

Univercells teams up with Repligen for real-time bioprocess monitoring

09 July 2025 | News

Integration of Repligen's MAVEN® Platform with Univercells' scale-X™ Bioreactors Enhances Process Control, Eliminates Manual Testing, and Supports Optimised Cell Growth through Real-Time Data



<u>Univercells Technologies</u>, a <u>Donaldson Life Sciences</u> business and global provider of bioprocessing solutions, announced a collaboration with Repligen Corporation to integrate real-time monitoring capabilities and enhance the development and manufacturing of viral vectors and vaccines. The <u>MAVEN® Real Time Glucose Control Platform</u> from Repligen will be used to perform real-time monitoring of glucose and lactate in the range of scale-X[™] bioreactors for adherent cell culture processes.

The MAVEN is a cornerstone of the bioprocess portfolio that Repligen recently acquired from 908 Devices. This acquisition brings four crucial devices for process analytical technology (PAT) applications, including the MAVEN, under the Repligen umbrella.

"This collaboration brings real time process analytical technology (PAT) to our <u>scale-X bioreactors</u>, <u>eliminating manual nutrient testing and significantly increasing data resolution</u>. With more frequent and automatic measurements we can feed <u>data into our SkaiaTM vision application software model</u> for an even more accurate estimation of cell growth," said Marie Jourdan, Director of Product Management at Universells Technologies.

The MAVEN from Repligen is designed to monitor and control glucose and lactate concentrations during cell culture and fermentation without removing any media volume from the bioreactor. Real time insights into cellular metabolism make it easier to optimize media and develop feeding and control strategies. Users can detect and react to process changes with

monitoring of glucose and lactate as often as every 2 minutes and up to 720 glucose-lactate data points per day.

"Compatibility of technologies is critical to commercializing advanced therapies," said Wolfgang Kuennecke, VP, Bioanalytic, Enzymatic Analyzers from Repligen. "In this alignment, we have combined MAVEN and the scale-X bioreactors via a custom diffusion manifold so that developers can expand their toolbox simply. This integration helps developers to concentrate on the needs of their cells and create the optimum process conditions for their growth."

As part of this collaboration, the team is actively generating data to support the integration of these technologies. At the same time, the team is engaging with potential beta testers to validate use cases and support the development of this solution. In the meantime, the scale-X bioreactor portfolio and MAVEN advanced monitoring system are taking immediate inquiries.