From Experiment to Enterprise: Scaling AI for Life Sciences with Lenovo and NVIDIA

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Every breakthrough starts with a question. But as scientific data grows in volume and complexity, the challenge is increasingly about making AI a dependable part of the research process, not a promising experiment used by a small number of specialists.

Across pharmaceutical and biotechnology organizations, AI can support everything from molecular modeling and data discovery to smarter laboratory operations. The next step is to make those capabilities accessible to more researchers, while ensuring the data, infrastructure and governance behind them remain secure, manageable and suitable for regulated environments.

Beyond access to powerful AI models, life sciences organizations need to protect sensitive research data and intellectual property, meet security and compliance requirements, and give researchers reliable AI capabilities across the lab, workstation and wider enterprise. The challenge is creating an environment that can support these workloads as use expands, without adding unnecessary complexity for either researchers or IT teams.

Bringing AI Closer to Life Sciences

Turning AI from a pilot project into an enterprise capability requires the right foundation — one that balances performance, data privacy and operational simplicity.

But success depends on more than access to powerful models. Organizations need to run AI securely where their data and researchers are, protect valuable intellectual property, and scale from individual projects to enterprise-wide adoption without creating more operational complexity. Local AI can keep selected workflows close to sensitive data, specialized applications and expert review, while maintaining a path to governed enterprise scale.

Lenovo and NVIDIA help create this foundation across the research environment. **Lenovo AI workstations** and **ThinkSystem accelerated compute infrastructure** provide the compute where it is needed; the **Lenovo xIQ Agent Platform** helps coordinate and govern AI agent workflows; and **Lenovo AI Factory**, powered by **NVIDIA Accelerated Computing** and **NVIDIA AI Enterprise software**, provides a consistent way to deploy and operate enterprise AI workloads.

Together, these capabilities help life sciences organizations address the practical barriers that can slow AI beyond pilot stage: performance, data privacy, security, governance and scalability. This helps IT teams spend less time managing complex AI environments, while researchers can focus more of their time on the scientific outcomes that matter – faster discovery, stronger collaboration and meaningful innovation for the industry.

AI for Drug Discovery

Drug discovery depends on scientists being able to make sense of large, complex datasets — from multiple sources — quickly and confidently. When the right AI infrastructure, platforms and applications are brought together, organizations can turn that complexity into faster insights and more informed scientific decisions. Across life sciences, AI is already supporting practical progress in research, development and laboratory operations. For developers building these workflows, NVIDIA BioNeMo provides models, tools and datasets across the AI lifecycle, while NVIDIA NIM microservices support optimized deployment of supported scientific models.

- **Agentic AI** can help researchers interact more naturally with scientific knowledge, surface relevant insights faster and support expert decision-making. Within these workflows, NVIDIA BioNeMo Agent Toolkit helps agents discover and apply specialized scientific skills across models, data and tools, moving from a scientific question to insight and the next informed decision while scientists retain responsibility for interpretation and decisions. By bringing advanced AI capabilities closer to enterprise data, organizations can support innovation while maintaining privacy and control.
- **Computational AI modeling** plays a critical role in modern drug discovery. Cresset's biomolecular computational chemistry and molecular design platform can help researchers apply advanced molecular modeling techniques while leveraging the performance of modern AI and accelerated computing platforms to support scientific

exploration and discovery.
- **Generative AI** is opening new possibilities for how researchers identify patterns, explore datasets and uncover potential opportunities for innovation. Accion Labs provides AI-enabled data discovery and specialized software that helps organizations bring powerful AI capabilities closer to researchers and scientific data, supporting faster and more informed research workflows.

Scaling AI from Experimentation to Enterprise

For life sciences organizations, the key challenge remains moving AI beyond isolated projects and into day-to-day research and operations — while helping maintain data control and a manageable path to enterprise-scale AI. Lenovo and NVIDIA offer life sciences organizations the expertise, infrastructure, AI development tools and accelerated computing needed to support that shift. This enables organizations to run AI from individual researcher workstations through to private cloud environments supporting enterprise-wide initiatives.

The aim is practical: to give researchers access to the AI capabilities they need, where they need them, while giving IT teams a manageable, secure foundation for scaling AI across the organization.

Lenovo and NVIDIA at BioTechX Europe 2026, 6-8 October 2026

Life sciences companies are looking for a more manageable path from an individual AI workload to a governed, scalable environment that researchers can use with confidence. The conversation is shifting from proving that AI can generate an insight to building AI environments that can support repeatable scientific work at scale.

At BioTechX Europe in Basel, we look forward to discussing how pharmaceutical, biotechnology, healthcare, research and technology organizations can apply this thinking to the innovations shaping biomedical research and drug discovery today.

Meet us at Booth #410 to:

- Discover how AI can help accelerate the journey from molecule to medicine
- Experience live AI demonstrations spanning infrastructure, platforms and life sciences applications
- Explore AI-powered drug discovery and molecular design workflows
- Meet Lenovo, NVIDIA and life sciences technology experts
- Discuss how to move AI initiatives from experimentation to a secure, private, scalable deployment