

In collaboration with
Boston Consulting Group



Industries in the Intelligent Age

Strategic Choices in the Age of AI: Shaping the Future of Life Sciences

INSIGHT REPORT

MAY 2026



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Reading guide

The World Economic Forum's AI Transformation of Industries initiative seeks to catalyse responsible industry transformation across industries and society. It advances the understanding of AI's impact on business and society while actively accelerating practical implementation through leadership convening, ecosystem collaboration and the scaling of real-world solutions.

A central pillar of the initiative is MINDS (Meaningful, Intelligent, Novel and Deployable Solutions), a programme that recognizes and showcases real-world AI deployments delivering scalable, inclusive impact across sectors.

This white paper series examines the transformative role of AI across industries, combining cross-industry analysis with in-depth sectoral and regional perspectives.

Building on 2025's foundational assessment of AI's state of development, strategic potential and emerging opportunities, the 2026 series shifts from *what is possible* to *what is required*. The focus moves

decisively towards operationalization, highlighting the actions organizations could take to move from experimentation to enterprise-wide implementation.

Each paper offers a practical, executive-level view of what transformation looks like, drawing on real-world case studies, leading practices and emerging data from across industries. While each paper is a standalone, common themes emerge: new operating models, evolving roles of leadership, human-AI collaboration, and the growing importance of AI governance and orchestration.

As AI adoption accelerates, this series aims to equip leaders with the insight, capabilities and decision frameworks required to build competitive, responsible and future-ready, AI-enabled organizations.

Together, these papers offer a comprehensive view of AI's current development and adoption, as well as a view of its future potential impact. Each paper can be read as a standalone or alongside the others, with common themes emerging across industries.



Cross industry

Impact on industrial ecosystems



Organizational Transformation in the Age of AI: How Organizations Maximize AI's Potential



AI in Action: Beyond Experimentation to Transform Industry



From Paradox to Progress: A Net-Positive AI Energy Framework

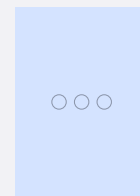


Artificial Intelligence and Cybersecurity: Balancing Risks and Rewards



Regional specific

Impact on regions



Upcoming: China



Industry or function specific

Impact on industries, sectors and functions

Advanced manufacturing and supply chains



Intelligent Industrial Operations Outlook 2026

Consumer goods



Unlocking AI Value at Scale: Workforce Adoption, Functional Capabilities, Consumer Industries

Healthcare



The Future of AI-Enabled Health: Leading the Way

Life science



Strategic Choices in the Age of AI: Shaping the Future of Life Sciences

Media, entertainment and sport



Artificial Intelligence in Media, Entertainment and Sport

Telecommunications



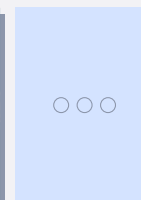
The Strategic Role of Telecom Providers Across the AI Value Chain

Transport



Intelligent Transport, Greener Future: AI as a Catalyst to Decarbonize Global Logistics

Financial services



Upcoming

Foreword



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Life sciences and medtech carry a unique societal mandate: to translate scientific and technological progress into healthier, longer and more productive lives. Positioned at the forefront of human health, the sector is tackling some of the world's most persistent and complex challenges – from cancer and neurodegenerative disorders to rare diseases that still lack full understanding and effective cures.

Artificial intelligence and other deep technologies now offer unprecedented opportunities to confront these challenges. **Beyond accelerating existing processes, they are fundamentally reshaping how research is conducted, therapies are developed, care is delivered and patients engage with the system.** Discovery is becoming computational, development more data-driven and care increasingly AI-enabled. These shifts have profound implications for industry competitiveness, public trust, health access, economic resilience and the sector's ability to navigate an increasingly complex geopolitical landscape.

These transformations are unfolding amid, and mounting, system pressures. Ageing populations, rising chronic disease burdens, workforce constraints and fiscal strain are testing health systems worldwide. **In this context, innovation in life sciences is not only a commercial endeavour; it is also intertwined with national priorities and system stability.**

Across the sector, investment in AI, data science and automation is accelerating, yet the foundations needed to fully realize this transformation remain incomplete. Companies are navigating new R&D models, data ecosystems, evolving value chains and shifting expectations from patients, regulators, payers, physicians and society overall. **Some of**

these shifts are already materializing at scale; others are still unfolding – but they are already prompting strategic decisions that will shape the industry for decades. To deliver on its mandate, the industry must rethink not only how it innovates but how it collaborates – with new partners, across sectors and with the public domain.

The Life Sciences and MedTech Horizons workstream, part of the World Economic Forum's Digital Healthcare Transformation Initiative in collaboration with BCG, was established to bring together global leaders to envision and prepare for this next era. The first outcome of this effort – the report you are about to read – presents the private-sector perspective on how AI is reshaping industry. **It explores how innovation is transforming research, development, market access and engagement with patients, and highlights the strategic choices leaders face.** It underscores that translating technological disruption into sustainable value requires the development of a clear vision for the future and aligned action across stakeholders.

This perspective is a critical starting point, but it is only one side of the equation. The next phase of this work will integrate the public-sector view to better understand how policy, regulation, financing and societal priorities must evolve in parallel. Bridging these perspectives will be essential to designing the vision and the enabling environment required for positive, responsible and scalable transformation. Only through the establishment of a shared vision and aligned, multistakeholder action can technological disruption be translated into sustainable value – advancing not only the competitiveness of the industry but also the health and well-being of societies worldwide.

Executive summary

This report examines how AI, generative models, and increasingly connected data ecosystems are driving a structural reconfiguration of the life sciences value chain, with implications for how innovation is generated, translated and delivered to patients. While digital technologies have already raised the industry's performance baseline, AI is shifting the focus from optimizing the current value chain to redefining its future structure, thereby expanding the range of viable strategic positions and forcing more explicit choices about where and how companies compete. As a result, competitive advantage is no longer anchored in incremental improvements, but in how organizations position themselves within a fundamentally evolving system.

The analysis identifies two fundamental shifts. First, in R&D, AI removes scarcity in research by dramatically increasing the volume and speed of hypothesis generation. As a result, the bottleneck shifts downstream, moving from discovery to development, translation and evidence generation. Competitive advantage increasingly depends on the ability to convert a larger share of ideas into approved, adopted and scalable interventions, supported by continuous learning systems that integrate clinical and real-world data.

Second, in market access and distribution, AI and digital interfaces reshape how demand is formed, how decisions are influenced and how products reach patients. Multiple access pathways are emerging in parallel (provider-led, direct-to-patient, and new intermediary-driven models) each requiring distinct capabilities, operating models, and economic logic.

Across these shifts, three strategic approaches emerge in both R&D and commercialization. In R&D, companies may position themselves as AI-supported science champions, asset integrators, or

development engines. In access and distribution, they may reinforce provider-led pathways, build direct patient relationships, or challenge traditional distribution models. These approaches are not mutually exclusive, but pursuing all simultaneously risks strategic dilution. Leaders must therefore make deliberate choices and align capabilities, organization and investment accordingly.

The report highlights two immediate implications. First, organizations must move beyond isolated digital initiatives and build integrated, lifecycle-spanning capabilities, supported by interoperable data and embedded across core processes. Second, leaders must make explicit strategic choices about where and how to compete within a reconfigured value chain. Incremental adaptation is no longer sufficient; sustained advantage requires aligning capabilities, operating models and investment around a clear strategic position.

Looking ahead, the pace and direction of transformation will depend on alignment between industry and public actors. Regulatory frameworks, reimbursement models, and data governance will shape which approaches can scale and where capabilities concentrate. The next phase of this work will, as a result, extend this analysis by incorporating the public sector perspective to identify the conditions required to enable responsible, scalable and equitable transformation.

Ultimately, the shift under way is not incremental. As AI reshapes both the creation and delivery of innovation, life sciences companies must transition from optimizing existing models to building fundamentally new ones, defining how value is created, captured and sustained in the decades ahead.

Introduction

Over the past decade, digital transformation, meaning the digitization and standardization of processes and core workflow automation, has delivered meaningful gains in biopharma and medtech (referred to as life sciences throughout this report). Improvements in procurement, demand forecasting and the automation of technical and regulatory documentation, for example, have moved from aspiration to standard practice and now define the baseline for operational excellence.

However, these advances represent only the first phase of the industry's broader structural reconfiguration. Artificial intelligence, generative models and increasingly connected data ecosystems are reshaping where and how value is created. The signals are clearly visible: AI-enabled biotech pipelines have grown at compound rates exceeding 20%;¹ a subset of AI-native players now holds pipelines half the scale of top incumbent pharma;² and digital and AI-enabled approaches may reduce trial delays by more than a third.³ Today, innovation is increasingly coming from new players and external ecosystems.

In biopharma R&D, AI's impact is most visible in discovery and clinical development; in medtech, it is in device intelligence, clinical decision support and workflow optimization. At the same time,

patient behaviour is changing; over 80% of Gen Z report being more likely to trust AI-supported diagnosis than traditional physician assessment.⁴ Thus, the basis of competition is evolving – not simply towards greater efficiency but towards fundamentally different ways of creating and capturing value.

Because of life sciences' unique societal role and operation within highly regulated, trust-sensitive and often publicly financed systems, these structural shifts extend beyond firm-level strategy. As regulatory standards, reimbursement design and data governance will shape which emerging models can scale, public and private systems must evolve in parallel.

