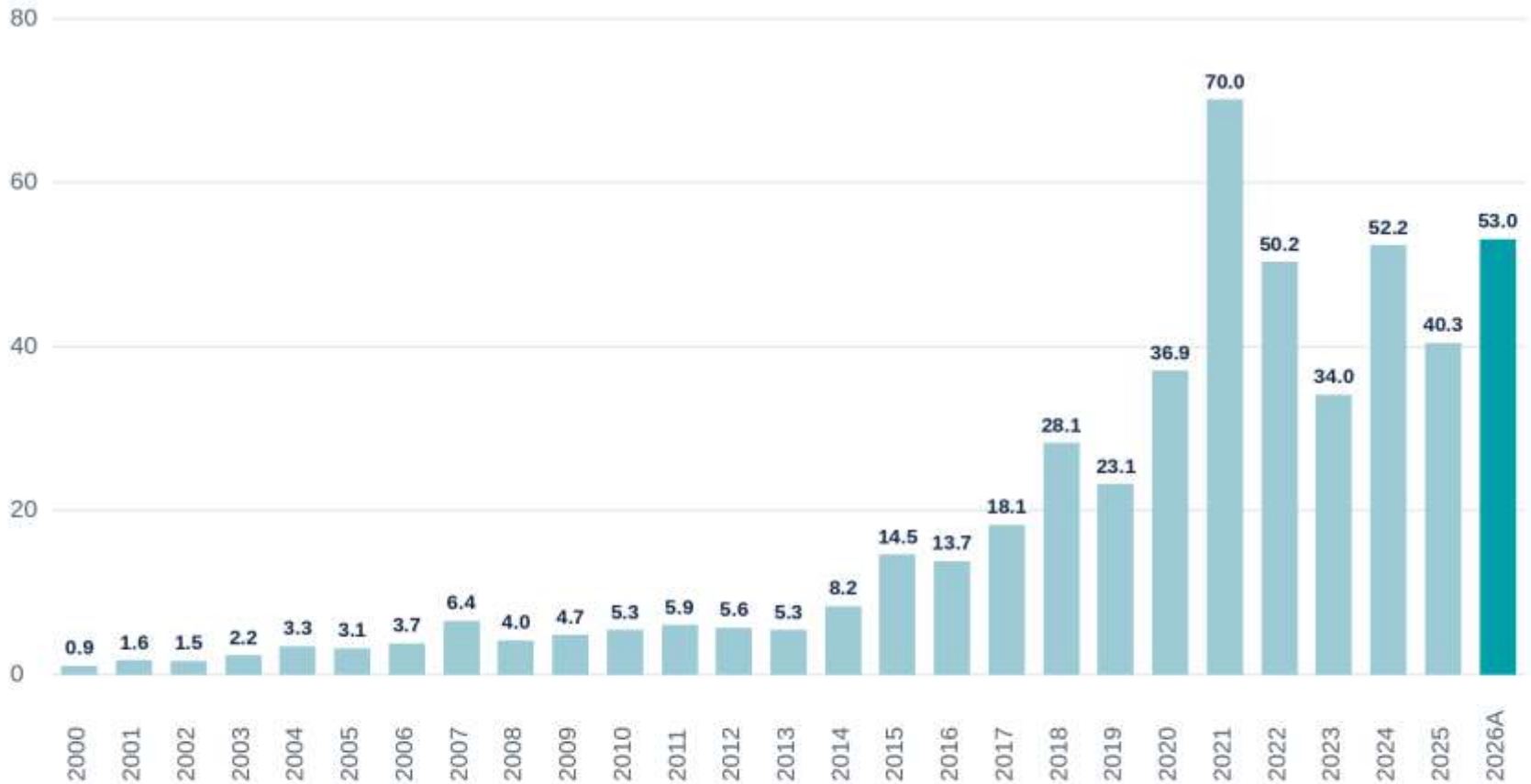


May led at $6.8bn; October added $3.6bn and November 1–10 added $1.1bn.

Source: S&P CapitalIQ and Crunchbase through November 10, 2026.
Excludes ATM/shelf announcements and cancelled/withdrawn deals. November is a partial month. Monthly figures are rounded.

