



*From Science Project to
Commercial Asset*

Navigating the Critical Transition of Mindset in Early- Stage Biotech Development

A Perspective for Biotech's Strategic
Decision-Makers in Early Stage Companies



Executive Summary

Biotechnology companies face a critical inflection point when scientifically compelling results are no longer sufficient to carry the story and they must evolve to demonstrate they are also commercially viable. This transition is iterative and should start early: asking the right commercial questions at the right stage, and using those answers to make sharper allocation decisions with limited resources throughout development.

An imbalance between scientific ambition and commercial vision is one of the most common hurdles for early-stage companies. In fact, in many cases, underperformance of a company can be traced back to insufficient commercial rigor during the period when breakthrough science must be translated into market reality.

For companies that are in process of growing out of the lab, sharp commercial focus serves as a strategic multiplier, especially in resource-constrained environments. When organizations can articulate precisely where and how their technology fits in the market, they demonstrate a strategic discipline that focuses scientific effort and signals organizational maturity to investors.

1. Introduction: The Science to Commercial Inflection Point

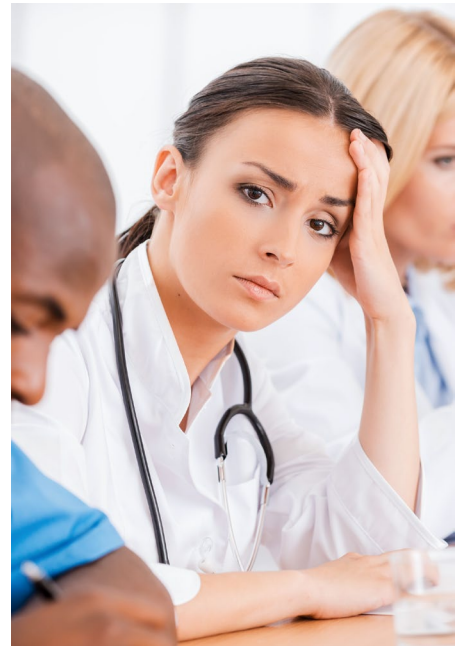
The Critical Transition Period

When science emerges from the bench and is flagged as having “translational value”, its purpose shifts from the theoretical (i.e., what has been learned from this piece of science) to the applicable (i.e., how can this science be applied to help people in the real world). At this point, the commercial realities of markets and behaviors become nearly as critical to the development and success of the technology as the science itself. In order to maintain further progress, these programs, that to this point have been driven by being “scientifically compelling”, must evolve to also demonstrate “commercial viability.”

In the early days of a company that has been formed around an exciting piece of science or innovative hypothesis, while the team is resolving the foundational questions of “does this technology work” and “is there a viable product here,” commercial opportunity can be expressed in broad strokes and abstract concepts on a single slide of the pitch deck. However, as the technology matures so does the expectation that the perspective on the opportunity will mature as well. The understanding of the target market and articulation of the commercial opportunity must become more specific: who exactly are the patients, what do clinicians and payers need, and how does this product reach them.

Why Technologies Stall: Commercial Misalignment, Not Scientific Failure

The most dangerous assumption in early-stage biotech is that good science equals good business (i.e., “the science will sell itself”). This comes at the cost of generally ignoring or downplaying the other factors that contribute to, and shape, the ability of the product to make the greatest impact on the greatest number of patients. The thinking being that if the science works, the market will shift towards the technology, and that will be sufficient (sometimes yes, but most times, no).



In reality, technologies often stall in part because of commercial misjudgment or misalignment:



Unmet needs alignment

Targeting a mechanism that's scientifically novel but addresses a problem clinicians have already solved adequately



Payer and market access

Developing a therapy with no clear reimbursement pathway or value story that resonates



Competitive positioning

Entering a crowded indication without sufficient differentiation, by type and magnitude, when adjacent white space opportunities exist



Clinical workflow integration

The "how" matters immensely when thinking about technology in real-world utilization scenarios, e.g., a therapy that requires three-hour infusions when patients expect 15-minute visits.

The gap between scientific elegance and commercial viability manifests in specific, recognizable consequences. Misallocated capital and extended development timelines represent the most common manifestation of impact, often stemming from pursuing scientifically impressive mechanisms without validated commercial pathways.

For instance, in cell therapy, a company structuring development plans around typical investor milestones (first-in-human dosing, safety cohort data) often discovers that commercial partners require different evidence entirely: manufacturing scalability, dosing convenience, and patient selection biomarkers.

Similarly, rare disease companies advancing therapies through Phase 1/2 trials before conducting comprehensive market access research frequently discover insurmountable obstacles: patient populations requiring non-standard genetic testing, one-time treatment models creating budget impact challenges, or specialized administration requirements incompatible with patient geography.

In fast-moving therapeutic areas, these delays can be the difference between leading a market and arriving too late to matter.

