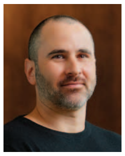
# Life sciences

## The bifurcation of life sciences real estate and its implications for investors


**Amachie Ackah**
Clay Cove Capital


**Isaac Friedman-Heiman**
Clay Cove Capital

**The sector's recent correction and diverging indicators belie the reality that, beyond characterizing assets into office and industrial buckets, life sciences assets are operationally different. Success requires underwriting both asset types separately, with different return expectations and risk assumptions.**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**KEY TAKEAWAYS**

**NOT A HOMOGENEOUS SECTOR**
Lab and R&D space, and purpose-built GMP manufacturing, are different asset classes that have different demand drivers, tenant credit profiles, lease structures, and return characteristics. Treating them as a single category produces mispriced exposure on both sides.

**SOURCE OF DISTRESS**
The lab cycle is not uniformly distressed. A specific cohort of 2022 to 2024 vintage deliveries in non-trophy locations carry most of the pain. Trophy products in tier 1 submarkets perform closer to historical norms.

**TENANT UNDERWRITING IS KEY**
The manufacturing surge demands long-duration credit underwriting: investment-grade tenants, build-to-suit, and near-zero tolerance for speculative construction in a category that is expensive to repurpose and hard to exit cleanly.

The post-COVID-19 correction in US life sciences real estate has been severe by any measure.

Laboratory and research & development (R&D) vacancies in the top thirteen US markets reached 23.5% in 4Q2025, up from roughly 5% in 2021[1] (see 1). Boston sits above 34%. The San Francisco Bay Area, San Diego, and Raleigh-Durham are all north of 25%.[1] Cap rates on stabilized lab assets have expanded by more than 200 basis points since their early 2022 trough.[2] The institutional consensus reads this as a cyclical drawdown in a sector with intact long-term tailwinds and waits for recovery.

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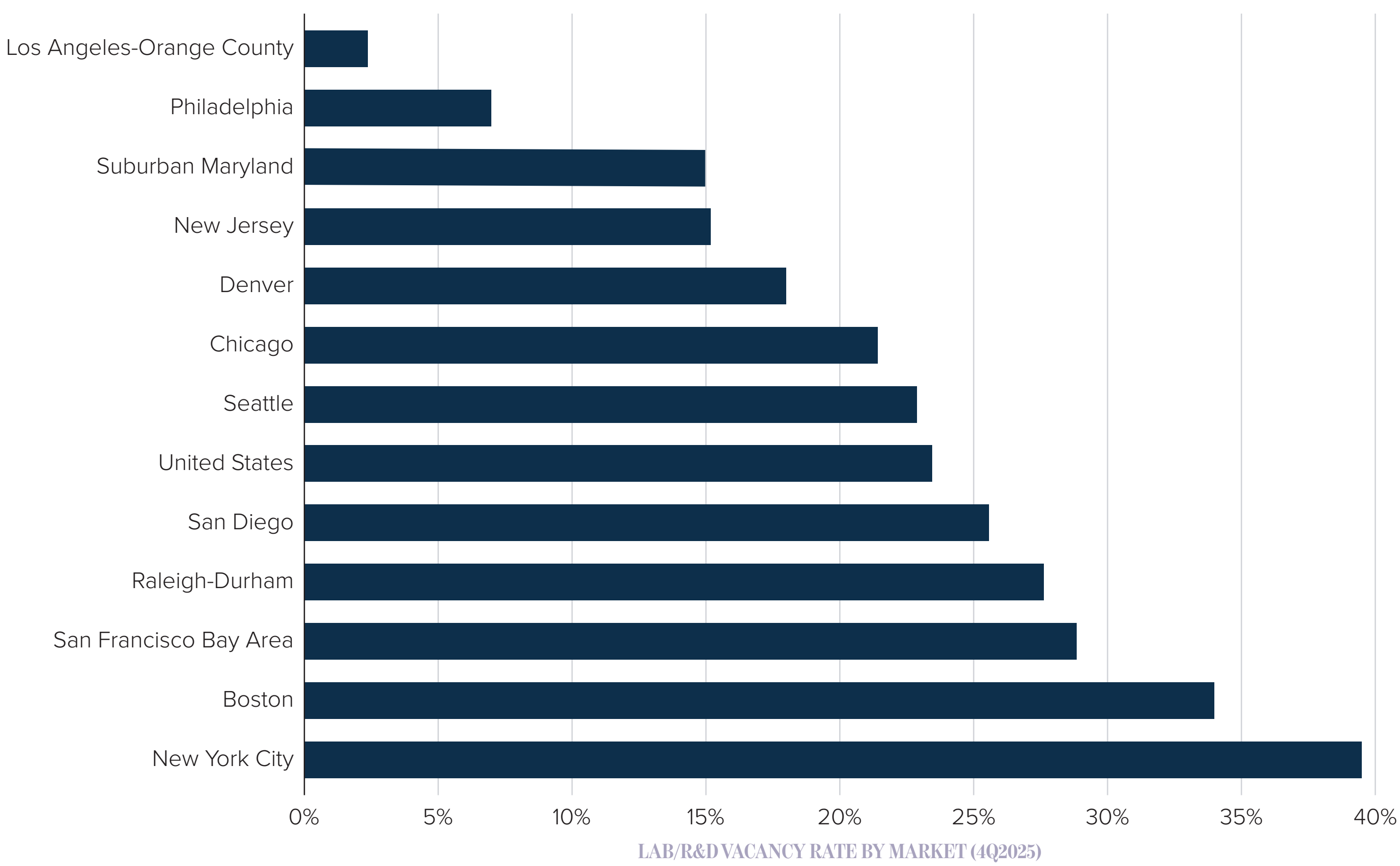
### The lab and R&D vacancy in the top 13 US markets reached 23.5% in 4Q2025