The sections that follow examine this transition in two steps. First, they outline the digital and operational advances that have become table stakes. They then analyse the deeper transformations reshaping and redefining competitive advantage in R&D, market access and distribution. A final section examines the implications of these transformations for public-private collaboration. While many of the trends described in this paper are already visible today, their full implications will unfold over the coming decades.

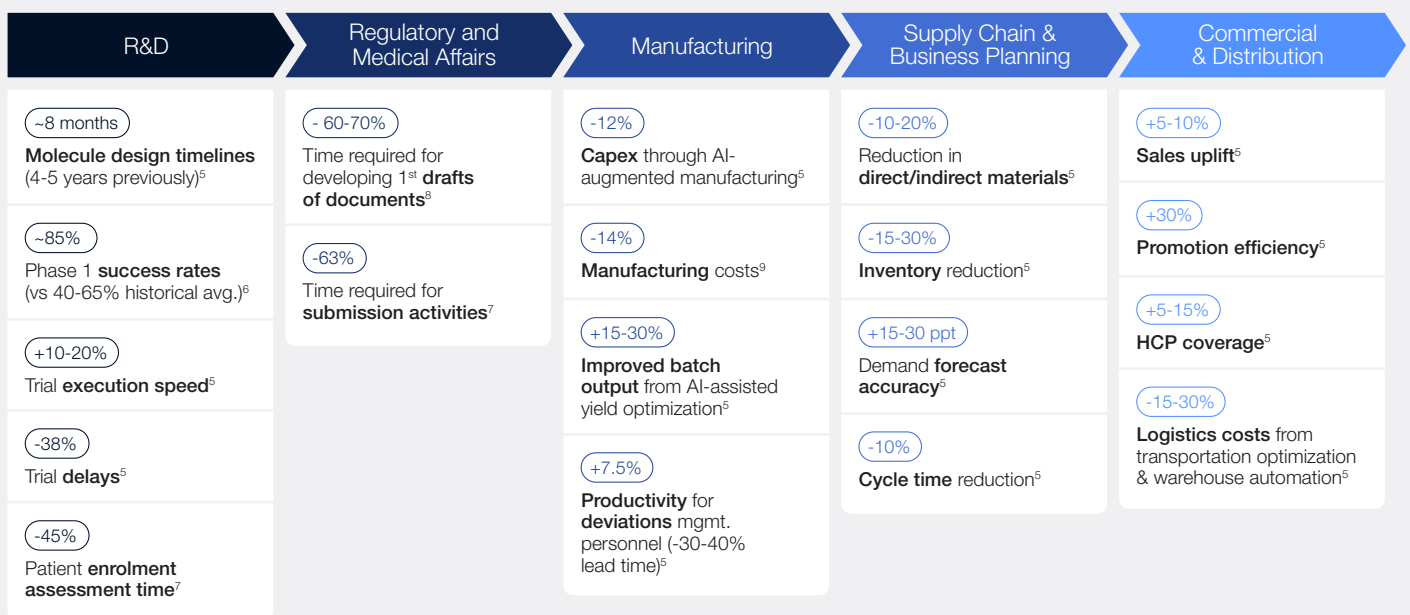
1

AI/digital already deeply impact the life sciences industry

Digital transformation across the biopharma and medtech value chain is no longer confined to pilots and has already delivered tangible progress (Figure 1). From research through manufacturing and commercial execution, AI-enabled capabilities drive step-change gains in speed, cost, reliability and scalability. What began as isolated applications is becoming core infrastructure, integrated into

processes, data flows and decision systems. As these capabilities become broadly accessible, advantage depends less on isolated use cases and more on how deeply AI is integrated into operating models and governance. These advances have raised the performance baseline and redefined what it means to be a best-in-class life sciences organization.

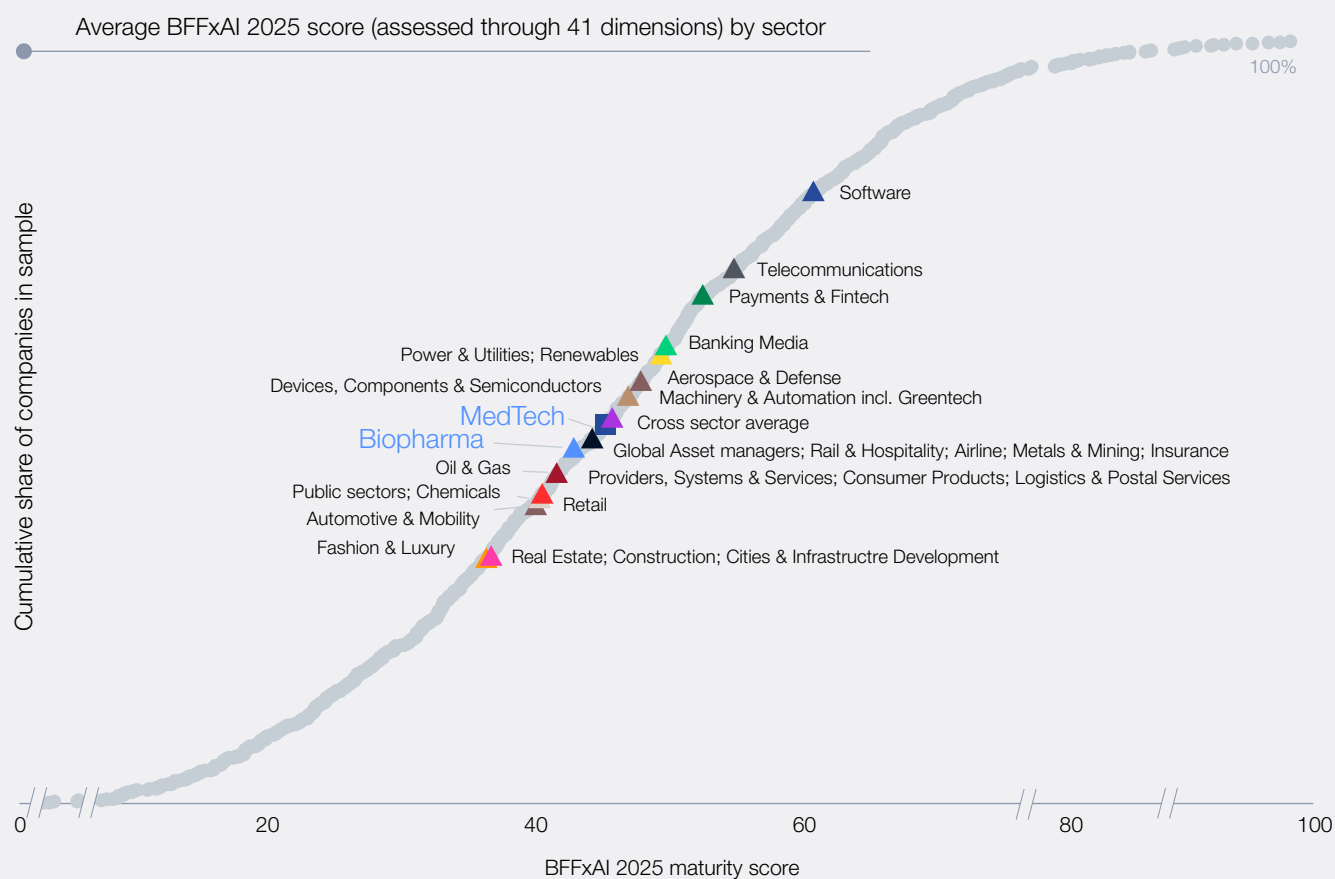
FIGURE 1 Digital & AI already impacting the whole life sciences value chain



This shift also reshapes how organizations work, as AI is already and will further automate substantial portions of knowledge work and operational execution. AI will not, however, eliminate the need for human judgment but increasingly determine where and how that judgment is exercised. In many areas, AI already supports prioritization and resource allocation. Over time, these systems may move beyond decision support to more autonomous decision-making, raising new governance and trust considerations.

Yet readiness remains uneven. According to BCG's *Build for the Future x AI 3.0 Global study (2025)*,¹⁰ only 34% of medtech players and 29% of biopharma players have reached true "AI-scaler" or "future-built" maturity. The rest are considered only "emerging" or "stagnating" (Figure 2).¹⁰ While many firms are investing in reskilling, data foundations and organizational redesign, upgrading the current model is unlikely to be sufficient. As new entrants already build operating models for a fundamentally different end state, incumbents must move beyond incremental improvement and make deliberate strategic choices about where and how they compete.

FIGURE 2 | Software and Telco companies have the highest maturity; Biopharma and MedTech at average level across all sectors



2

Competitive advantage will be redefined by a new R&D ecosystem and a reconfiguration of access and distribution

So far, the underlying logic of how life sciences creates value has remained largely intact as the gains already achieved can mostly be mapped to the traditional life sciences value chain. Competitive advantage has largely continued to rely on strong internal R&D, protected intellectual property and scale-driven commercialization through established healthcare systems. Digital tools, while powerful, have primarily optimized existing processes rather than fundamentally reinvented the value chain.