Venture investment near historic highs

Biopharma venture equity ($bn), 2000–2026 annualized



$53.0bn

2026 annualized venture equity

$45.6bn

Recorded January 1–November 10

32% above 2025

Based on the annualized run rate versus $40.3bn

Source: S&P CapitalIQ and Crunchbase through November 10, 2026.

Top 10 Venture Privates in 2026

Private, venture-backed companies • Financings recorded through November 10, 2026

Rank	Company	Amount Raised ($mm)	Date	Lead investors	What the company does
1	Isomorphic	2,100	May 12	Thrive Capital	AI-driven drug design using protein structures and molecular models.
2	Earendil Labs	787	Mar 20	Not disclosed	AI-enabled discovery of protein and antibody therapeutics.
3	SAIL BIOMEDICINES	465*	Jul 29	Johnson & Johnson (strategic investor)	Programmable RNA medicines and in vivo CAR-T delivery.
4	NewLimit	435	May 28	Founders Fund	Epigenetic reprogramming to restore cell function and extend healthspan.
5	Chai Discovery	400	Jul 14	Index Ventures	AI models to design therapeutic proteins and antibodies.
6	dren bio	350	Oct 29	Juvia Group; Lightspeed Venture Partners	Antibodies that deplete pathogenic cells in cancer and autoimmunity.
7	Ollin Biosciences	330	May 13	TCGX; ARCH Venture Partners	Medicines for wet AMD and diabetic macular edema.
8	AdvanCell	315	Jul 15	Ally Bridge Group; Alpha Wave	Lead-212 targeted alpha therapies and isotope production for cancer.
9	enveda	311	Sep 23	Catalio Capital Management	AI-powered discovery of medicines from natural chemistry.
10	OMass THERAPEUTICS	310	Oct 15	Bain Capital Life Sciences; Forbion; Novo Holdings	Small-molecule drugs for endocrine and immune diseases.

Excludes public-company PIPEs, reverse-merger financings and unraised targets. *Sail: announced strategic equity investment.
Earendil did not designate a lead investor; its amount spans financing rounds. Dates and amounts follow the events worksheet.

Source: S&P CapitalIQ and Crunchbase through November 10, 2026; company announcements for lead investors and descriptions.

Venture Capital Fund Raising Showing Slight Recovery in 2026

Biopharma venture capital funds raised (US$bn), 2000–2026 YTD



2026 YTD

$18B

vs. $16B in 2025

Source: Supplied biopharma venture fundraising chart. Amounts in US$ billions, rounded as shown in the source.

20 Largest Biopharma Venture Fundraises in 2026

2026 YTD through November 10 • Stifel research of fund press releases and news stories

RANK	FUND MANAGER / VEHICLE	RAISE ($MM)
01	**Blackstone Life Sciences** Blackstone Life Sciences VI	4,700*
02	**OrbiMed** Private Investments X and Asia Partners VI	2,900
03	**Forbion** Growth Opportunities IV and Ventures VIII	2,600
04	**Lux Capital** Lux Ventures IX	1,500
05	**Jeito Capital** Jeito II Fund	1,200
06	**Dimension** Dimension Fund III	800
07	**Andreessen Horowitz** Bio + Healthcare Fund V	700
08	**TCG Crossover** TCGX Asia Life Sciences Fund I	600
09	**Luma Group** LumaBio I LP	410
10	**Yosemite** Yosemite Fund II	350

RANK	FUND MANAGER / VEHICLE	RAISE ($MM)
11	**Santé Ventures** Santé Ventures Fund V	330
12	**Servier Ventures** Servier Ventures	232
13	**Aulis Capital** Aulis Capital Fund I, L.P.	200
14	**BDC Capital** Life Sciences Venture Fund	150‡
15	**Epidarex Capital** Epidarex Capital IV, LP	145
16	**Kos Biotechnology Partners** Inaugural Global Life Sciences Fund	123
17	**Breakout Ventures** Breakout Ventures Fund III	114
18	**Arkin Capital** Arkin Bio Ventures III	100
19	**Remiges Ventures** RDiscovery Fund, LP	100
20	**Kurma Partners** Kurma Biofund IV	99.4

* Blackstone reflects $4,700MM recorded in 2026. OrbiMed and Forbion each combine two vehicles. ‡ BDC is shown at the workbook's 150 figure and is noted as CAD-denominated.