Vacancies nationwide are up over four times the 5% rate in 2021. New York City, Boston, and San Francisco have the highest vacancy rates in the country, but distress is concentrated in selected properties.




*Source:* Cushman & Wakefield, US National Life Sciences MarketBeat, 4Q2025.

This reading is incomplete. The same period that produced record lab vacancy also produced the highest US pharmaceutical and medicine industrial production reading since 2009.[3] Announced life sciences facility capital expenditures captured in local economic development incentive data roughly tripled between 2022 and 2025, with average deal size up nearly 300%.[3] Build-to-suit projects now make up 57% of the national life sciences construction pipeline, up from 34% one year earlier[1] (see 2). The sector that is supposedly working through a cyclical correction is, on the manufacturing side, in the middle of an investment surge.

The numbers only conflict if the sector is homogeneous, but it's not. There are two parts, and the post-2022 correction is making that split clearly visible.

- Discovery-oriented lab and R&D space, concentrated in a handful of talent-dense clusters, is one asset class.
- Purpose-built good manufacturing practice (GMP) manufacturing, dispersed across reshoring corridors, is another.

They have different demand drivers, different tenant credit profiles, different lease structures, and different return characteristics. Treating them as a single category, which most institutional underwriting still does, produces mispriced exposure on both sides.

## How the cycle produced divergence

The lab cycle is well understood in its proximate causes. COVID-era venture capital deployment into biotech peaked in 2021 at unprecedented levels, and developers responded by pushing the national life sciences construction pipeline to 63 million square feet by mid-2023, most of it speculative.[2] Those projects delivered into a venture capital reset. Biotech's share of total US venture dollars fell from roughly 15% to 7%,[4] and lab leasing activity contracted as biotechs cut runway and gave back space.

What is less understood is where the resulting vacancy sits. Half of the vacant lab and R&D space in Boston-Cambridge is concentrated in just 26 properties, and half of the Bay Area's vacancy in 33 properties.[3] The oversupply is falling disproportionately on newer buildings delivered since early 2022.[4] Kendall Square has held occupancy materially better than the broader Cambridge market, where supply constraints and a tenant base weighted toward established pharma R&D have insulated it from the venture-driven givebacks impacting newer Cambridge deliveries.[3]

The lab cycle is not uniformly distressed across the asset class. It is a specific cohort of 2022 to 2024 vintage deliveries in non-trophy locations carrying most of the pain, while irreplaceable trophy products in tier 1 submarkets perform closer to historical norms.