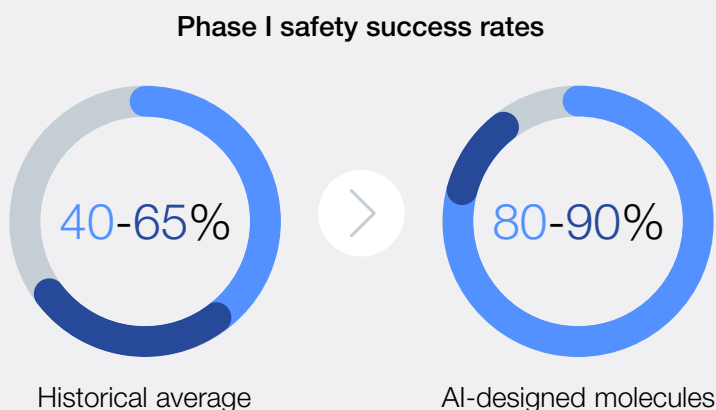
That logic is now shifting. AI and digital technologies are challenging long-held assumptions about what is possible – and what is necessary – to succeed in life sciences. Structural reconfigurations, particularly in R&D and market access, will change the existing value chain at its core and thereby expand the range of viable strategic positions. As a result, competitive advantage increasingly depends on deliberate choices, and aligning capabilities, organization and investment accordingly.

2.1 AI removes scarcity in research, shifting the way companies differentiate in R&D

For much of the modern life sciences era, research was defined by scarcity: limited biological targets, constrained experimental capacity, scarce data and long trial-and-error cycles. These constraints shaped how innovation occurred, how organizations were structured, where competitive advantage accumulated, and which players could compete at

scale. AI is altering those constraints. Large-scale hypothesis generation, rapid in-silico experimentation and automated iterations are expanding what was once a narrow, human-limited funnel into a faster-moving system in which candidate molecules can be generated, screened and refined at unprecedented speed, volume and cost.

FIGURE 3 AI is beginning to improve molecule success rates



This shift is measurable. The global AI drug discovery market is growing at roughly 25% annually¹¹ and AI-enabled molecular design has shortened early-stage timelines from four to five years to less than a year in some cases¹² while improving early-stage success rates (Figure 3).¹³ This indicates both higher throughput and improved early filtering of candidates. The ecosystem is expanding in parallel: big tech plays an increasingly prominent role and AI-native discovery players demonstrate how small, highly focused teams can generate clinically relevant assets at a fraction of historical cost.

Together, these developments have driven a well-documented expansion in preclinical portfolios (Figures 4 and 5).^{14,15} By 2023, 67 AI-discovered molecules had entered clinical trials, growing at compound rates over 60% (Figure 6),¹⁶ thereby reflecting an exponential increase in AI-native discovery output also progressing to development.

FIGURE 4 **Subset of AI-native players holds pipeline 50% that of big pharma**

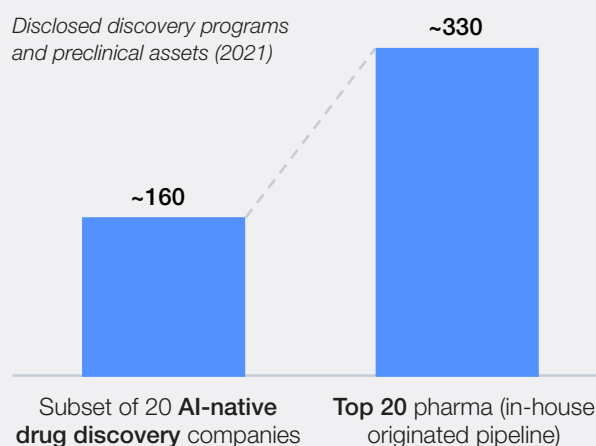


FIGURE 5 **Rapidly growing 'AI-first' biotech pipeline**

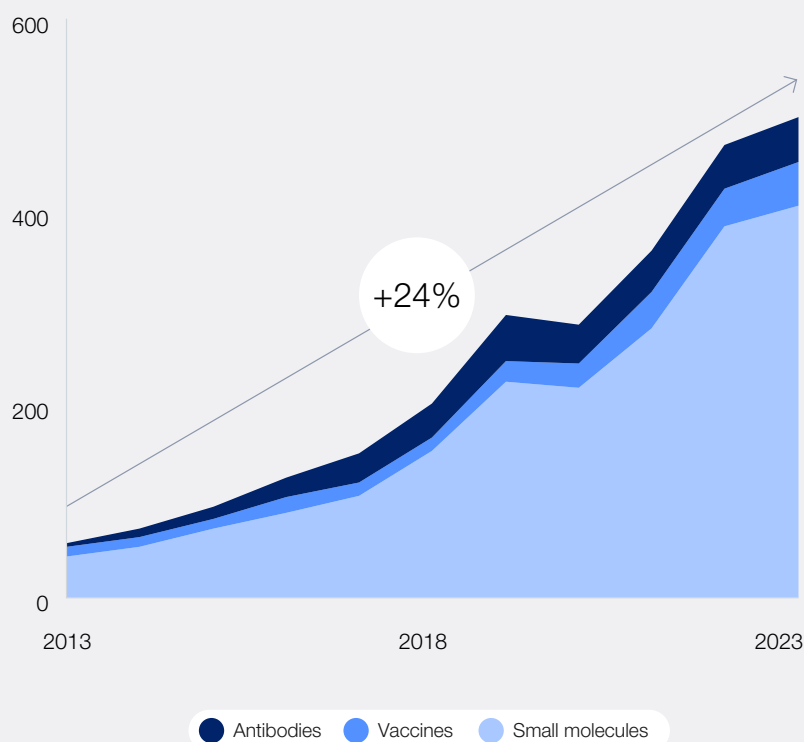
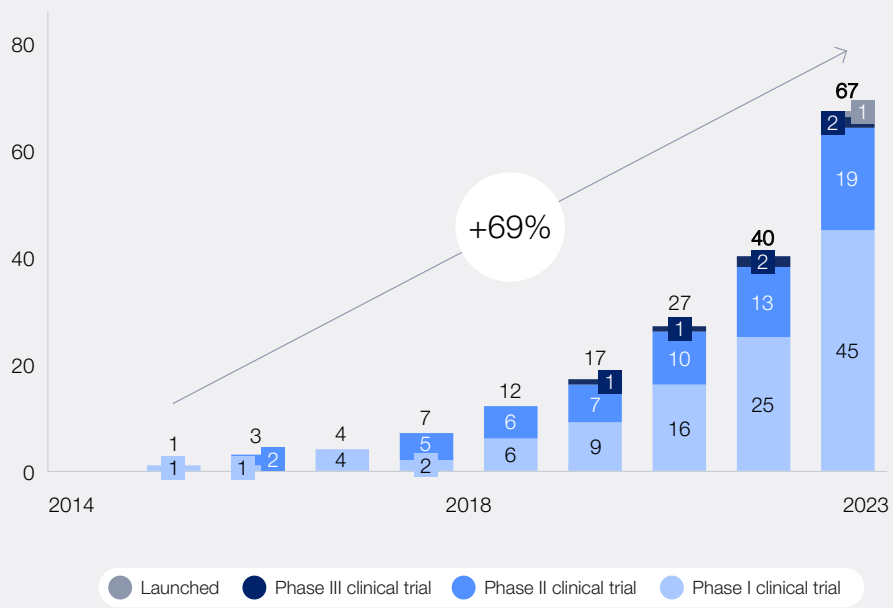


FIGURE 6 | Total number of AI-discovered molecules in clinical trials



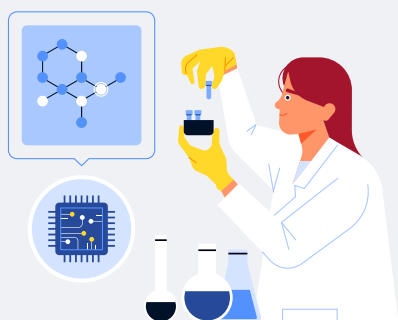
Thus, in biomedical research, AI is changing the rhythm by generating far more hypotheses, targets and candidate molecules that organizations and ecosystems can realistically absorb or advance. Rather than eliminating constraints altogether, this shifts the primary bottleneck downstream. While discovery becomes less capacity-limited, development, translation and regulatory approval remain slower, capital-intensive and uncertainty-laden. Importantly, greater discovery throughput should not be mistaken for resolution of all the industry's core challenges as higher candidate volume does not automatically translate into higher clinical success without deep insight and rigorous development.

Although most visible in biopharma, a similar dynamic is emerging in medtech, where AI may also reduce constraints in early stages of value creation. New technologies may help create large procedural datasets that can accelerate product refinement, development and training (e.g., through AI-enabled surgical video capture and labelling). Furthermore, incisionless or minimally invasive approaches represent disruptive alternatives to traditional surgical models; and, in select disease areas, closed-loop

neuromodulation and biomarker-driven implants may compete with pharmacological therapies. Companies such as Medtronic illustrate how sensing-enabled and adaptive stimulation systems¹⁷ can move devices to continuous learning rather than episodic deployment. Across both segments, AI increases discovery speed while intensifying pressure on translation and system readiness.

Furthermore, rather than relying solely on discrete clinical phases, R&D may increasingly evolve towards continuous learning systems that integrate clinical trial data with real-world evidence and longitudinal patient outcomes. In such models, insights are not only used to support approval but to iteratively refine therapies, adapt development strategies and inform subsequent innovation cycles.

