

FAQ: Uncovering the Value of Agentic AI in Life Sciences

IQVIA answers some common questions to help life sciences companies prepare for the future of Agentic AI



What is agentic AI?

Agentic AI refers to autonomous, adaptable AI tools or systems that can perform tasks independently without the need for constant prompting for each action. Unlike traditional AI, these agents continuously learn and execute tasks across research, clinical and commercial domains — accelerating timelines and improving decision-making.



How is agentic AI transforming life sciences?

Today, AI is reshaping the entire lifecycle — from molecule discovery to market access. It enables faster trial design, automates regulatory documentation, predicts market trends, improves patient engagement, to name a few areas of benefit. These capabilities help organizations better manage operating costs, improve quality and bring therapies to patients sooner.



Which areas of life sciences benefit most from agentic AI?

Clinical development, trial execution, regulatory submissions and commercial operations can all see measurable gains from this technology. For example, automating key aspects of site start-up and literature reviews can reduce timelines significantly, research agents can gather essential insights faster and predictive analytics improves market strategy.



What are the biggest challenges in adopting AI responsibly?

Building trust is the defining challenge with more autonomous AI capabilities. Organizations must ensure transparency, explainability, and governance. Data and other inputs must be accurate, de-identified, and ethically sourced and AI outputs should be auditable for regulators and clinicians.



What best practices should we follow for successful AI adoption?

We recommend five key guidelines to support your efforts:

1. Define clear business objectives
2. Ensure data accuracy and readiness
3. Embed trust and compliance in your processes
4. Maintain human oversight to ensure an experts-in-the-loop approach
5. Document every step for regulatory review and future improvements



How does human oversight fit into AI-driven processes?

“Experts in the loop” — clinicians, data scientists and regulatory specialists — validate AI recommendations before implementation. This ensures safety, ethical integrity and alignment with clinical realities.



What does the future of AI in life sciences look like?

Expect deeper integration of AI across the asset lifecycle, connected intelligence ecosystems and advanced trust frameworks. AI will increasingly combine real-world evidence with predictive modeling to enable precision-driven decisions.



How can organizations turn AI insights into measurable impact?

Start by aligning AI initiatives with clear business objectives — such as reducing trial start-up time or improving patient recruitment. Then, embed trust and compliance into every layer, maintain human oversight, and track progress against defined KPIs. This approach ensures AI delivers tangible value, not just theoretical promise.



How can IQVIA help organizations position themselves for success?

IQVIA Healthcare-grade AI[®] combines deep domain expertise, advanced analytics, and trusted governance to help life sciences organizations drive innovation responsibly. From clinical development to commercialization, IQVIA delivers scalable AI solutions that prioritize transparency, compliance and measurable impact.

IQVIA also partners with leading technology innovators like NVIDIA to power advanced AI infrastructure and enable agentic AI capabilities at scale. These collaborations ensure that organizations can leverage cutting-edge technology alongside IQVIA's domain expertise — creating a foundation for trusted, high-impact AI adoption across the life sciences value chain.



Ready to unlock the full potential of AI in life sciences?

Explore [IQVIA's AI solutions](#) and connect with our experts to accelerate your journey.