

OpenText AI for life sciences

Unlock innovation and efficiency throughout the drug development value chain



Generative artificial intelligence (GenAI) is helping drive a technological transformation in the pharmaceutical industry. Beyond the positive impact on drug discovery, GenAI can play a pivotal role in equipping organizations to boost innovation, increase operational agility, and gain new visibility into manufacturing processes.

Top reasons for pharmaceutical companies to adopt GenAI:

- 1 Accelerated drug discovery:** GenAI models can analyze vast molecular datasets to identify promising compounds in days rather than months, dramatically shortening time-to-market while reducing R&D costs.
- 2 Improved manufacturing intelligence:** Real-time process monitoring through GenAI enables predictive maintenance, reduces downtime, and ensures consistent quality across production facilities.
- 3 Automated regulatory compliance:** AI-powered systems can continuously monitor changing regulations, automatically flagging potential compliance issues and suggesting appropriate documentation adjustments.
- 4 Advanced personalized medicine:** GenAI facilitates analysis of genetic, clinical, and lifestyle data to develop targeted therapies tailored to specific patient populations, improving treatment efficacy.
- 5 Resilient supply chains:** Predictive GenAI models identify potential disruptions before they occur, allowing pharmaceutical companies to implement contingency plans and maintain reliable product supply.
- 6 Optimized clinical trials:** AI algorithms can identify ideal patient candidates, predict trial outcomes, and detect safety signals earlier, reducing development timelines and costs.
- 7 Enhanced knowledge management:** GenAI systems transform unstructured data across research papers, internal documents, and clinical notes into actionable insights, democratizing expertise across organizations.

“Companies must address the practical constraints of using GenAI to manage regulatory-grade data generated from clinical trials in transactional systems, as well as less sensitive data used in business systems, such as finance and HR.”

Boston Consulting Group