This shift clearly changes where competitive advantage lies and how resources, capabilities and governance should be configured. Incrementally adding AI tools to legacy models is unlikely to be sufficient. Overall, incumbents may converge around three strategic approaches:



1

AI-supported science champion

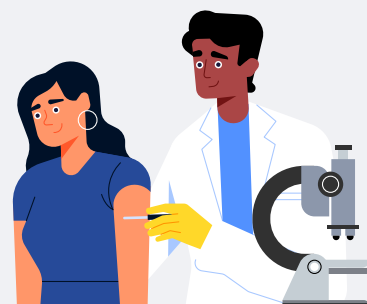
Strengthening internal scientific leadership and using AI to deepen biological insight as an **AI-supported science champion**



2

Asset Integrator

Positioning as an **asset integrator**, systematically sourcing, selecting, and scaling externally generated innovation through disciplined portfolio construction



3

Development engine

Building a **development engine**, competing on superior execution in clinical development, evidence generation, and real-world translation



AI-supported science champion

One strategic path is to become an AI-supported science champion – doubling down on scientific depth as a core strategic asset while using AI to expand and refine biological insight, translational understanding and experimental learning. Today, for many complex diseases – such as neurodegeneration, autoimmune disorders, metabolic conditions and oncology subtypes – biological pathways remain only partially understood and patient responses vary widely.

Despite technological progress, therapeutic advancement is still constrained by gaps in causal insight. To date, only around 5% of the human proteome has been successfully targeted for drug development, recognized through initiatives such as Target 2035.¹⁸ The core belief underlying this strategy is, therefore, that durable advantage still rests on deep biological understanding, even as AI increases the range of testable hypotheses. In this context, advantage accrues not to those who generate the most candidates but to those who translate computational advances into defensible, patentable, biological understanding.

This same logic applies in medtech. Here, differentiation stems from codifying procedural expertise, refining device performance through real-world data and embedding adaptive intelligence into therapeutic systems. In both segments, the core differentiator is not output volume but the ability to convert AI-generated signals into defensible, high-confidence insight that improves downstream outcomes.

The AI-supported science champion approach evolves the traditional R&D model but with a different operating logic. The objective is not more assets but better questions and experiments to reduce uncertainty earlier. AI thereby acts as a force multiplier for scientific reasoning, rather than a substitute for it. This logic also challenges the assumption that value lies in treating large, homogeneous patient populations. As biological and clinical heterogeneity becomes more visible, competitive advantage may increasingly depend on the ability to develop therapies for more precisely defined patient segments, where stratification meaningfully improves probability of success.

In this approach, scientific talent remains central, but its role shifts. Researchers move from hypothesis generation to curating, interrogating and validating AI-generated insights. This places a premium on disciplines such as systems biology, translational medicine, clinical pharmacology and physiology, which allow organizations to distinguish correlation from causation. At the same time,

AI-supported science champions operate hybrid architectures, retaining control over scientific judgment and experimental design while partnering with technology providers and data platforms for infrastructure and tools.

Operating models evolve accordingly. AI-supported science champions may rebuild tight integration between computational capabilities and wet-lab experimentation, reversing earlier trends towards decoupling and outsourcing. Experimental platforms are designed to run faster, smaller and more iteratively, enabling continuous design-build-test-learn cycles, connecting discovery directly to early development. Rather than traditional large and centralized R&D structures, organizations may become leaner and more modular, embedding smaller, AI-native research units within the larger enterprise.

Geography and ecosystem choices become critical differentiators in this approach. Scientific capabilities are increasingly distributed across regions, with major hubs in talent, infrastructure investments, centralized data environments and fast clinical execution emerging, particularly in Asia. Regulatory environments that support AI-enabled R&D may also reinforce these hubs (Figure 7). Thereby, over time, discovery may concentrate in select, highly automated AI-driven research ecosystems (“giga-labs”) that generate assets continuously and license them globally. Connecting deliberately to the right hard-science ecosystems is thus crucial, particularly for science champions.

FIGURE 7 Asian evolution toward high-impact R&D capabilities



The risks of this strategy are material, as sustaining deep scientific capability is both resource-intensive and culturally demanding. Firms must balance exploratory research with portfolio discipline and resist hollowing out core expertise in pursuit of short-term efficiency. This model is, therefore, most viable for organizations that compete in complex, high-unmet-need disease areas where mechanistic depth materially alters probability of success and lifetime value. It also requires a longer time horizon and a willingness to operate in complex collaborative environments, including academic partnerships, shared data infrastructures and cross-border scientific ecosystems. When executed well, however, scientific leadership compounds over time – strengthening intellectual property, informing multiple programmes and improving long-term capital allocation.

As AI dramatically expands the volume and pace of hypothesis generation and candidate discovery, the bottleneck shifts towards interpreting those outputs; the constraint shifts towards interpretation and validation. In this environment, deep biological understanding becomes more valuable, not less. AI does not replace science; it raises the standard for what scientific leadership requires.



Asset integrator

Today, the source of innovation is fragmenting. Between 2021 and 2023, nearly 60% of all AI-in-health investment came from venture capital and 10% from Big Tech, while biopharma accounted for less than 5%.²⁸ Besides, around 45% of drug pipelines of the top 20 pharma now originate outside their own labs,²⁹ reflecting the growing role of smaller, AI-native teams and external ecosystems. As AI lowers the cost and speed of early research, the strategic challenge shifts from generating ideas to selecting and advancing the right ones.

One viable response for incumbents is to become asset integrators. Rather than relying primarily on internal discovery, these organizations build advantage through disciplined sourcing, evaluation and scaling of externally generated assets. The critical question is not whether promising ideas exist outside the firm but whether the organization can consistently identify high-potential assets and translate them into approved, reimbursed and globally scaled therapies faster and more reliably than peers. In this model, competitive advantage stems from portfolio construction, risk pricing and timing – not from originating the science itself.

This model is already visible in practice. AI-native developers generate and derisk assets efficiently, often with small teams and highly focused scopes. At the other end of the value chain, while incumbents capture value through regulatory navigation, manufacturing scale-up and commercialization (Case study 1 on Gusacitinib³⁰). Another example of this is the trajectory of Dupixent (dupilumab, a targeted biologic medication used to treat chronic inflammatory conditions³¹), discovered by Regeneron and scaled globally by Sanofi,³² which also illustrates how discovery and downstream value capture can be structurally decoupled.

In medtech, asset integration follows similar logic. Companies may incorporate externally developed devices, software modules and data platforms into their portfolios. This may even involve incorporating innovations originating outside healthcare, such as mass-market sensors, consumer electronics, AI models, or components adapted from adjacent industries. Differentiation here also lies in integrating these innovations within regulated frameworks and scaling them through established clinical and reimbursement pathways, rather than originating them internally. A prominent example is the acquisition of Cardiologs, an AI-based cardiac diagnostics company, which expanded Philips' patient monitoring and diagnostic capabilities.³³

CASE STUDY 1

Asset integration in practice – Gusacitinib

Formation Bio, an AI-native pharmaceutical company, acquires or licenses clinical-stage assets from diverse sources and advances them using proprietary AI-enabled development capabilities.

Asset: Gusacitinib, an oral dual JAK/SYK inhibitor

Sourcing: Acquired from Asana BioSciences in 2022 and advanced by Formation Bio to Phase 3 (for chronic hand eczema)

Transaction: Licensed by Formation Bio to Sanofi in June 2025 for up to €545 million (upfront and milestones) plus royalties

Next step: Sanofi to advance global development and explore additional indications

Learning: Gusacitinib reflects a sequential asset-integration model. Formation Bio creates value through sourcing and derisking; Sanofi later captures value through global development, regulatory navigation, and commercialization. In both cases selecting, derisking and handing off assets acts as a key differentiator.

Asset integrators operate within a broad, continuously active ecosystem of AI-native biotechs, academic spin-outs, technology-enabled contract research organizations (CROs) and regional innovation hubs. Pursuing this path therefore requires moving from episodic bilateral partnerships to continuous ecosystem engagement. Firms must evaluate assets earlier, at greater scale, and with less complete evidence, requiring faster judgments on biological plausibility, data quality and translational readiness than previously needed. Late-stage validation and narrow clinical endpoints are no longer sufficient as primary filters. As deal volume increases and decision environments are becoming faster and more crowded, disciplined portfolio governance becomes critical.

For asset integrators, differentiation lies primarily in the later stages of the value chain. Competitive strength comes from navigating regulatory pathways, securing favourable reimbursement and pricing, scaling manufacturing reliably, coordinating global launches and driving adoption across diverse health systems. In this strategic approach, value is captured not by inventing assets but by efficiently advancing and scaling them. The aim is not to pursue more opportunities but to make better capital allocation decisions.

The asset integrator approach is not without risk. Over-reliance on external innovation can leave organizations vulnerable to mispricing assets or misreading translational risk. Successful asset integrators, therefore, retain a focused core of translational expertise to ask the right questions and manage risk effectively. When executed well, the approach replaces discovery-led differentiation with ecosystem mastery—turning external advances into sustained clinical and commercial performance.



