

Navigating The Road Ahead In Pharma's Defining Era

2025

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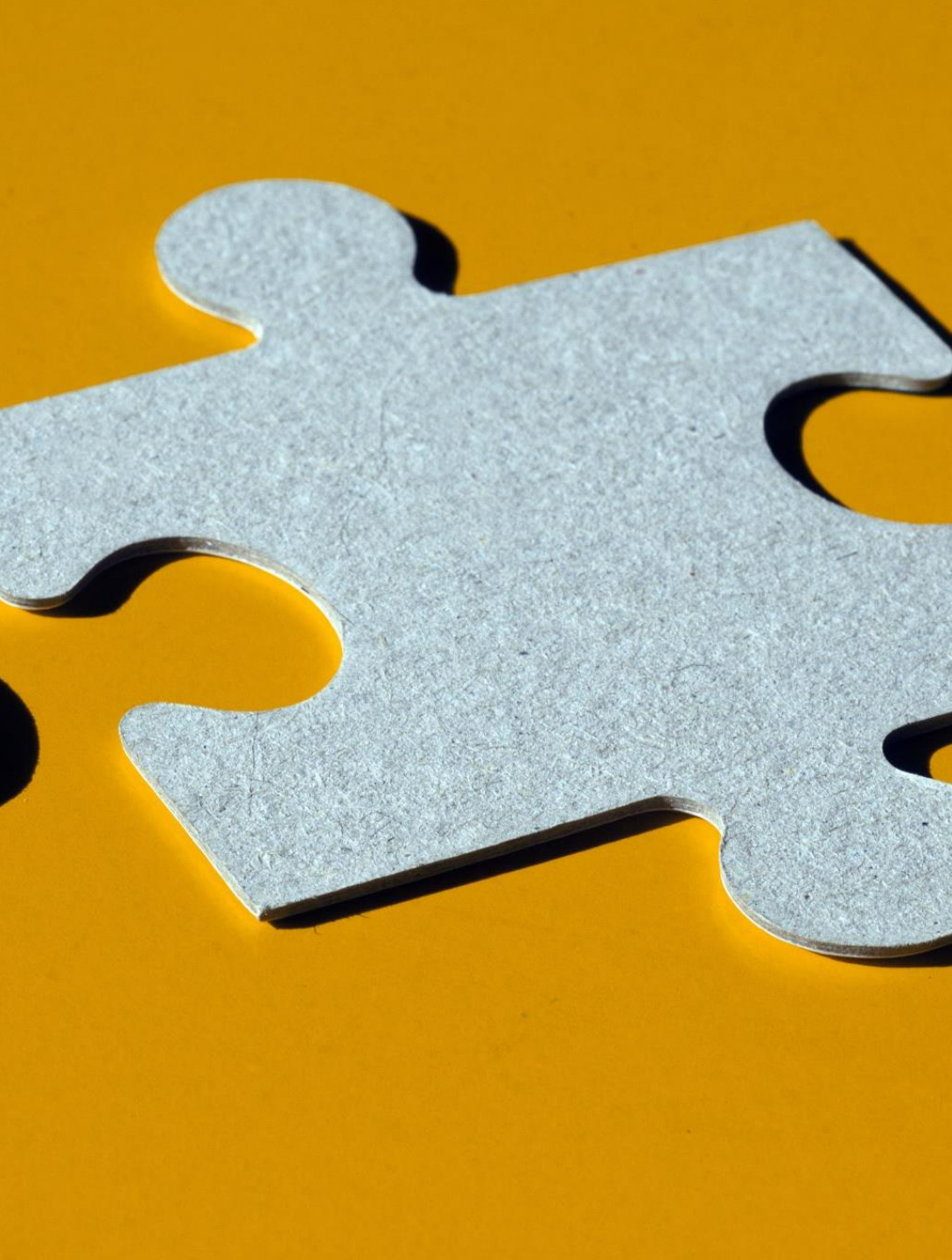
EMERGING TRENDS IN PHARMACEUTICALS



Pharma is entering a period of renewed growth after years of stalled returns, signaling a shift in how innovation and investment drive value. This means faster drug development, stronger investor confidence, and greater patient impact.

- In 2025, **R&D productivity reached 8.2%**, the highest in ten years. (*Deloitte, March 2025*)
- The global pharmaceutical industry **spent nearly \$288 billion on R&D in 2024**—this stat is projected to reach almost \$340 billion by 2030. (*BioSpace, 2025*)

What's driving this resurgence? A new era of **agile innovation and smarter investment**.



Things move quickly in pharma. **Market intelligence can help you keep up.**

- Companies using advanced market intelligence see **24% higher commercial success rates**
- Predictive analytics help define product positioning **18 months before approval**
- Pre-launch market conditioning leads to a **35% increase in first-year adoption**

Pharma companies that invest in market intelligence can **spot changes early**, **move faster**, and **make smarter decisions**.

KEY TAKEAWAYS:

FOUR EMERGING TRENDS SHAPING PHARMACEUTICALS

**1**

Strategic Drug Repurposing: Unlocking Value in Existing Compounds

Drug repurposing reduces development costs by 60% and shortening timelines by 45%. AI-powered screening has revolutionized candidate identification, with computational methods now predicting 73% of successful repurposing candidates.

**2**

Rare & Ultra-Rare Disease Focus: From Niche To Now

The rare disease segment has transformed from specialized niche to core strategic priority, with 40% of 2025 FDA approvals addressing conditions affecting fewer than 200,000 patients. Advanced diagnostics have compressed the "diagnostic odyssey" from 7+ years to under 18 months.

