

Having Identified Rapid, Early Process Development as Critical to the Success of Novo Nordisk's Biologics Programs, Company Chooses SimCell® MicroBioreactor System For High-Throughput Mammalian Cell Culture Process Development

WOBURN, MA, U.S.A. – BioProcessors announced the sale of the SimCell™ MicroBioreactor Automation Management System to Novo Nordisk A/S (NYSE: NVO), having successfully completed platform evaluation trials. The SimCell™ platform enables Novo Nordisk to rapidly accelerate their mammalian cell culture process development initiatives. As a result of the joint effort, the companies demonstrated the predictability and scalability of BioProcessors' MicroBioreactor Array and a high-throughput robotic workstation to conventional bioreactor systems. BioProcessors' SimCell MicroBioreactor solutions enable biotechnology and pharmaceutical companies to increase cell culture experiment capacity by orders-of-magnitude with greater data quality, faster cycles and lower costs than conventional biopharmaceutical processing methods.

"Existing high-throughput systems emphasize miniaturization at the expense of performance and data generation, in most cases limiting the usefulness of such high-throughput tools to only a screening function," said Dr. Andrey Zarur, CEO and President, BioProcessors. "This paradox is clearly visible in the area of cell culture where 96 well plates and shake flasks are used as high-throughput screens for cell line selection, media and process optimization. In all but the simplest of processes these systems are at best only a crude approximation of a working bioreactor and hence provide little reliably scalable cell culture process information. Poor scalability and, in the case of shake flasks, insufficient experimental power to provide complete full factorial process development DOEs limits researchers 'real-time' ability to identify robust processes capable of operating at their global optima," Dr. Zarur added. BioProcessors SimCell MicroBioreactors address this process development "data gap" by integrating microfluidics with remote monitoring and control, enabling high-throughput process development through the miniaturization of bioreactors that accurately simulate full scale manufacturing processes.

About Novo Nordisk

Novo Nordisk is a healthcare company and a world leader in diabetes care. The company has the broadest diabetes product portfolio in the industry, including the most advanced products within the area of insulin delivery systems. In addition, Novo Nordisk has a leading position within areas such as haemostasis management, growth hormone therapy and hormone replacement therapy. Novo Nordisk manufactures and markets pharmaceutical products and services that make a significant difference to patients, the medical profession and society. With headquarters in Denmark, Novo Nordisk employs approximately 21,000 full-time employees in 78 countries, and markets its products in 179 countries. Novo Nordisk's B shares are listed on the stock exchanges in Copenhagen and London. Its ADRs are listed on the New York Stock Exchange under the symbol 'NVO'.

About BioProcessors

BioProcessors' SimCell™ solution provides biotech and pharmaceutical companies with a proven process to exponentially increase experiments and to scale-up candidate drugs to production fermentation yields. SimCell's MicroBioreactor solution delivers results at a fraction of the time and cost inherent in existing process development methods. Its market leading system stores and retrieves a robust quantity of reusable, verifiable and reproducible experiment data.

SimCell's high-throughput, multi-factorial design (full DOE) capability accelerates the development of robust economic processes and reduces the time-to-market to deliver production level drugs for biotechnology and pharmaceutical firms, minimizes investor risk when shifting and scaling-up into production and allows predictable and increased quality cell growth to meet market demand.

BioProcessors' SimCell solution suite provides a complete robotic automation platform, powerful integrated experimental design and data analysis software capable of fully automating the development process. SimCell is the novel and proprietary MicroBioreactor technology. SimCell Automation and Management System is the complete robotic and system capability to predictably and consistently control the environment (oxygen, temperature, pH) and reach the desired cell culture level. This allows scientists to design, manage and monitor thousands of cell culture experiments simultaneously. SimCell Insight provides the data and the software for thorough and historic technology evaluation and analysis. SimCell KnowledgeSource is a comprehensive set of methodologies, best practices, and instructional material that makes microbioreactor biopharmaceutical development a practical reality. KnowledgeSource is embedded in the technology and ingrained in the scientific staff of BioProcessors, which it shares and continues to develop with its partners and clients.

Customers such as Amgen (NASDAQ: AMGN), Novo Nordisk (NYSE: NVO) and others are now able to meet the expanding consumer demand for new drugs without curtailing revenue and profits by minimizing the inherent weaknesses built into anemic drug production processes. SimCell is being implemented, and is easily integrated, by other leading biotechnology and pharmaceutical firms into their existing process development structure. SimCell can be either purchased for in-house use or fully utilized on an outsourced or trial basis.