Development engine

A third path is to become a development engine. In this approach, companies recognize that as research accelerates faster than development, the gap between upstream idea generation and downstream validation widens. Consequently, development productivity – the ability to convert more assets into approved, adopted and scalable therapies through better trials, better patient selection, earlier integration of real-world data and continuous learning from outcomes – becomes a critical advantage. Importantly, development productivity does not refer only to speed to approval. It also includes improving probability of success, strengthening evidence robustness and sustaining value beyond launch.

Historically, only about 10% of drug candidates entering Phase I reach approval,³⁴ reflecting the intrinsic uncertainty of translation. While AI is beginning to improve parts of the system (Figures 1 and 3), the core challenges are related to speed as well as the ability to improve probability of success and generate more robust evidence earlier. Players such as Medable³⁵ demonstrate how digital and AI capabilities can compress timelines and also enable faster learning, better trial design and more reliable translation. Their success also underscores a broader industry shift. Development excellence itself – enabled by digital and AI capabilities – can be built as a differentiated, scalable capability in its own right. Organizations that can reliably move assets from proof-of-concept to approval – and continue learning post-launch – become preferred partners for upstream innovators and acquirers of derisked assets who seek reliable, repeatable translation at scale.

For incumbents, the strategic question is, therefore, not whether development can be accelerated, but whether they will internalize and scale such capabilities – or allow that value to be captured externally.

The same dynamic appears in medtech, not in molecular translation but in procedural validation. As intelligent devices and AI-powered features proliferate, differentiation increasingly depends on demonstrating safety, clinical utility, usability and reimbursement viability across care settings. In both segments, the bottleneck moves from generating ideas to proving and scaling them reliably.

The development engine differs from the asset integrator in economic logic and organizational focus. Asset integrators compete primarily through portfolio construction, identifying promising external assets, pricing risk effectively and capturing value through ownership, licensing structures and scaling. They may concentrate on later-stage or externally derisked assets and frequently leverage external CROs, technology platforms, or specialized partners to execute development efficiently.

Development engines, by contrast, treat translational capability itself as the core proprietary system. They invest disproportionately in internal development infrastructure, adaptive trial design, regulatory science and lifecycle orchestration. Their differentiation lies in building repeatable, high-throughput development architectures that can absorb assets from multiple sources and systematically enhance probability of success, accelerate evidence generation and unlock additional indications or sub-population opportunities. Ownership is secondary; repeatable, high-quality execution is the strategic asset.

Capability priorities for development engines differ markedly from traditional development models. Development engines invest disproportionately in clinical operations, biostatistics, regulatory science, clinical pharmacology and medical affairs, but with a distinct operating philosophy: continuous learning at scale rather than sequential execution. Advanced capabilities in adaptive trial design, patient stratification, endpoint innovation and operational analytics are essential.

Accelerating speed of development depends on deep disease-area understanding to identify where uncertainty truly sits and which data will most effectively reduce it. Lastly, AI and automation are embedded end-to-end – from protocol drafting to monitoring and documentation – as part of an integrated operating model that compresses timelines and reduces friction.

Partnership strategy also evolves. Development engines position themselves as preferred collaborators for AI-native biotechs and academic innovators, offering reliable, scalable translation capabilities. However, unlike asset integrators, they differentiate through execution speed and evidence depth rather than ownership structures.

The risks are distinct to other strategic approaches. Without discipline, organizations may drift into execution-only roles or dilute focus by advancing too many programmes. Strong portfolio governance and clear stopping rules are essential. When executed well, however, the development engine offers durable advantage: as idea generation becomes easier, the ability to prove, derisk and scale interventions becomes decisive.

TABLE 1 Strategic approaches in R&D

Strategic Approaches	Core beliefs supporting the approach	Supporting signals in the market	Capabilities needed		
			Discovery & early research	Development & translation	Partnership management
Existing model of incumbents	Sustainable advantage comes from internally integrated, end-to-end R&D and scale-based risk diversification	Large, integrated R&D organizations remain the dominant model among global incumbents Capital allocation heavily favors internal discovery programs and broad portfolios	Large, internally controlled discovery , organized by therapy area and modality, with AI optimizing existing workflows	Conventional, phase-based clinical development engines , incrementally enhanced by AI to improve efficiency and execution	Deal-driven, transactional partnerships with limited integration
1 AI-supported science champion	Deep biological and physiological understanding remains scarce and differentiating even as AI expands hypothesis space	Comprehensive biological insight still lacking across much of proteome Rising investment in hard-science ecosystems in new innovation centers (China, India)	Deep internal scientific leadership , through AI-augmented hypothesis curation, mechanistic reasoning, tight wet lab/AI integration	Science-driven trial design (patient stratification, endpoint selection, early failure anticipation) grounded in biological insight	Selective, science-led partnerships with academia and technology players
2 Asset integrator	Discovery is becoming cheaper, faster, and more distributed; advantage shifts to asset selection and scale	<5% of AI-for-health investment comes from biopharma; majority from VC/tech AI-native biotechs generate increasing numbers of assets Existing success stories, e.g., Dupixent	Capability to systematically source and evaluate external assets at early stage	De-risk, position, and prepare externally sourced assets for scale, transfer, or exit	Continuous ecosystem engagement to source, de-risk, and scale external assets
3 Development engine	Proving, de-risking, and scaling assets in real-world settings becomes the primary bottleneck	Only ~10% of Phase I assets reach approval historically Development lags discovery in speed and throughput Players like Medable illustrate the emergence of specialized partners that scale development as a standalone capability	<i>Largely continue as-is</i> (discovery sourced externally or selectively)	High-throughput, adaptive development as the core source of advantage, optimizing success rates, evidence quality, and learning speed	Repeatable co-development partnerships with CROs, technology providers and innovators

Strategic questions

Few large incumbents will pursue any one of these strategies in pure form. Many will combine elements of scientific leadership, selective asset integration and development specialization. The broader shift, however, is clear: as AI reduces scarcity in research, differentiation moves away from generating ideas and towards translating them into scalable outcomes.

This shift forces leadership teams to confront a set of explicit strategic questions that can no longer be deferred or addressed incrementally:

- Where should value creation be concentrated along the R&D continuum?
- How should capital allocation be adjusted for R&D?
- Which scientific capabilities must remain internal and which can be accessed through the ecosystem?
- How should the R&D organization be redesigned for different speeds of “R” and “D”?
- What workforce bets are placed on science, data and development talent?
- How must R&D be adapted to tap into the new innovation ecosystem?



2.2 GenAI and the reconfiguration of market access and distribution

For most of the modern life sciences era, market access and distribution followed a relatively stable logic. Patient acquisition flowed primarily through healthcare professionals, prescribing behaviour was shaped by clinical evidence and field engagement, and distribution relied on established reimbursement and channel structures. Digital tools, so far, largely served to optimize this model at the margins rather than disrupt it.

That logic is now under pressure. Ageing populations, rising chronic disease and fiscal strain are increasing payer scrutiny and access constraints. At the same time, generative AI, consumer-grade digital interfaces and new distribution players are lowering the cost of information, engagement and coordination across the care journey. As a result, multiple

access pathways are becoming viable in parallel: some reinforcing provider-led acquisition, others building direct patient relationships, and still others reshaping distribution through new intermediaries. Importantly, there is no single future state.

These dynamics are already starting to be visible today and they are unfolding unevenly across therapeutic areas, geographies and patient segments. What is changing, however, is the range of viable strategic options – and the capabilities, operating models and economics required to pursue them.

For incumbent biopharma and medtech companies, this rebalancing forces a set of explicit strategic choices about who they are optimizing for and how they position themselves.



Three strategic approaches emerge:



Provider preference optimizer

The first strategic approach is to reinforce provider-led patient acquisition using genAI and digital

tools to strengthen differentiation at the point of care. This approach rests on the belief that patient acquisition continues to flow primarily through healthcare professionals who remain the primary gatekeepers for many care, reimbursement and treatment decisions. However, their preference is earned less through promotion and relying solely on episodic trial results and more through integration into clinical workflows, decision support and measurable performance over time. Thereby organizations aim to become the partner within existing pathways.

This approach requires shifting from episodic sales engagement to embedded support – pre-visit data aggregation, AI-driven risk stratification within electronic health record (EHR) systems, real-time outcome tracking tied to reimbursement metrics and tools that reduce workflow friction. Platforms such as YiduCore³⁶ illustrate this shift and show how, by structuring patient information before the clinical encounter and routing patients more effectively, AI can ease administrative burden and improve pathway efficiency. The objective is simple: help providers deliver care more reliably, more efficiently and with clearer accountability for outcomes.

Importantly, products are designed not as standalone interventions but as components of provider-centric care solutions that reduce administrative burden and improve predictability of care delivery; e.g., through digital diagnostics,

adherence monitoring, patient follow-up and outcome tracking. This may also unlock one the largest missed opportunities in healthcare: prevention. By integrating therapeutics, diagnostics and digital monitoring, provider-centric models allow earlier intervention and more proactive management of chronic and high-risk populations.

Over time, these capabilities could extend beyond optimizing individual interventions to deeply influencing health trajectories. Here, provider preference may increasingly hinge on which partners help health systems deliver measurable population-level outcomes, not simply superior products or services.