The manufacturing side has run on a separate clock entirely. Three drivers, none of which have a meaningful equivalent on the lab side, have converged. Reshoring policy, including BIOSECURE Act pressure on Chinese contract manufacturing

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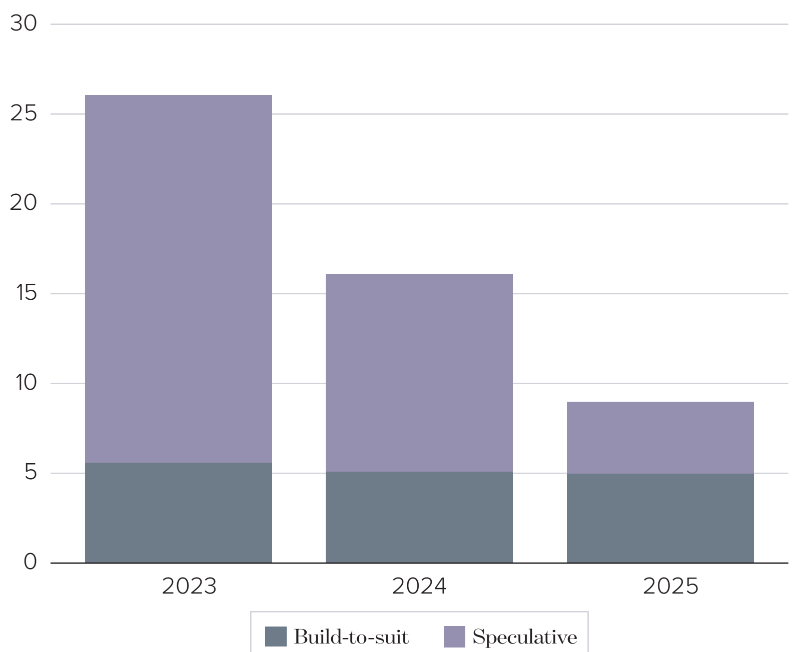
### Build-to-suit projects now make up 57% of life sciences construction pipeline

While volume has remained consistent since 2023, build-to-suit projects have comprised a growing percentage of overall construction in the US led by investment-grade or near-investment-grade large pharma and well-capitalized CDMO tenants.

US LIFE SCIENCES CONSTRUCTION PIPELINE: BTS VS. SPECULATIVE (MSF)




Note: BTS construction held steady at roughly 5 million square feet (msf) per year while speculative construction collapsed from 20.5 msf in 2023 to 4 msf in 2025. The compositional shift toward BTS (now 57% of pipeline) reflects speculative capital exiting rather than BTS capital surging.

Source: Cushman & Wakefield, US National Life Sciences MarketBeat, 4Q2025.

operations (CDMOs), tariff threats on imported pharmaceuticals, and the broader political consensus around domesticating biopharma supply chains, have shifted capital expenditure decisions toward US facilities (see 3).

The biologics patent cliff is producing record M&A and licensing activity as large pharma scrambles to replace revenue from drugs losing exclusivity through 2030, driving demand for manufacturing capacity tied to the acquired and in-licensed assets.[3] And the commercialization of advanced therapy medicinal products (ATMPs — cell, gene, and tissue-based therapies) requires purpose-built manufacturing that did not exist at scale five years ago. The facilities are expensive, slow to build, and tenant-specific.

These GMP facilities sit in fundamentally different geographies from existing lab clusters. In 2024, suburban Maryland posted positive net absorption, among the strongest of any tracked market, while Boston posted negative absorption.[5] Raleigh-Durham captured FUJIFILM Diosynth's 809,000 square foot CDMO facility, Johnson & Johnson biologics expansion, and Novo Nordisk growth.[5] The Carolinas, Salt Lake City, and the New Jersey pharma corridor are absorbing facility announcements that would have gone to coastal lab clusters in a different cycle. Manufacturing is dispersing because reshoring economics, state incentive packages, and proximity to existing pharma operations matter more than university density and venture capital concentration.