Investors increasingly demand evidence of rigorous commercial thinking during Series A discussions and beyond. Absence of clear market access planning, competitive positioning and differentiation, or reimbursement strategies triggers skepticism that is difficult to overcome.

A reflection on biotech companies that have achieved some level of success reveals consistent patterns: they design clinical protocols to address both regulatory and commercial questions, they thoughtfully maintain secondary indications, and they invest in market access planning well before launch. The differentiating factor is timing of commercial integration and willingness to invest in uncomfortable questions early.

Scientific and commercial rigor are complementary disciplines. Successful organizations learn to apply both simultaneously, calibrating the depth and focus of each to the stage of technology lifecycle. The challenge is that for many scientific founders, this commercial lens does not come naturally.



Why Scientific Founders Struggle With This Shift

The difficulty scientific founders face in adopting commercial thinking stems from several deeply ingrained factors.



Outside core expertise.

Scientific founders are well trained to design elegant experiments, interpret complex data, and advance scientific knowledge. Assessing reimbursement landscapes, evaluating competitive positioning, or modeling market penetration rates is simply a different skill set for many scientists.



Requires different metrics of success

Academic and early-stage research reward scientific breakthroughs measured in papers published, grants secured, and peer recognition gained. Commercial success requires a different scorecard: market share potential, value propositions validated, and capital efficiently deployed. Some scientists are uncomfortable thinking about scientific impact in terms of dollars and cents or simply don't appreciate the critical metrics.



Stakes feel personal

For many founders, their technology represents years or decades of dedicated research. They are leading experts in their field. Subjecting that work to commercial scrutiny can feel like subjecting a core part of their identity to critique.

This shift is challenging, but it is a necessary area of growth for any organization. Scientific rigor, mechanistic insight, and intellectual curiosity remain essential. Organizations must simultaneously evaluate opportunities through the perspectives of investors, payers, clinicians, and patients.



Start now.

Begin asking commercial questions even without all the answers. Build advisory relationships even before committing to full-time commercial hires. Conduct preliminary market research even if it's informal and qualitative rather than comprehensive and quantitative.

2. The Foundational Commercial Analysis – Data, Dynamics, and Decisions

So then, what are the tools and information needed to facilitate this shift in mindset and strategy? The solution is a structured commercial analysis that is complementary to the ongoing scientific development. Gather the evidence. Understand how the system behaves. Then form hypotheses and act. In commercial terms, this translates to three stages of inquiry: assembling the data that defines the landscape, understanding the how the pieces in the landscape interact and the “rules of engagement, and making the strategic decisions that position the technology to succeed within it.

Data: The Commercial Landscape

The starting point is evidence. Before any strategic question can be answered credibly, the organization needs a grounded factual picture of the market it intends to enter. This means understanding a few critical areas:





Disease and patient characteristics

How large is the population, how are patients identified, diagnosed, and segmented today



Patient journey and clinical workflow

How patients move from diagnosis through treatment and follow-up, and where the friction points are in that process



Unmet needs

Defined gaps that clinicians and patients actually experience in current care; the inverse of this can be articulated as “value drivers” in that these are things that matter in evaluating new therapies



Competitive landscape:

Approved therapies and pipeline assets that will define the market at the time of entry; this is that anchor for differentiation hypotheses



Market access and payer environment

Rules that governs patient access, evidence requirements, and economic context

These components form the fact base. At the earliest stages, much of this can be assembled through desk research, publicly available data, and conversations with advisors. As the organization matures, the expectation shifts toward validated primary research: direct interviews with clinicians, payers, patients, and other stakeholders who can confirm, challenge, or reframe the assumptions embedded in the initial picture. Note here that while the founding team may have the world's experts on any given topic, it's always best practice to reach outside the "circle of trust" to incorporate external, unbiased perspective.

Dynamics: How the Market Works

Data describes the landscape at a slice in time. Dynamics describe how the pieces interact and where they are headed. This is the analytical step that brings a slide deck to life to become a commercial thesis.

We view this piece as a bit of a math equation where we take the fact base as the starting point and apply some weighted average of market trends and anticipated events to try and project out the market undulations and trajectory into the future. As with any good forecasting exercise, the value is in the journey rather than getting the final result exactly correct. That is to say the goal here is to form a well-reasoned opinion on a couple of likely future market scenarios that you can plan against and, critically, the leading indicators or trigger points for quickly identifying which path we end up travelling down. This is the difference between understanding what the market looks like and understanding how it actually works.



Decisions: The Strategic Outputs

With a grounded understanding of both the data and the dynamics, the organization is equipped to make the strategic decisions that define its commercial trajectory. Three outputs emerge from this foundation.