For medtech companies in particular, devices, imaging systems and procedural technologies are already closely integrated into clinical workflows and capital budgets. AI may strengthen that position by reducing operating room inefficiency driving pre-surgical planning, enhancing procedural precision, codifying surgical quality and integrating device intelligence into care pathways. Beyond initial acquisition, value is also shaped by ongoing maintenance and upgrades. In this context, AI may reinforce and deepen existing customer relationships rather than disrupting them.

Delivering this strategy raises the bar for incumbents. Beyond clinical efficacy, organizations must demonstrate operational impact, utilization patterns and downstream cost effects. Medical, commercial and market-access functions increasingly converge around measurable performance within care pathways, often in partnership with health systems and payers through outcome-linked arrangements.

The primary risk for this approach is not that provider-led models disappear but that organizations become complacent. Simply digitizing existing sales tactics or adding standalone tools will not suffice. If AI-enabled solutions do not meaningfully improve workflow efficiency, outcome visibility, or reimbursement performance, providers will not differentiate between offerings. Choosing this path, therefore, requires a clear commitment, making operational impact, not promotional presence, the primary source of advantage.



Direct-to-patient commercial platform

A second strategic approach is to invest directly in the patient relationship as an additional acquisition channel alongside provider-led pathways. The premise is that technology is reshaping how people discover, evaluate and request care. Historically, patients relied on clinicians and insurers to interpret symptoms and determine access. Earlier digital tools reduced information gaps marginally but rarely changed behaviour at scale.

FIGURE 8

GenAI is shifting how patient engage with healthcare



>80%
of Gen Z are more likely to **trust**
AI than physician diagnosis

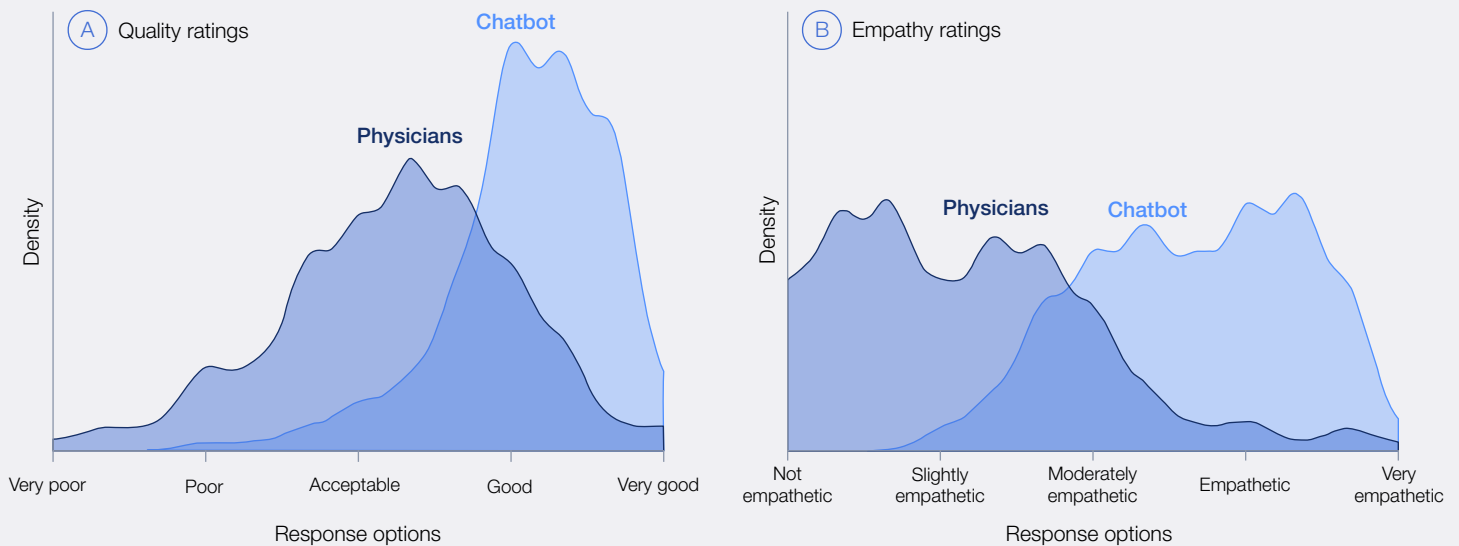


What has changed is the interface. AI-enabled systems are increasingly perceived as credible and empathetic and can match or exceed human performance in certain diagnostic and guidance tasks. The launch of ChatGPT Health in 2026,³⁷ alongside health-focused AI initiatives from Amazon and Anthropic,^{38,39} signals the emergence of continuously available digital entry points. For many users, particularly younger populations, interacting with AI is becoming a routine entry point into care

(Figure 8).⁴⁰ In addition, empirical evidence suggests a trust inflection: AI-generated responses are rated as more empathetic in 73% of text-based interactions,⁴¹ and verified physicians prefer AI-generated responses in 79% of cases (Figure 9⁴²).

In more advanced future scenarios, regulated AI interfaces could even triage symptoms and coordinate escalation to clinicians.

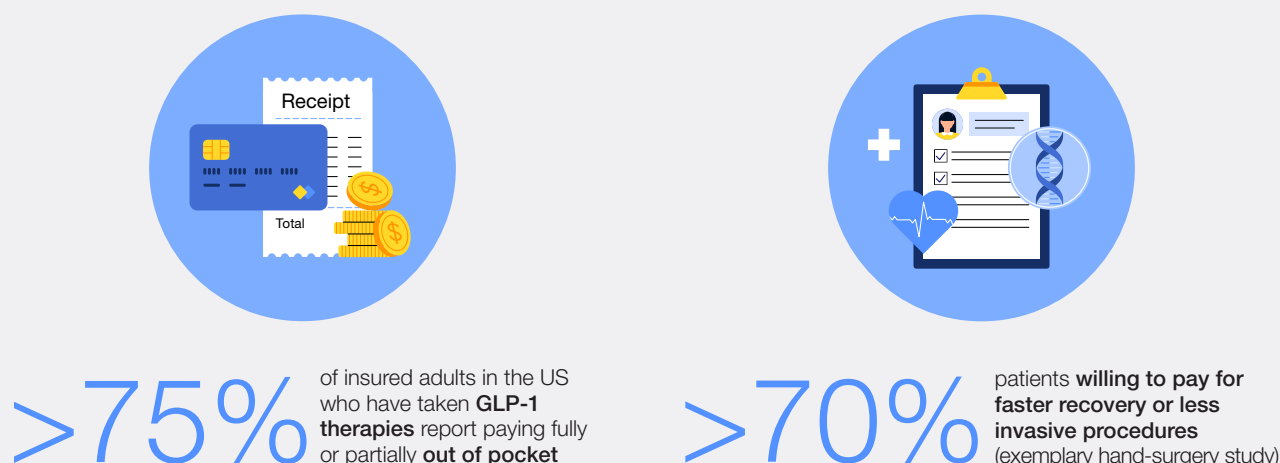
FIGURE 9 Chatbot responses were preferred over physician responses in terms of quality and empathy



As influence shifts upstream, patient acquisition economics and pricing dynamics change together. When patients arrive informed and opinionated, preference is shaped before the clinical encounter and clearer visibility into real-world performance increases their ability to evaluate trade-offs. Some may even proactively seek diagnostics, preventive interventions, or specific therapies, actively advocating for access. In health systems where spending already outpaces GDP growth,⁴³

reimbursement is often constrained for interventions that improve convenience or quality of life rather than core clinical outcomes.

In this context, earning sustained patient trust, attention and engagement earlier in the decision process may increase willingness to pay among those able to do so (Figure 10^{44,45}) and enable pricing models that complement traditional reimbursement structures. This dynamic, however, may also deepen disparities in access.



To support continuous rather than episodic engagement, therapies may be positioned as part of integrated experiences that combine onboarding, education, adherence support and outcome tracking. AI enables personalization and scalable engagement, while real-world data strengthens feedback loops. The rapid expansion of GLP-1 support programmes, which combine medication with coaching and digital monitoring, illustrates how value increasingly resides not only in the molecule but in the surrounding care system.

This evolution may also have profound implications for prevention. Continuous monitoring and real-time risk modelling enable earlier and more individualized intervention. Rather than episodic screening, prevention can become an ongoing, data-informed process embedded in daily life. In such models, patient preference may hinge less on isolated product attributes and more on which organizations support long-term health management.

This strategic approach requires capabilities that differ from traditional commercial models. While medical information has long been accessible through literature and professional channels, AI is increasingly translating that information into personalized, understandable and actionable insights for individual patients and providers. As a result, promotion alone loses effectiveness. Organizations must demonstrate transparent real-world performance and communicate medical value clearly through digital interfaces to non-expert audiences while ensuring compliance and ethical

governance. Thus, brand trust, tone and interaction design turn into strategic capabilities. Operationally, continuous streams of patient-generated data must be securely integrated and translated into actionable insight. These data flows underpin personalization, engagement and real-world evidence, increasingly blurring traditional boundaries between commercial and medical functions.

The risks of this approach are significant. Companies that historically mediated through providers must now earn trust directly. As AI becomes embedded in patient-facing systems, transparency, data protection and bias mitigation move from compliance to strategic imperatives (Case study 2⁴⁶). Without robust governance structures and responsible AI safeguards, direct-to-patient initiatives risk regulatory non-compliance and reputational damage and may potentially contribute to spreading misinformation and worsening patient outcomes. Furthermore, the role of providers may shift to involvement only at defined decision points while routine interaction is handled digitally. This may create tension if perceived as bypassing or pressuring clinical judgment.