The tenant universes diverge as sharply as the geography. Discovery-oriented lab tenants are typically venture-backed biotechs with runway measured in quarters and credit profiles dominated by enterprise value rather than cash flow. The State Street SPDR S&P Biotech ETF Index (XBI) leads lab net absorption by approximately nine months, reflecting the lag between biotech financing conditions and the headcount decisions that drive lease signings. The relationship has held across cycles and has no equivalent in any other major property sector.[3]

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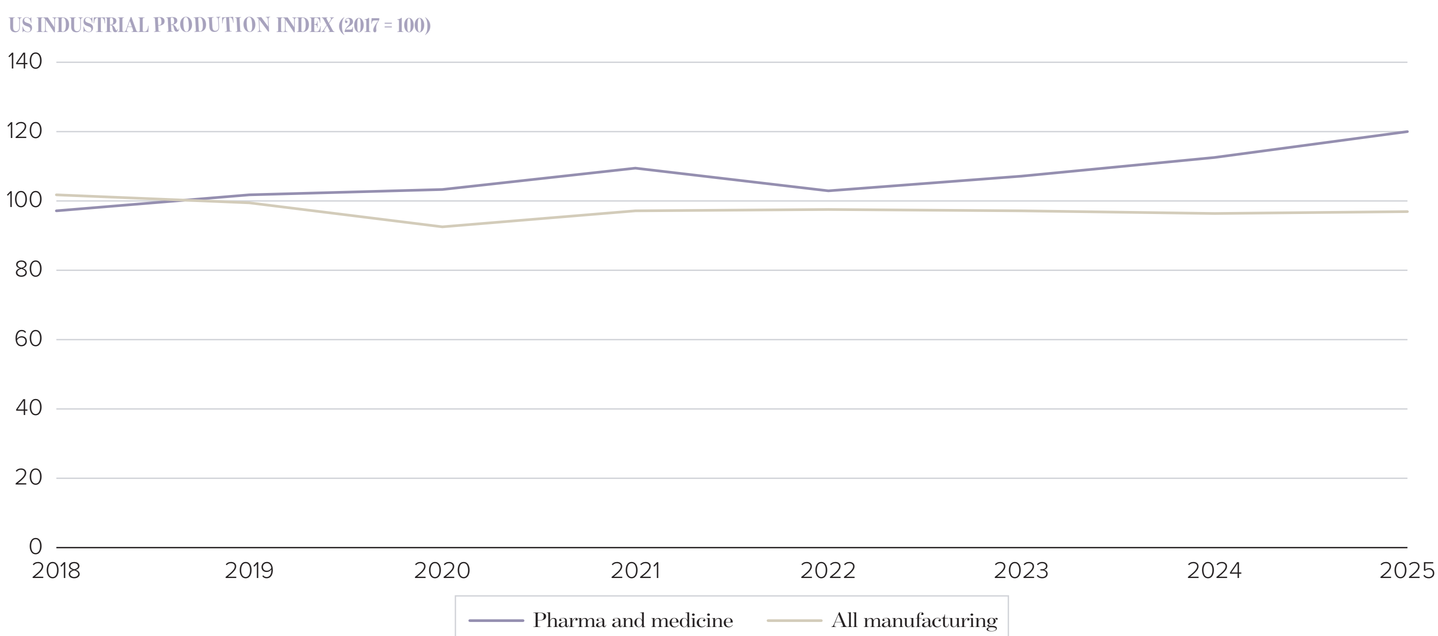
### Pharma and medicine production have exceeded the US industrial average since 2019

Although lab and R&D vacancies are high, a manufacturing facility investment surge is occurring. Life sciences facility capital expenditures roughly tripled between 2022 and 2025, with average deal size up nearly 300%.




Note: Pharmaceutical and medicine index reached its highest level in December 2025 since 2009.

Source: CBRE Research, 2026 US Life Sciences Trends, March 2026; underlying data from the Federal Reserve.

Manufacturing tenants are dominated by investment-grade or near-investment-grade large pharma and well-capitalized CDMOs taking 15- to 20-year build-to-suit leases. Manufacturing properties accounted for 28% of life sciences transactions above $15 million in 2024 and 2025.[3]

The two tenant universes produce assets that price differently, finance differently, and behave differently in a stress scenario.

## The case against bifurcation

The strongest case against this framing of divergence is that life sciences real estate is reverting toward a specialized office subset rather than splitting into two asset classes. Lab vacancy at 23.5% nationally puts the sector in roughly the same neighborhood as office vacancy in many markets.[1]

The COVID-era thesis that lab demand was structurally decoupled from broader commercial real estate cycles has not held empirically. Sublease overhang, tenant defaults, and capital giving back space are office-like behaviors. AI-native biotechs are running lab-to-office ratios of 45:55 rather than the historical 70:30, and using roughly one-third less space per employee.[4] Lab demand per dollar of biotech revenue is structurally declining.