**3**

AI-Powered R&D Transformation: Redefining Development Paradigms

Artificial intelligence has moved beyond hype to deliver measurable impact across the pharmaceutical value chain. Companies leveraging these technologies are bringing candidates to IND 64% faster than traditional discovery methods, creating structural advantages for early adopters.

**4**

Strategic Partnership Ecosystems: Networked Innovation Driving Success

The industry is shifting decisively from fully integrated models toward networked innovation, with strategic biotech partnerships outperforming traditional acquisition approaches on multiple value metrics. Technology alliances are creating differentiated capabilities.

STRATEGIC DRUG REPURPOSING

Drug repurposing has evolved from a niche approach into a mainstream strategic innovation pathway. This approach can deliver substantial efficiency gains compared to traditional drug discovery models—**reducing development costs by 60% and shortening timelines by 45%**.

Why It Matters:

- Brings previously shelved or low-priority assets back to life
- Lowers regulatory risk (existing safety data = faster approval)

73% AI-powered screening technology has transformed candidate identification, with computational methods **now predicting 73% of successful repurposing candidates**.

Market Examples:

- SpringWorks Therapeutics revived a scrapped Pfizer drug into a leading candidate
- Viagra and Cialis repurposed to treat pulmonary arterial hypertension

Strategic Opportunities:

- Use **AI-powered screening** for faster, more accurate candidate ID
- Address **physician skepticism** with targeted education and transparent trial data
- Monitor emerging **regulatory fast tracks** for repurposed drugs



RARE & ULTRA-RARE DISEASE RENAISSANCE

Longitudinal market tracking shows the rare disease segment has transformed from a specialized niche to a core strategic focus across the industry.

Why It Matters:

- Faster patient diagnosis accelerates trial enrollment and improves patient outcomes
- High unmet need drives quicker regulatory review and strengthen value proposition

7+ years vs. 18 months

In 2025, **40% of FDA approvals addressed conditions affecting fewer than 200,000 patients**, representing a dramatic shift industry wide. Diagnostic odyssey reduced from **7+ years** to **under 18 months**.

Market Examples:

- **Eplontersen** (Ionis/AstraZeneca) for hATTR
- **Donidalorsen** for hereditary angioedema
- **Cure Rare Disease's ASO therapy**, a first-of-its-kind approach to SCA3

Strategic Opportunities:

- Collaborate with **patient advocacy organizations**
- Build **tailored access models** with 43% higher acceptance for rare therapies
- Prioritize **storytelling and patient narratives** to build trust with stakeholders



AI-POWERED R&D TRANSFORMATION

AI and machine learning have moved from theory to practical application across the pharmaceutical industry. These technologies are now producing measurable gains in speed, precision, and decision-making.

Why It Matters:

- Accelerates time-to-market by optimizing every phase from discovery to development by reducing trial-and-error inefficiencies
- Identifies previously undetectable biological pathways using complex datasets

64% Companies leveraging AI bring candidates to **Investigational New Drug** application (IND) 64% faster than traditional discovery models.

Market Examples:

- **Recursion Pharmaceuticals**: Phenomics platform uses deep learning on cellular imaging to identify novel targets
- **Exscientia & Sumitomo Pharma**: AI-designed OCD compound created and trial-ready in just 12 months

Strategic Opportunities:

- Partner with AI platforms that integrate into clinical development networks
- Target training to address physician skepticism toward AI-derived compounds



STRATEGIC PARTNERSHIP ECOSYSTEMS

The pharmaceutical industry is shifting away from fully integrated R&D models toward external partnerships. These ecosystems allow companies to access specialized knowledge, share risk, and bring products to market more efficiently.

Why It Matters:

- Increases innovation by tapping into external talent and technology
- Distributes risk across partners
- Accelerates research translation into development

33% Partnerships deliver **33% higher ROI** than traditional M&A in biotech-pharma collaborations.

Market Examples:

- Academic institutions partnering with pharma to fast-track clinical research
- Biotech firms co-developing with large pharma companies
- Patient advocacy organizations helping design more effective recruitment plans

Strategic Opportunities:

- Structure academic partnerships around translational goals
- Form alliances with biotech and tech firms to access emerging platforms
- Collaborate with patient advocacy groups to improve trial success rates



OPPORTUNITIES FOR INSTITUTIONAL GROWTH

Leverage Strategic Drug Repurposing

Use AI to identify safe candidates and accelerate approval timelines while building physician trust

Capitalize on the Rare Disease Renaissance

Strengthen ties with advocacy groups and use advanced diagnostics to speed early detection and trial enrollment

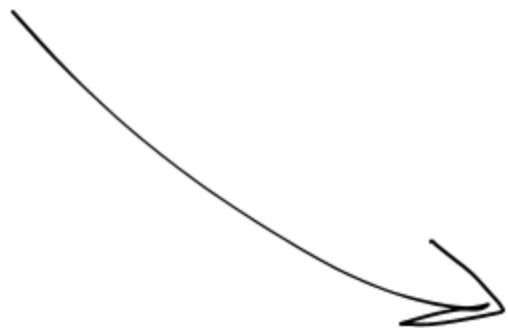
Extend AI Integration Beyond Discovery

Apply AI across development, regulation, and trials to streamline patient targeting and site selection

Build Networked Innovation Ecosystems

Form strategic partnerships beyond legacy models and conduct translational research with academic institutions

**WANT TO BETTER UNDERSTAND HOW THESE
TRENDS ARE AFFECTING YOUR MARKET?**



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