In sum, this approach treats the patient relationship itself as a strategic asset. It is, therefore, a high-conviction, high-accountability strategy, shifting the centre of gravity from provider-centric influence to sustained patient engagement and demanding new capabilities, governance discipline and organizational models to operate responsibly at that interface.

CASE STUDY 2

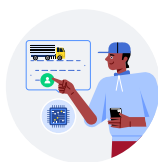
Ethical AI as a prerequisite for trust, access and scale

What it is

Ethical AI in health refers to designing and governing AI systems that are transparent, robust, representative and continuously monitored to prevent bias and harm in regulated, safety-critical environments. This is in line with the EMA/FDA's guiding principles for good AI practice in drug development which, among others, emphasize human-centricity and appropriate model validation. Models trained on unrepresentative data can amplify disparities in diagnosis, trial recruitment and treatment access. Opaque or biased models also increase regulatory liability and reputational risk. By contrast, transparent and inclusive AI strengthens evidence credibility, expands the addressable population and improves adoption.

Industry response – Sanofi

Through its *A Million Conversations* initiative, Sanofi identified gaps in trust in the healthcare system and its professionals, particularly among women, people with disabilities, people from ethnic minorities and LGBTQ+. These findings reinforce Sanofi's commitment to responsible AI governance, emphasizing transparency in data use and the need for more representative datasets. As distrust in healthcare may lead to avoidance of care, limiting both clinical impact and market reach, Sanofi sees ethical AI as a vital way to build trust and deliver better, smarter solutions that matter both to patients and healthcare providers.

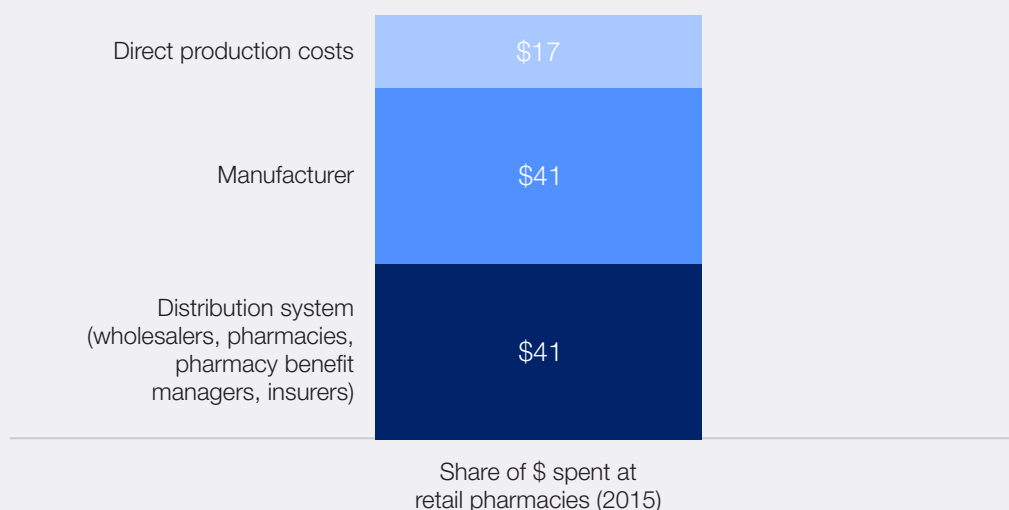


Distribution challenger

The third strategic approach challenges the traditional distribution model, recognizing that a substantial share of value in life sciences lies in how therapies are distributed and fulfilled. Historically, distribution typically followed a two-layer structure: pharmaceutical wholesalers supplying retail or hospital pharmacies, which

then dispensed to patients. In the United States, over 40% of spending at retail pharmacies is absorbed by distribution intermediaries (Figure 11⁴⁷), underscoring how much value is absorbed by intermediaries. That structure is now under pressure as logistics-driven players, digital platforms and non-traditional pharmacies enter healthcare with different economics, prioritizing efficiency, data control and consumer experience over legacy rebate structures.

\$41 of every \$100 spent at US retail pharmacies goes to distribution intermediaries



The 2020 launch of Amazon Pharmacy illustrates this shift, offering discounts up to 80% on generics and 40% on brand-name drugs.^{48,49} By integrating prescription fulfilment into a broader retail and logistics ecosystem, Amazon reframed pharmacy access as a commerce function, rather than standalone healthcare. It also demonstrates how quickly distribution power can migrate when logistics, data and consumer experience converge.

For manufacturers, this introduces a buyer with different leverage points, data expectations and partnership models from traditional pharmacies or pharmacy benefit managers.

A similar dynamic appears in medtech where, for example, consumer EEG devices (e.g., those developed by Muse⁵⁰) are distributed directly through retail and digital channels, while comparable sensing technologies are deployed in research and clinical contexts through institutional procurement. Although the underlying technology may be similar, distribution channels, pricing models, regulatory oversight and user engagement diverge sharply.

Together, these examples illustrate a simple but profound shift: distribution is becoming an ever more strategic layer where visibility, economics and bargaining power are actively contested. The same

product may require parallel distribution strategies, optimized for different intermediaries and buyer logics. Challenging the distribution mix means deliberately designing for coexistence and competition between old and new ones. For manufacturers, this demands new capabilities in “distribution intelligence” – understanding how products are ranked, recommended, substituted and fulfilled in platform-mediated environments, and aligning contracting, pricing and supply strategies accordingly.

Supply-chain coordination must adjust to partners whose economics are driven by fulfilment efficiency, customer lifetime value and data ownership rather than traditional rebate mechanics alone.

The risks are significant. New intermediaries can compress margins, shift bargaining power and fragment channel strategy. Visibility in digital channels can be volatile and difficult to control and managing parallel models increases complexity.

Yet disengagement is not an option. As digital and logistics players expand their healthcare presence, control over distribution becomes as consequential as control over innovation itself. For life sciences companies, challenging the distribution mix is not about novelty, it is about remaining relevant in a value chain where intermediaries, incentives and points of leverage are being fundamentally redefined.



TABLE 2 | Strategic approaches in market access and distribution

Strategic Approaches	Core beliefs supporting the approach	Supporting signals in the market	Capabilities needed				
			Patient acquisition	Engagement & interaction	Evidence, data & outcomes	Access, reimbursement & economics	Partnership management
Existing model of incumbents	Market access and treatment choice is mediated through clinicians, payers, and health systems	Most prescription volume and access decisions continue to flow through HCP-led, insurance-covered pathways Comprehensive biological insight still lacking across much of proteome	Provider-led demand generation through education and clinical promotion	Episodic, HCP-centric engagement focused on education, training and support programs	Trial-centric and post-hoc real-world evidence , primarily generated for regulators and payers rather than patients	Pricing and access negotiated with payers under established reimbursement frameworks	Relationship-based engagement with clinicians and payers, and episodic public-sector coordination, operating within fixed reimbursement and regulatory structures
1 Provider preference optimizer	Providers remain the primary gatekeepers for access, reimbursement, and treatment choice across large parts of care	Rising investment in hard-science ecosystems in new innovation centers (China, India)	Ability to shape provider preference at scale, enabled by AI	Deep integration into provider workflows and decision moments	Evidence generation aligned with provider and payer priorities	Access models within existing reimbursement frameworks	Tight operational alignment with health systems and payers to embed solutions into care pathways and drive outcome accountability
2 Direct-to-patient commercial platform	Patient preference is increasingly formed upstream of the clinical encounter and can be influenced directly	80% of Gen Z are more likely to trust AI over physicians GenAI perceived as credible and empathetic (79% preference) >75% of GLP-1 users pay partially or fully OOP	Ability to acquire patients through digital, media, and AI-mediated channels	Continuous, longitudinal patient engagement	Translation of outcomes data into patient-understandable performance signals	Pricing and access models partially independent of traditional reimbursement	Orchestration of ecosystem of technology, service, and clinical partners to control the patient interface and trust
3 Distribution challenger	Distribution is becoming a strategic layer where visibility, leverage, and economics shift	41% of US pharmacy spend goes to distribution intermediaries Amazon Pharmacy launch (2020)	Ability to drive product visibility and preference in digital and platform-mediated channels	Interaction management with non-traditional buyers	Channel-level performance monitoring	Adaptation of pricing, contracting, and supply to new platform economics	Coordination with platforms, retailers, logistics players, and regulators to manage channel power and parallel distribution models

Strategic questions

Together, these three strategic approaches reflect a structural shift in how value is created and captured in life sciences as genAI reshapes access, engagement and distribution. What changes are not only the tools available but the structure of the value chain itself.

Each approach requires distinct capabilities, operating models, talent profiles and economics. While elements of all three may coexist in large organizations, attempting to pursue all with equal emphasis risks strategic dilution and internal tension. The leadership task is not to predict a single outcome but to choose deliberately where to compete.

These choices raise strategic questions that can no longer be deferred:

- What risks arise from failing to explore these emerging models – and which risks are acceptable versus unacceptable?
- How should investment be rebalanced in commercial capabilities?
- Where is deep internal expertise required and where are partnerships the more effective or scalable path?
- How must the organization and talent model evolve to support the chosen access strategy?
- How can organizational complexity be managed in multiple access models?
- How can real-world data and patient interactions be captured and translated into continuous learning loops in R&D and commercialization?