Amounts in millions. US dollars except where indicated.

Private debt financing totals $21.7bn

Monthly recorded private debt, including commitments where the source reports them



Q3 averaged $2.7bn per month. October recorded $0.6bn; November 1–10 added $1.3bn.

Source: Biopharma events worksheet, through November 10, 2026. USD bn. Excludes ATM/shelf announcements and cancelled/withdrawn deals.

Europe: Reformed IP Framework, but the Capital Gap Persists

New EU rules reset incentives; scale-up capital still comes mainly from the U.S.

Regulatory and IP Framework

- EU pharma package adopted by the Council on 28 Sep 2026; enters into force after Parliament adoption and OJ publication
- Regulatory protection reset: 8 years data protection + 1 year market protection, with an extra year for innovative medicines meeting conditions
- E.g., comparative trials, trials in more than one member state, early EU filing
- Total capped at 11 years (12 with a transferable exclusivity voucher)
- Biotech Act I (proposed): 12-month SPC extension for biotech products and advanced therapies; clinical-trial modernisation; regulatory sandboxes
- Industry pushback: EFPIA says the reform has not strengthened the framework for innovators and is pressing for a longer SPC extension

Capital Markets

- ~6x funding gap: U.S. VC funds total ~€930bn vs. ~€150bn in the EU; gap widest at later stages
- Listings go to Nasdaq: no UK biotech IPOs in 1H26; European issuers seeking a listing are turning to Nasdaq
- Private momentum: European biopharma VC of $1.1bn in Q3 2026 vs. $584m in Q3 2025; Forbion raised $2.6bn
- Deal appetite: 74% of European biotech leaders expect higher partnering / M&A appetite over the next 12 months
- Public policy response: Biotech Act proposes a two-year “capital booster” pilot; EESC calls for a permanent late-stage tool via the EIB

Transaction Implications

- Extra EU protection now has to be earned: early EU filing and comparative trials are rewarded – creating tension with U.S. MFN pricing, which pushes companies to protect ex-U.S. prices
- New tradable assets: transferable exclusivity vouchers raise valuation, transfer and licensing questions
- SPC strategy matters more: biologics and advanced therapies gain if the Biotech Act’s 12-month SPC extension passes – but eligibility conditions (e.g., EU production, novelty) are still being negotiated and the extension is contested
- Cross-border is the default for financing: U.S. listings, U.S.-led rounds and trade sales remain the main exit routes for European scale-ups

Source: Council of the EU (28 Sep 2026); European Commission; EFPIA; EESC; ECB Economic Bulletin 5/2026; BioIndustry Association; UK Biotech Finance; J.P. Morgan Q3 2026; European Biotechnology; Stifel Biopharma Market Update (9 Oct 2026).