The same logic extends to manufacturing. GMP facilities are best understood as specialized industrial: built-to-suit, tenant-specific, priced like long-duration credit instruments backed by industrial real estate. Bundling them with labs under a life sciences heading creates a category error in the other direction.

While both observations carry weight, the idea that life sciences should dissolve back into office and industrial misses the operational reality. Lab assets require specialized expertise to underwrite, lease, and operate that office allocators do not possess. GMP manufacturing requires regulatory, technical, and tenant relationships that industrial allocators do not possess.

## What execution requires

The practical case for treating lab and manufacturing as distinct underwriting exercises is compelling. What follows is less a checklist than a posture: underwrite the two sides separately, with different return expectations

An automated pharmaceutical production line

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## The case for life sciences real estate as a long-term institutional allocation remains intact.

and different risk assumptions, rather than running a single life sciences strategy that bundles them.

On the lab side, that means accepting that recovery will be uneven and incomplete. Trophy submarkets and trophy product will lead. A meaningful portion of 2022 to 2024 vintage commodity product will not stabilize without significant repricing. JLL projects that roughly 18.7 million of the current 61 million square feet of available US lab space will shift to other uses by 2030.[4] Supply discipline is arriving fast: the construction pipeline will fall 77% between 4Q2025 and 4Q2026, dropping to decade-low levels (see 4), and by year-end 2026 only two properties will remain under construction in the top 13 US markets, both fully preleased.[3] Meanwhile, the XBI surged 84% between April 2025 and January 2026, and venture capital deployment in 2H2025 totaled $17.3 billion, the strongest six month stretch since early 2022.[3] The conditions that historically precede a lab recovery are forming.

Much of the 2022 to 2024 vintage was financed against 2021 rent and cap rate assumptions, and those loans are now maturing into a market where stabilized values sit well below original underwriting. Capital deployed against lab in the next cycle should expect to acquire from sellers facing refinancing gaps rather than at market prices, and should weight tenant credit underwriting more heavily than physical specifications.

On the manufacturing side, the posture is closer to the long-duration credit work that defines specialized

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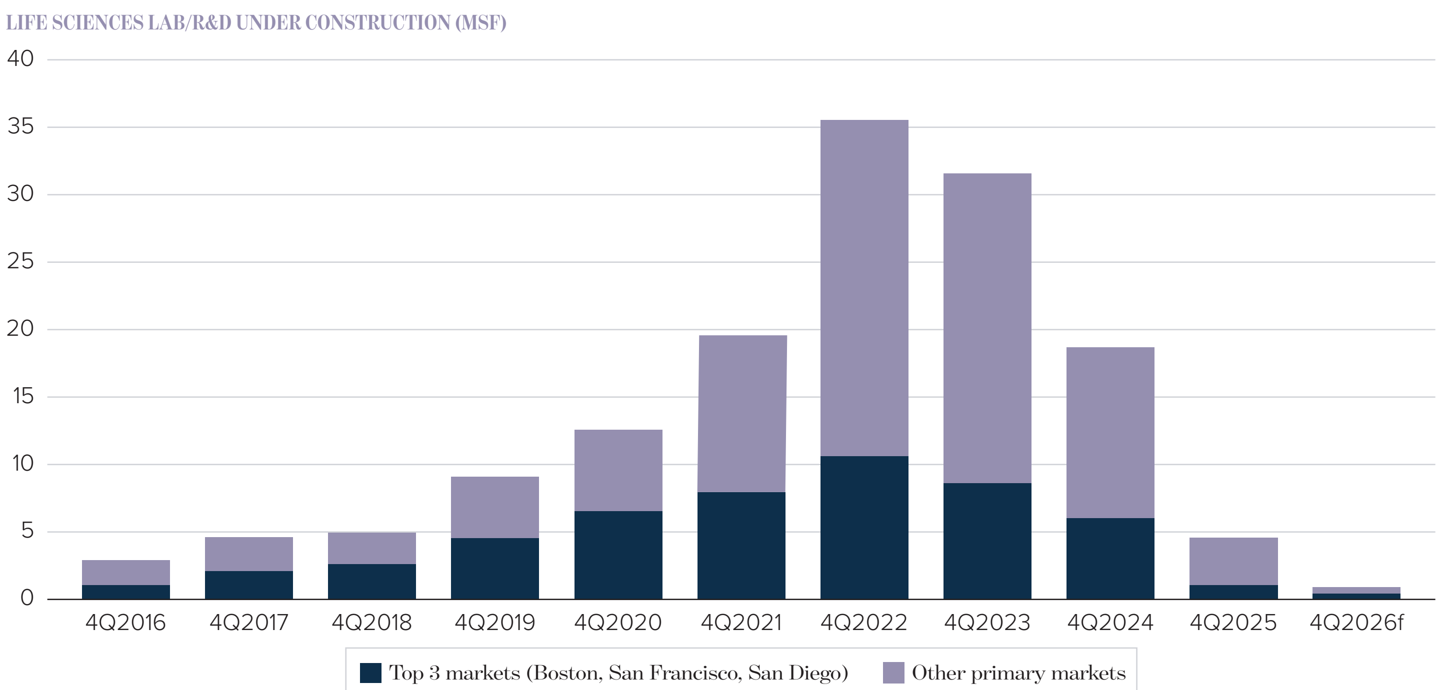
### The lab construction pipeline is dropping to decade-low levels by 4Q2026

