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Tech Mahindra and NVIDIA collaborate to advance drug safety using agentic AI

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To enhance the accuracy, speed, and efficiency of pharmacovigilance processes



Tech Mahindra, a leading global provider of technology consulting and digital solutions to enterprises across industries, has announced a pharmacovigilance (PV) autonomous solution built with NVIDIA AI software to advance drug safety management.

The transformative solution leverages agentic artificial intelligence (AI) and automation to enhance the accuracy, speed, and efficiency of pharmacovigilance processes, addressing critical industry challenges such as manual delays and data overload.

Powered by Tech Mahindra's TENO framework, which is built on NVIDIA's cutting-edge AI technology, the solution is designed to automate and optimize pharmacovigilance workflows.

By integrating the NVIDIA AI Enterprise software platform, including NVIDIA NeMo, NVIDIA NIM microservices, and NVIDIA AI Blueprints, the Tech Mahindra solution streamlines case intake, data transformation, quality control, and compliance management, thereby ensuring a seamless and intelligent PV workflow. Additionally, the LLM-powered AI agents within the solution autonomously handle case classification, prioritization, and verification of pharmacovigilance emails to reduce the risk of human error.

Tech Mahindra and NVIDIA work together to provide better patient outcomes by bringing agentic AI-driven intelligence to pharmacovigilance. The pharmacovigilance industry manages over 1,000 daily cases of adverse drug reaction (ADR) for major drugs. For instance, in the case of an email reporting adverse drug reaction (ADR), the AI-driven PV solution instantly flags, prioritises, and processes the request by eliminating human intervention that could potentially lead to delays and errors. The solution reduces turnaround times by up to 40%, enhances data accuracy by 30%, and cuts operational costs by 25%. This ensures timely case processing, regulatory adherence, and proactive risk mitigation, thereby transforming pharmacovigilance from reactive to predictive.

Tech Mahindra has also expanded its TENO framework to encompass NVIDIA AI Enterprise, enriching it with customised AI agents to address a broad spectrum of industry challenges. The framework integrates NVIDIA NeMo to accelerate generative AI pipeline for data collection and curation, coupled with Tech Mahindra's VerifAI solution for data validation and governance. The distributed training and model customisation capabilities embedded within the framework ensure that the AI models continuously evolve to enhance decision-making precision.