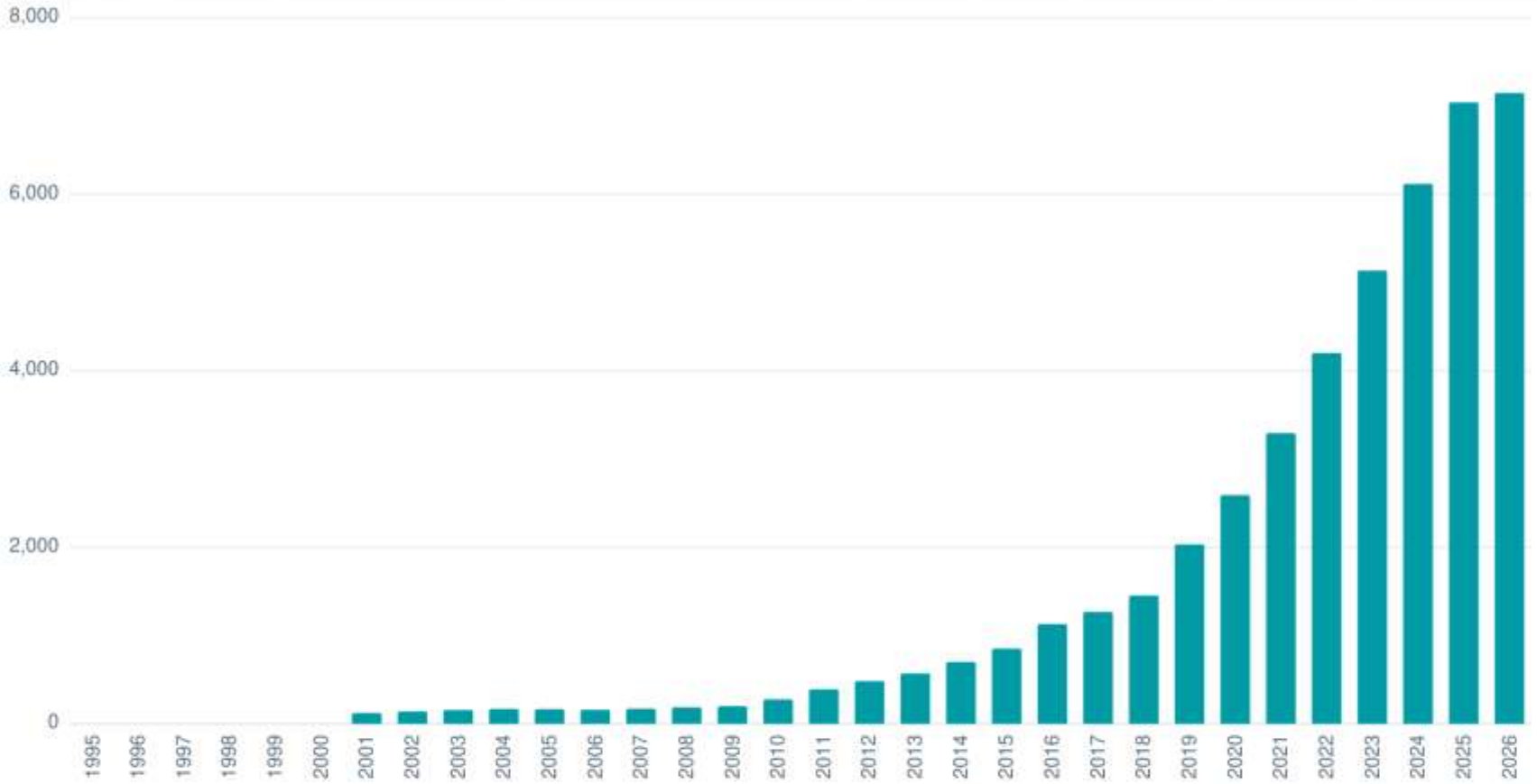
China Impact on Global Biopharma Sector



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China’s pipeline expansion

Number of drugs in development, 1995–2026



7,149

Drugs in development
2026

Sustained expansion

The pipeline has grown from 851 programs in 2015 to more than 7,000 in 2025–2026.

Source: Citeline R&D Report, January 2026. www.citeline.com/en/rd26/

China’s pharmaceutical industry plan, 2026–2030



25%

Target global market share by 2030 for domestically originated first-in-class drugs

China’s 15th Five-Year Plan

Released September 18, 2026 by ten government agencies, including the Ministry of Industry and Information Technology.

China R&D partnerships

Largest China-origin licensing and R&D partnerships | 2026 YTD through November 9

Chinese partner	Global partner	Total value	Upfront
CSPC	AstraZeneca	$18.50bn	$1,200m
HANSOH PHARMA	Roche	>$15.51bn	$400m
HENGRUI	Bristol Myers Squibb	$15.20bn	$600m*
Innovent 信达生物制药	Pfizer	$10.50bn	$650m
Innovent 信达生物制药	Lilly	$8.85bn	$350m
ABOGEN	NOVARTIS	$7.78bn	$575m

How these deals work

Chinese partners contribute discovery platforms and early development. Global pharma gains worldwide or ex-China rights; territory structures vary.

Most value comes later

$76.3bn+

Total announced value across the six deals

$3.78bn

Upfront cash—approximately 5% of total value

Hansoh–Roche and Abogen–Novartis enter the top six.