After peaking above 35 million square feet in 4Q2022, the pipeline drops to roughly 1 million square feet by 4Q2026, with Boston, San Francisco, and San Diego accounting for a meaningful share of the cycle peak.




Note: Pipeline peaked at 37.7 million square feet in 2Q2023. By year-end 2026, only two properties will remain under construction in the top 13 US markets, both fully preleased build-to-suit facilities.

Source: CBRE Research, 2026 US Life Sciences Trends, March 2026.


A facility that operates for the purpose of handling manufacturing for both clinical trials and commercial drug launches

industrial. Tenants are investment grade. Leases are long. Asset specificity is high. The risk is not tenant runway but commitment to long-cycle facility decisions in a policy environment that can shift. Reshoring policy and tariff regimes can change with administrations. The patent cliff is real and quantifiable, but the manufacturing capacity response to it is being underwritten today on assumptions about pricing, regulation, and supply chain configuration that may not hold across the full lease term.

The discipline is build-to-suit underwriting on tenant credit, with limited tolerance for speculative construction in a category where building specifications are inherently tenant-specific. Purpose-built GMP and ATMP facilities are expensive to repurpose and nearly impossible to exit cleanly if the tenant relationship deteriorates. Getting this right requires operator relationships and tenant diligence that go well beyond credit ratings.

Geography matters differently for each side, and allocators should plan accordingly. Lab demand remains concentrated in tier 1 clusters: roughly 47% of National Institute of Health (NIH) funding flows to major markets, and Boston, San Francisco, and San Diego dominate new company formation.[5] The next lab cycle will reward investors who can acquire irreplaceable positions in these submarkets at a basis reset, not those who chase yield in unproven locations.

Manufacturing investment is dispersing along a fundamentally different map. Raleigh-Durham, the New Jersey pharma corridor, suburban Maryland, and emerging hubs in the Carolinas and Mountain West are capturing facility commitments on the strength of existing pharma infrastructure, state incentive packages, and labor availability.[5] The geographic template for the next cycle's manufacturing allocation looks nothing like the cluster map that defined lab investing over the past decade.

The case for life sciences real estate as a long-term institutional allocation remains intact. Demographic pressure on healthcare demand, the ongoing patent cliff, AI-enabled drug discovery, and the commercialization of new therapeutic modalities will drive sector growth for decades. The error is not in the asset class thesis. The error is in continuing to underwrite life sciences as one asset class when the post-correction market is making it increasingly clear that it is two.

1 Cushman & Wakefield. 2025. "US National Life Sciences MarketBeat Q4 2025."
2 PwC/ULI. 2026. "Emerging Trends in Real Estate 2026: Life Sciences Property Type Outlook."
3 CBRE Research. 2026. "2026 US Life Sciences Trends." March 11.
4 JLL. 2025. "Life Sciences Real Estate Perspective and Cluster Analysis."
5 Colliers. 2025. "2025 Life Sciences Report." March 31.
6 Alexandria Real Estate Equities, Inc. (NYSE: ARE), Supplemental Financial Information, 1Q2025.
7 PitchBook/CBRE, Life Sciences Venture Capital Data, 4Q2025.

Amachie Ackah is a Partner and Isaac Friedman-Heiman is a Senior Advisor, both at Clay Cove Capital.