The first is the **target product profile and value proposition**: the best version of the product as defined by what the market needs. This is where clinical aspirations meet commercial reality. The TPP should reflect the endpoints that matter to prescribers and payers, the administration and dosing characteristics that fit real-world workflows, and the differentiation that will be meaningful at the time of market entry. The value proposition distills this into a clear answer for each stakeholder: why this product, for these patients, at this time.

The second is the set of **strategic pillars**: the defining choices about how the product wins. These are the three or four commitments that focus the organization's resources and guide tradeoff decisions. They might include indication sequencing strategy, the basis of competitive differentiation, the commercial model (build, partner, or license), and the evidence generation approach that serves both regulatory and commercial requirements. Strategic pillars provide the rationale for saying no to scientifically interesting but commercially dilutive opportunities.




The third is the **strategic roadmap**: the tactical plan that sequences milestones, maps dependencies, and allocates resources against time. The roadmap translates strategic intent into operational reality. It connects clinical development decisions to commercial readiness milestones and ensures that the evidence being generated, the partnerships being explored, and the capabilities being built are all advancing in coordination.

None of these outputs can be developed credibly in isolation from the commercial foundation. A target product profile written without understanding the patient journey is aspirational. Strategic pillars defined without competitive dynamics are theoretical. A roadmap built without market access context will require costly revision. The depth of the underlying analysis scales with the stage of the organization, but the structure remains the same.



3. Commercial Questions and Infrastructure by Development Stage

The key to successful integration of commercial thinking is knowing which questions matter at each stage, building appropriate capabilities to address them, and using those insights to inform both scientific and business decisions. The following consolidates the priority questions and expected investment across three stages of development.

	Stage 1: Pre-Seed to Seed	Stage 2: Seed to Series A	Stage 3: Series A to Series B+
Questions 	<ol style="list-style-type: none"> 1. What is the target patient population and where are the meaningful gaps in current care? 2. What does the competitive landscape look like at anticipated market entry? 3. What regulatory pathway exists and has it been navigated by comparable assets? 	<ol style="list-style-type: none"> 1. How do clinical endpoints align with what payers and prescribers value? 2. What is the target product profile from the customer perspective? 3. Which potential partners value this space and what data do they need? 	<ol style="list-style-type: none"> 1. Build, partner, or license: what is the optimal commercialization path? 2. What evidence beyond efficacy do payers need for coverage? 3. What is the manufacturing and supply chain strategy at commercial scale?
Key infrastructure 	Advisory relationships (equity-based)	Fractional commercial leadership + primary market research	Full-time commercial leadership + go-to-market infrastructure
Investment level 	Desk research + advisors	Targeted primary research + fractional hires	Comprehensive research + full-time team

4. Conclusion: The Path Forward

Reframing the Challenge as an Opportunity

The transition from science project to commercially viable asset represents an evolution that amplifies the ability to create impact.

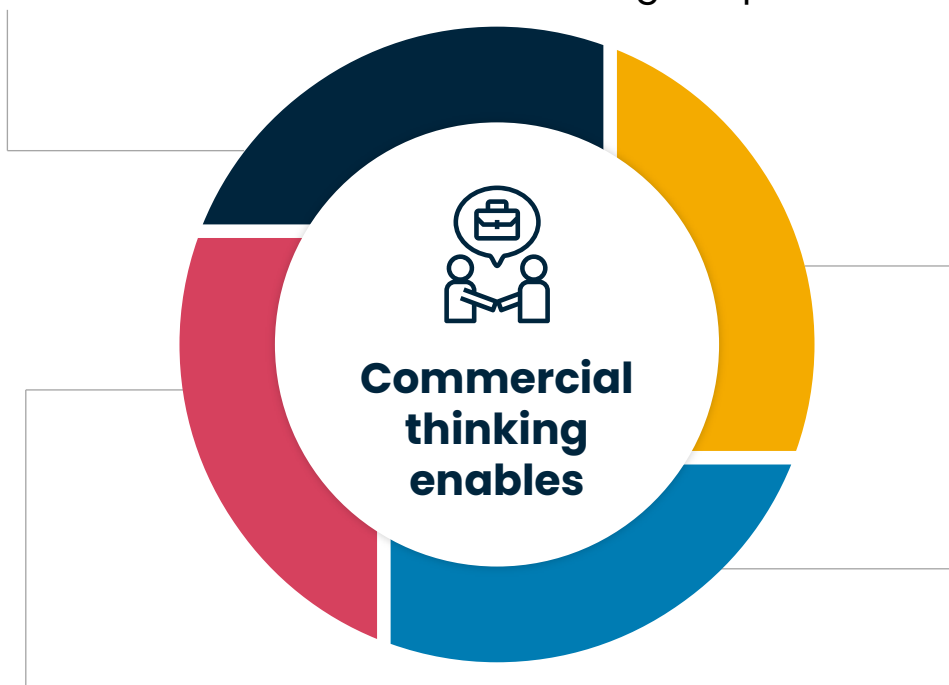
Commercial thinking enables:

Scientific focus on high-impact areas:

Understanding which indications have the greatest unmet need and clearest path to patients focuses scientific effort where it matters most

Efficient capital deployment:

Every dollar spent on strategically informed research creates more value than dollars spent pursuing scientifically elegant but commercially misaligned paths



Patient impact at scale:

The greatest scientific breakthrough means nothing if it never reaches patients. Commercial viability transforms innovation from lab curiosity to medical reality

Sustainable organizations:

Companies that integrate commercial thinking early build sustainable businesses that can support multiple assets, hire great teams, and create long-term value for all stakeholders

Call to Action: Start the Transition Now

Regardless of current stage, the best time to integrate commercial thinking is now.

If you're pre-seed	If you're Seed to Series A	If you're Series A+
<ul style="list-style-type: none">• Add commercial advisors to your advisory board before your next financing• Conduct preliminary market opportunity assessment for your target indications• Include market access questions in your scientific advisory board discussions	<ul style="list-style-type: none">• Commission competitive landscape and market research• Hire fractional commercial leadership to guide clinical protocol design• Begin building relationships with potential strategic partners	<ul style="list-style-type: none">• Establish full-time commercial leadership if you haven't already• Develop comprehensive target product profiles from customer perspective• Create clear go-to-market strategy and partnership evaluation frameworks

The biotech industry has evolved. Investors expect commercial thinking during Series A discussions. Partners require clear market access strategies during due diligence. Payers demand value propositions that extend beyond clinical efficacy.

This evolution makes the path to market clearer. Organizations that embrace commercial thinking early are able to create more value, reach more patients, and build more sustainable businesses.

Your science deserves to reach patients. Commercial thinking is what makes that possible.

SIDEBAR: Self-Assessment – Is Your Organization Ready for Commercial Thinking?

Use this self-assessment to calibrate where your organization sits today. The questions map to the commercial building blocks outlined above, applied at increasing depth as you progress through each stage

Stage 1: Foundation Questions

- Can you articulate your target patient population size in specific numbers? Other defining characteristics?
- Do you know the benefits and challenges of the current standard of care and how your therapy would be positioned relative to it?
- Have you identified the regulatory pathway and are there successful precedents?
- Do you know who the decision makers are (physicians, payers, health systems) and what they value?
- Can you name your top three competitors that will be in market when you launch? Do you have a hypothesis to win against them?

Stage 2: Integration Questions

- Do you have at least one advisor or board member with commercial expertise in your therapeutic area?
- Have you talked to 10+ potential customers (prescribers, payers, patients) about your value proposition?
- Are commercial considerations explicitly included in your R&D prioritization decisions?
- Does your board receive regular competitive intelligence and market updates?
- Have you developed a target product profile that reflects market/customer needs, not just scientific capabilities?

Stage 1: Foundation Questions

- Do you have full-time or fractional commercial leadership?
- Have you created a preliminary go-to-market strategy (scenario based, build vs. partner, trade-offs)?
- Do you have market access and reimbursement expertise informing your strategy?
- Are you actively building relationships with potential partners or key opinion leaders?
- Do your clinical protocols address endpoints that payers and prescribers care about?

Scoring:

0-5 boxes checked: You're in science project mode. This is fine for very early stage, but if you're approaching or past Phase 1, you have significant commercial blind spots that need addressing.

6-10 boxes checked: You're making the transition but have important gaps. Prioritize filling commercial capability gaps in the next 6-12 months.

11-15 boxes checked: You're successfully integrating commercial thinking. Continue building capabilities and refining strategy as you learn more about your market.

The Authors



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Mike has supported the commercialization of innovative drugs, devices, and health technology for nearly 20 years. He has partnered with Pharma and Biotech companies of all sizes to identify/evaluate market opportunity, develop winning strategies, and guide execution and pull-through.

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Walter brings 30 years of experience across biotech and consulting, with in-house roles at Neurocrine Biosciences, Ambit Biosciences, and Fate Therapeutics. As a consultant, he has partnered with leadership teams on more than 200 engagements – often as an extension of the leadership team, helping companies figure out who they want to be when they grow up.

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Who we are

Perspec Partners helps client teams make decisions that matter. We combine proven expertise in commercial and business strategy with tech-enabled workflows to deliver results for emerging biotechs, development-stage programs, and commercial assets.

What we deliver

- Decision-ready insight
 - Clear action plans with explicit trade-off
 - Embedded partnership when execution determines success
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How we help

- Opportunity assessments & valuation
- Pipeline & indication prioritization
- TPP optimization & value narrative
- Market access & pricing strategy
- Competitive assessment & strategy
- Commercial/launch readiness
- Brand and growth planning
- Partnering strategy
- Organizational buildout & scaling

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