Sources: DealForma export, November 10, 2026; company announcements. Deals announced January 1–November 9, 2026. Total values include potential milestones and option payments; royalties excluded. Figures rounded.

* Hengrui: $600m at signing; $350m of later anniversary payments excluded from upfront. Hansoh total includes a $110m anniversary payment and more than $15bn in milestones.

China partnerships buy capabilities

Multi-program options combine access to discovery with staged commitments of capital

中國生物製藥有限公司
SINO BIOPHARMACEUTICAL LIMITED

6 preclinical programs →

Boehringer Ingelheim

6 programs

Preclinical ADCs and T-cell engagers

$358m

Upfront and near-term payments

Up to $7bn

Potential option and milestone payments



Sino Biopharm	Conducts global Phase I development.
Boehringer	Can exercise options after agreed milestones.
Territory rights	Four programs outside mainland China, Hong Kong and Macau. Two programs worldwide.

Portfolio alliances can extend early development capacity while sharing scientific and execution risk

The $358m includes near-term payments. Potential option and milestone payments are contingent. Royalties are additional.

Source: Stifel Investment Banking Analysis, based on BI's recent announcement with Sino Biopharma

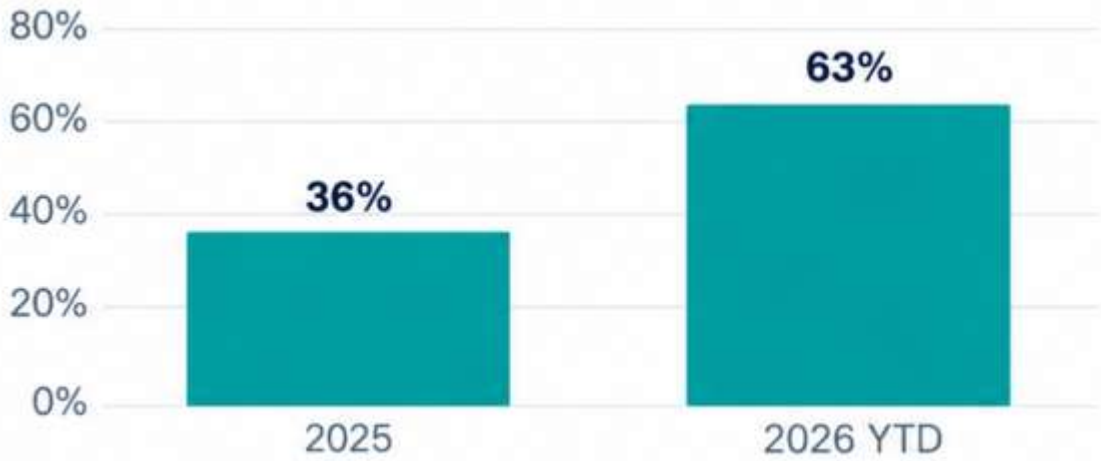
China drives pharma licensing

Through November 9, 2026

China deals, value ($bn)



Share of upfront cash to China



8 of 10

Largest 2026 YTD global licensing deals by total value came from China

$184m

Average disclosed upfront cash per deal
Large pharma, 2026 YTD

63%

2026 YTD large-pharma upfront cash allocated to China

Source: DealForma export dated November 10, 2026; announcements through November 9, 2026.
Universe: large public biopharma licensees plus Boehringer Ingelheim, Servier, Chiesi and Menarini. China includes Hong Kong.
Disclosed cash upfronts only; average excludes undisclosed values. Total deal value includes contingent payments. Both years recalculated on this basis.

