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Sartorius to advance drug discovery and manufacturing with AI in collaboration with NVIDIA

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Exploring advanced technologies to help bring novel therapies to patients faster

Germany-headquartered life science group Sartorius is expanding its multidisciplinary collaboration with NVIDIA to help enable the development of new and better therapies, combining Sartorius' in-depth knowledge of life sciences and bioprocessing with NVIDIA's artificial intelligence (AI)-powered computing platforms and software.

Sartorius has been working with NVIDIA since 2020. The life science group has integrated NVIDIA's technology into its instruments, enabling edge computing applications of its live-cell imaging platform for commercialised AI assays in the lab. The focus of the collaboration has been on developing predictive AI models of stem cell-derived organoids to replace animal models in drug discovery and precision medicine. Sartorius is also using NVIDIA solutions for predictive bioprocess design and simulation tools for manufacturing innovative therapies.

The expanded collaboration includes increasing adoption of the NVIDIA Clara suite of AI-powered computing platforms, software, and services in the Sartorius ecosystem. Plans involve creating and commercializing powerful foundational models based on Sartorius' extensive and unique data sets. New predictive AI models, tools, and simulations for numerous application areas will also be available to Sartorius customers through the NVIDIA Clara suite and the NVIDIA DGX platform.

In a forward-looking approach to innovation and technology integration in the biopharmaceutical sector, the collaboration will explore numerous advanced technologies, including the computer-based design and simulation of complex 3D-bioprinted spheroids and organoids or synthetic biological pathways and organisms designed based on Sartorius cell lines, to produce novel therapeutic agents and therapies.