Implications for public-private collaboration

The strategic approaches outlined in this report are being shaped not only by internal capability choices but by the public frameworks within which they operate. As companies rethink how they create and capture value, collaboration and alignment between industry and public actors becomes critical.

For industry, the implication is that internal transformation must be matched by a clearer understanding of the regulatory and reimbursement conditions under which new models can scale. As organizations invest in AI-enabled R&D systems, adaptive development architectures, longitudinal patient engagement models, or new distribution pathways, they face material uncertainty on how continuously learning systems will be evaluated, how real-world evidence will be weighted in approval and payment decisions, how patient data can be accessed and governed responsibly, and how divergent cross-border requirements will affect global operating models. Greater clarity and predictability in these areas would reduce strategic ambiguity and enable more deliberate capital allocation and organizational redesign.

For policy-makers, the implication is reciprocal. Regulatory modernization, evidence standards, reimbursement design and data governance increasingly influence not only the safety of and access to healthcare innovation but also the structure of innovation itself – shaping where innovation takes place and where capabilities concentrate across geographies and systems. As business models evolve towards continuous learning, outcome-based care and AI-mediated interfaces, institutional frameworks must adapt in ways that preserve trust and accountability while enabling responsible experimentation.

The degree of transparency, stability and international coherence in these frameworks will shape the pace, geography and inclusiveness of AI-driven transformation in life sciences.

Structured collaboration to reduce uncertainty at a moment of strategic redefinition, therefore, becomes more and more critical. Industry transformation and institutional evolution must proceed in parallel if innovation is to strengthen, rather than fragment, health systems.



Conclusion:

From table-stakes progress to core strategic choices

AI and digital technologies in life sciences have moved beyond experimentation. Automation, AI-enabled supply chains, faster regulatory processes and data-driven commercial execution are delivering measurable gains. These capabilities raise the performance baseline – but they do not guarantee sustained advantage. Leaders can no longer rely on incremental efficiency gains, reorganizations, or isolated digital initiatives to pull ahead. Two imperatives follow.

First, organizations must close the gap between isolated digital initiatives and integrated, lifecycle-spanning capabilities. This requires robust data foundations that connect discovery, development, manufacturing, access and real-world performance – so insights can be reused and compounded across the organization. As R&D and evidence generation become increasingly data-driven and iterative, companies must also build the internal infrastructure to support continuous interaction with regulators. Furthermore, AI-enabled offerings increasingly combine software, data, analytics and services, moving away from static, self-contained interventions, requiring coordination across organizational boundaries.

Few companies can meet this on their own. Partnerships must, therefore, be treated as strategic infrastructure, not tactical add-ons. Moving forward, competitive advantage will depend less on standalone interventions and more on the ability to orchestrate ecosystems, sustain data flows and align partners on measurable outcomes.

Second, leaders must make explicit choices about how and where they will compete in R&D and distribution. As the value chain is being reconfigured and AI lowers the cost and increases the throughput of discovery, value creation opportunities shift to development, translation and real-world evidence. In parallel, technology is reshaping how demand is formed, preferences are influenced and products are accessed. As the strategic approaches outlined illustrate, organizations can compete in fundamentally

different ways, each requiring distinct capabilities, operating models and risk profiles. What is no longer viable, however, is ambiguity and attempting to straddle incompatible strategies without making deliberate trade-offs.

It is also important to recognize that the strategic approaches described here may represent stepping-stones to longer-term reconfiguration. Given its regulatory and safety constraints, healthcare is unlikely to simply layer AI on to legacy structures in the same way as other industries. The feasibility and pace of these transformations will not be determined by industry alone. While leading regulators are engaging – through increased dialogue and collaborative efforts such as the precisionFDA⁵¹ initiative – progress remains uneven and may not match the speed of technological change.

Less mature regulatory systems may face greater challenges, creating divergence in where innovation can be developed, validated and scaled. Regulatory and reimbursement frameworks must continue to evolve to support adaptive, data-driven and outcome-oriented approaches. Fully capturing AI's potential will also require rethinking core processes, not just incrementally adapting existing ones, to accelerate how innovation reaches patients.

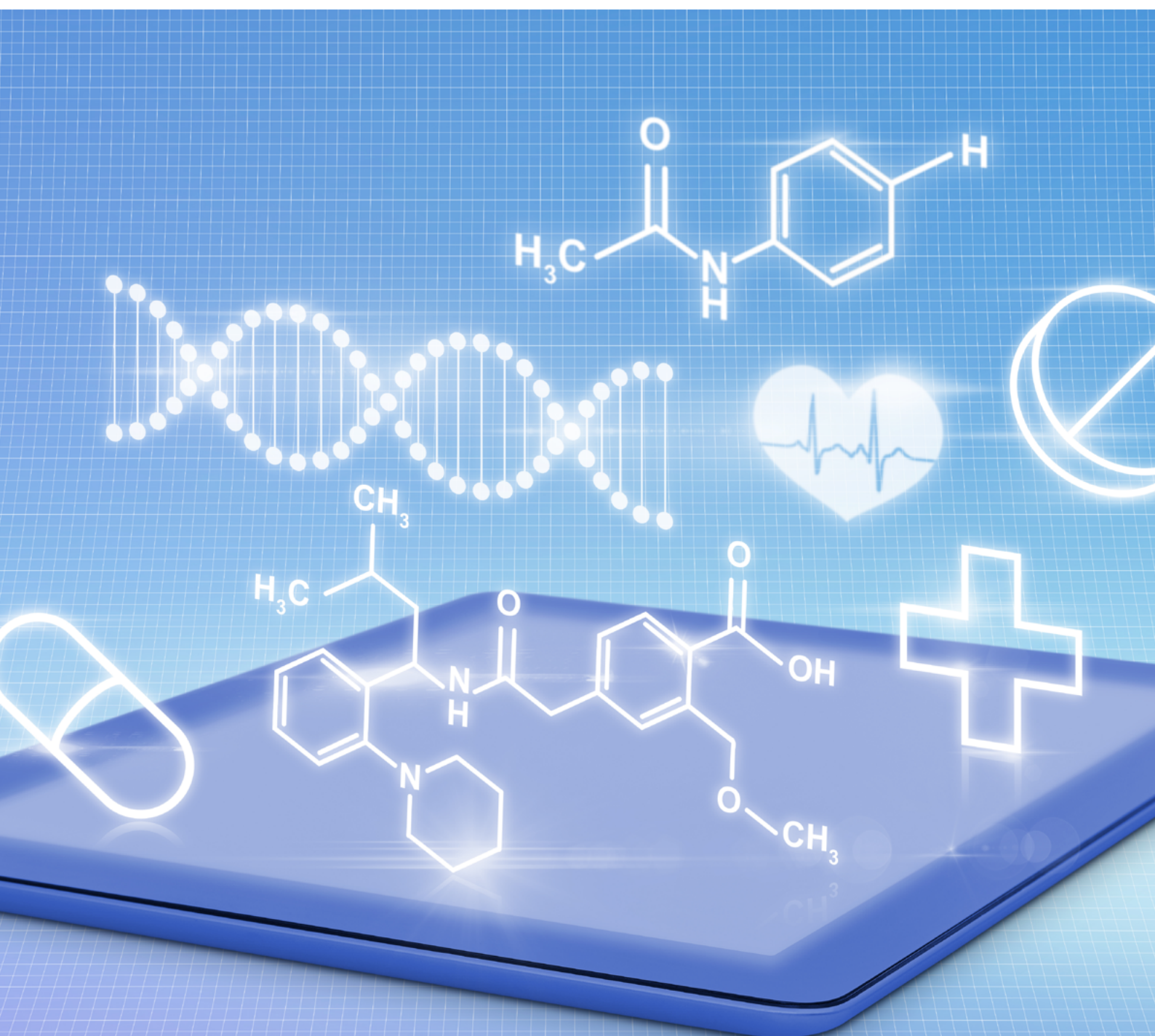
Similarly, payers and public authorities will play a central role in shaping which models scale, through reimbursement design, evidence expectations and data-sharing arrangements. The pace and geography of innovation will depend on how effectively public and private actors align incentives, governance and infrastructure. Yet, over time, the cumulative impact of AI on discovery, development and care delivery will require deeper organizational redesign than incremental adaptation.

Many of these changes will unfold gradually. However, decisions made today – on data architecture, organizational design, partnerships and regulatory engagement – will determine which paths remain open as technology, policy and societal expectations evolve over the coming decades.

Consequently, leaders face defining questions:

- Which of these shifts will most materially redefine where organizations win?
- How quickly do we need to move – and how far are we willing to go? What will it cost if we wait too long?
- Do we want to be first movers, accepting the higher costs and leveraging the early learning?
- Which choices are we prepared to commit to, and which paths are we willing to forgo?
- How will we build and sustain trust across partners, regulators and patients as data, AI and decision-making become increasingly interconnected?

Life sciences must not simply improve existing models; they must redefine them. Those that act deliberately – closing foundational gaps, making explicit strategic commitments and actively working with the public sector to shape the institutional conditions in which they operate – will define the next era of life sciences. Those that delay risk remaining optimized for a value model that is already eroding.



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