Biopharma Licensing Trends



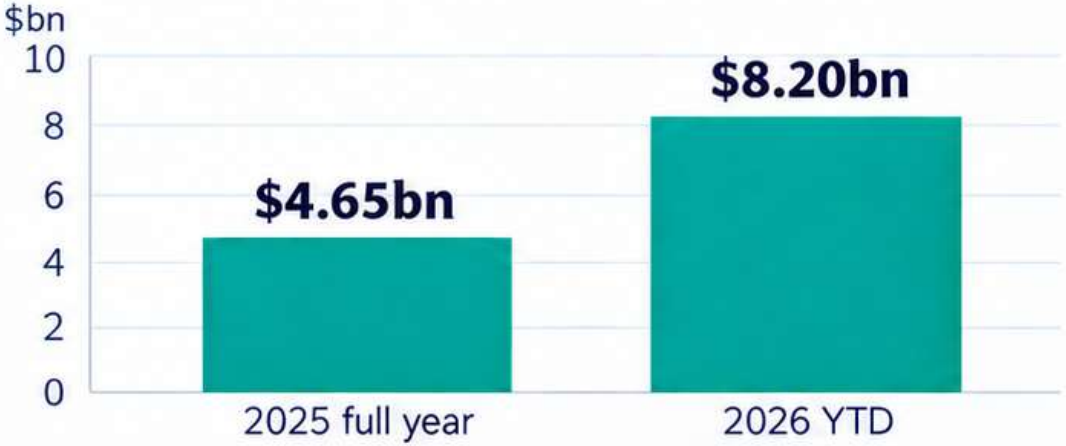
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Pharma is licensing innovation earlier

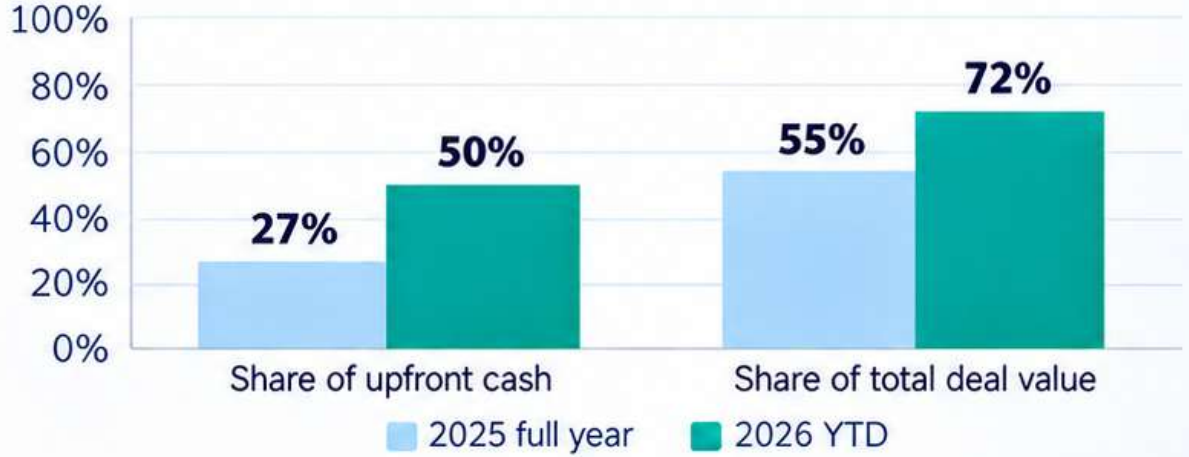
Discovery and preclinical programs capture half of disclosed upfront cash in 2026



Early-stage upfront cash rises 76%



Early-stage programs take a larger share



$8.2bn
Early-stage upfront cash in 2026 YTD

50%
Share of disclosed upfront cash

72%
Share of total announced deal value

Buyers are committing capital before clinical proof of concept.

Source: DealForma export dated November 10, 2026. Full-year 2025 vs. January 1–November 9, 2026; all deals in supplied export.
Early stage = platform/discovery plus preclinical/IND, using stage at signing. Upfront figures reflect disclosed cash.
Total announced deal value includes contingent payments; figures rounded. Data are not limited to large pharma or China.

DEALFORMA

Four shifts in biopharma licensing

Full-year 2025 compared with 2026 YTD through November 9 (global and regional license data summary)

Deal value already matches 2025

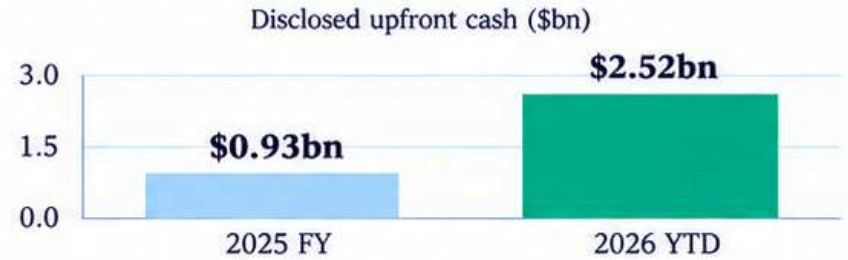
504 → 375 deals

$285.4bn → $286.6bn
total announced value

100%
of 2025 full-year deal value

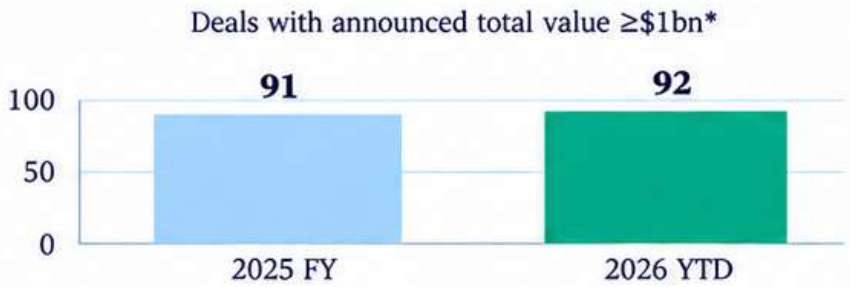
With nearly two months remaining,
Disclosed upfront cash: $17.2bn → $16.4bn.

AI licensing accelerates



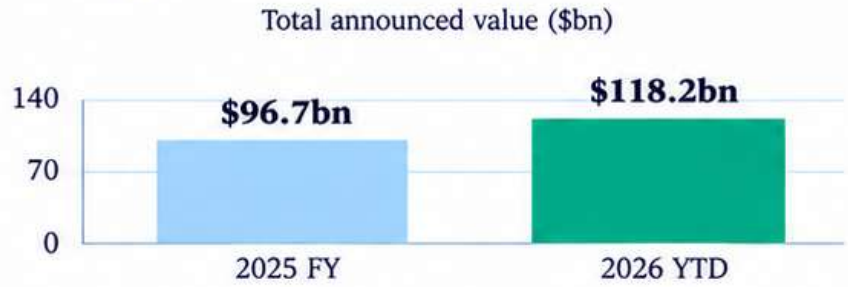
AI/ML-classified deals: 50 → 52; total value: $42.9bn → $64.6bn.

Billion-dollar deals gain share



Share of deals: 18% → 25%. Top ten deals: 27% → 36% of total value.

Oncology remains the engine



Share of total value: 34% → 41%; deal count: 156 → 113.

* Billion-dollar deal: announced upfront payments plus potential milestones totaling at least $1bn; not cash paid at signing.

Source: DealForma export dated Nov 10, 2026. FY2025 vs. Jan 1–Nov 9, 2026; all deals in supplied export.
Disclosed terms only. Total value includes contingent payments. AI/ML and oncology follow primary classifications; figures rounded.

DEALFORMA

Minghui grants ASKA exclusive Japan rights to MHB018A

Minghui licenses exclusive Japan rights to ASKA | November 4, 2026

明慧医药
FOR BETTER LIVES MINGHUI PHARMACEUTICAL

Exclusive Japan rights to MHB018A →

ASKA Pharmaceutical



$110m
Upfront payment

Up to $440m
Upfront + potential milestones

Mid-30%
Maximum tiered royalties on Japan net sales

Subcutaneous anti–IGF-1R antibody for thyroid eye disease
Global Phase 3 program underway
Minghui retains all rights outside Japan

Stifel acted as financial advisor to Minghui Pharmaceuticals. This transaction involved the largest publicly disclosed upfront payment on a single asset Japan license deal seen to date.

Sources: Minghui / ASKA announcement and Fierce Biotech, November 4, 2026. Historical ranking: Stifel.

MFN raises the stakes for regional rights

Protecting U.S. pricing can make regional licenses harder to secure

U.S. economics influence regional decisions

Biopharma companies may be more reluctant to license Japan, Europe or Latin America rights when lower local prices could influence U.S. pricing and launch strategy.

Regional partners face scarcer access

Concerns about pricing control and international reference prices can reduce willingness to split territories—potentially raising the price of the best assets.

A potential advantage for Chinese assets

Chinese developers with limited U.S. exposure may have greater flexibility to license Japan, Europe, the Middle East and other territories, creating an opening for regional buyers.



Market perspective: ***MFN may shift regional demand toward Chinese innovation.***

China-based origin does not exempt a drug or its U.S. licensee from U.S. MFN exposure. Effects depend on the applicable reference markets and commercial arrangements.

Sources: Skadden MFN analysis, June 2026; Goodwin cross-border licensing analysis, January 2026. China opportunity reflects market interpretation.

Licensing economics by development stage

Median and average disclosed deal terms | 2026 YTD through November 9

Upfront cash ($m)



Total deal value ($m)



Median Average (mean)

Source: DealForma export dated November 10, 2026; deals announced January 1–November 9, 2026.

Disclosed values only; n = deals with disclosed terms. Stage at signing. Discovery includes platforms; PC = preclinical / IND.

Upfront = cash, excluding equity. Total deal value includes contingent payments and may cover multiple assets. Figures rounded.

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STIFEL

STIFEL | Investment Banking

Track Record of Success

- Founded in 1890; publicly listed since 1983
- $10.9 billion market capitalization(1)
- $5.9 billion in LTM net revenue, representing 11% growth over prior year(2)
- Premier growth focused investment bank
- Extensive retail brokerage in U.S. and global wealth management with $580 billion in total client assets and 2,300+ financial advisors
- Stifel Bank & Trust with ~$31 billion in assets(3)
- 2023 U.S. Mid-Market Equity House of the Year(4)
- 2022 Investment Bank of the Year – Americas(5)



(1) As of November 10, 2026.
(2) As per Stifel's earnings release on October 21, 2026.
(3) As of December 31, 2024.
(4) 2023 International Financing Review as of February 2, 2024.
(5) Global M&A Network as of February 6, 2023.

Full Service Global Investment Bank

- U.S. headquartered with strong pan-European presence and Asian / LatAm reach from 30 offices around the globe
- Full range of products / services dedicated to growth companies across the entire corporate lifecycle from venture to public markets
- Deep industry expertise across all primary industry verticals
- Over 750 investment banking professionals
- Substantial cross-border execution capabilities with extensive access to both international and local capital
- Research driven with more than 1,800 stocks under coverage by 110+ analysts globally
- Over 1,050 M&A advisory roles since 2020 for nearly $500 billion in value
- This includes 375 cross-border deals



Select Bookrun Stifel Financings

2025–2026 YTD[1]



Stifel has raised over $27.4 billion across 96 bookrun transactions in 2025–2026 YTD

Source: Dealogic and Stifel Capital Markets as of October 23, 2026.
Note: Deal values and dates represented are as of the announcement that the definitive agreement was signed. Stifel transactions include deals completed by Stifel, Nicolaus & Company, Incorporated and its affiliated entities, Torreya Capital LLC and its affiliated entities, and Bryan Garnier and its affiliated entities. Any pending IPO transaction tombstones on this page are neither an offer to sell nor a solicitation of an offer to buy any of these securities. An offer may only be made by the prospectus for the offering.
(1) Select tombstones represent only transactions with a deal value of $20 million or greater and exclude ATM transactions.

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Stifel Biopharma Special Topic Publications

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Q3 Biopharma Market Update



Oct 9, 2026

Q2 Biopharma Market Update



July 8, 2026

Q1 Biopharma Market Update



April 6, 2026

Biopharma Outlook 2026



Jan 8, 2026

Aging Biology, Part II



Nov 21, 2025

Breast Cancer



Oct 25, 2025

Medicine, Progress & AI



Sep 11, 2025

Obesity Drug Update



July 9, 2025

Healthcare Future



May 30, 2025

Aging Biology, Part I



Mar 26, 2025

Biotech Policy



Aug 26, 2026

China Biotech



Jun 15, 2026

Women's Health II



May 21, 2026

AI and Insecurity



May 13, 2026

Women's Health I



Jan 20, 2026

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