

PCT, a NeoStem Company, Presented Lovo(R) Cell Processing System Data at IBC Life Sciences' Commercialization of Cell, Gene & Immunotherapies Conference

NEW YORK, Dec. 12, 2014 -- NeoStem, Inc. (Nasdaq:NBS), a biopharmaceutical company developing novel cell based therapeutics, and Progenitor Cell Therapy, LLC ("PCT"), a NeoStem company and a leading contract development and manufacturing organization in the cellular therapy industry, announced that Dr. Ian Gaudet, Senior Engineer with PCT's Engineering and Innovation Center, presented results of PCT's most recent study to generate data on the performance of the Lovo[®] Cell Processing System.

Dr. Gaudet presented the results on December 12, 2014 at IBC Life Sciences' Commercialization of Cell, Gene & Immunotherapies conference in San Diego, California.

The Lovo cell processor, developed and sold by Fresenius Kabi, is an automated system that removes supernatant from target cells and stores them in viable media. Lovo automates the labor-intensive tasks of separation, washing, platelet-reduction, fluid-exchange, and concentration of white blood cells. The system includes single-use disposable processing sets with a sterile fluid path to facilitate closed system processing.

Fresenius Kabi introduced the Lovo system at the 20th Annual International Society for Cell Therapy meeting held in Paris, France in April 2014. The system is designed for use in research and transplant laboratories in academic institutions, biotech companies and other facilities that process cells.

Utilizing its more than 15 years of cell processing expertise, PCT has been evaluating the use of the Lovo system in typical cell therapy applications and generating data on the operation, performance, and usability of the device. Study results presented at IBC indicate performance advantages of the Lovo system in comparison to other methods for cell washing and volume reduction, including high cell recovery, maintenance of cell viability, and effective reduction of pre-wash ingredients. The Lovo system also provided operational advantages, including closed, fully automated execution of the process. The data was generated for washing two liters of culture-expanded T cells into a final volume of 150 mL, a typical need for cellular immunotherapy applications. The study took place in PCT's Mountain View, California facility.

"Current and future users of the Lovo system now have additional feedback and data from an end-user perspective," said Dr. Robert A. Preti, President of PCT and Chief Scientific Officer of NeoStem. "Our team has gathered firsthand experience with this major product offering in cell therapy — experience that will ultimately benefit our clients who use the Lovo system. Data gathered from this evaluation will help the industry respond to some of the unique challenges that are facing cell therapy manufacturers today."

PCT's collaboration in support of the Lovo system is one of the initiatives being undertaken by PCT's recently formed Engineering & Innovation Center (EIC), designed to help PCT's client base accelerate the development of more cost effective and robust manufacturing processes for cellular therapeutic candidates. Through the EIC, PCT helps its clients think beyond current practices and accelerate the use of automation, integration and other engineering strategies to address important issues such as scale up and cost of goods in anticipation of commercial production.

"We are pleased to apply the expertise and resources of our Engineering and Innovation Center to continue to better understand the current and influence the future technology landscapes for manufacturing development in regenerative medicine," said Brian Hampson, Vice President, Manufacturing Development and Engineering of PCT. "The data gathered from this evaluation may help a wide variety of cell therapy companies respond to some of the challenges they are facing today. The ability of customers to achieve robust processing on a closed, automated platform like the Lovo system should help them achieve faster, easier and more consistent results in their cell processing."

About NeoStem, Inc.

NeoStem is a biopharmaceutical company pursuing the preservation and enhancement of human health globally through the development of cell based therapeutics that prevent, treat or cure disease by repairing and replacing damaged or aged tissue, cells and organs and restoring their normal function. The business includes the development of novel proprietary cell therapy products as well as a revenue-generating contract development and manufacturing service business. This combination has created an organization with unique capabilities for cost effective in-house product development and immediate revenue and cash flow generation.

www.neostem.com

About PCT

Progenitor Cell Therapy (PCT), a wholly owned subsidiary of NeoStem, Inc., is a leading contract development and manufacturing organization in the cellular therapy industry. For over 15 years, PCT has provided pre-clinical and clinical cGMP development and manufacturing services to more than 100 clients, advancing regenerative medicine product candidates from the development stage all the way through to human testing. PCT has two cGMP-compliant, state-of-the art facilities in New Jersey and California to serve the cell therapy industry and offers manufacturing of cell therapy-based products, engineering and innovation services, process and product development, cell and tissue processing, collection and storage, regulatory consulting, facility design, validation, and due diligence evaluations. www.pctcelltherapy.com

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements reflect management's current expectations, as of the date of this press release, and involve certain risks and uncertainties. Forward-looking statements include statements herein with respect to the successful execution of the Company's business strategy, the Company's ability to develop and grow its business, the successful development of cellular therapies with respect to the Company's research and development and clinical evaluation efforts in connection with the Company's Targeted Immunotherapy Program, Ischemic Repair Program, Immune Modulation Program and other cell therapies, the future of the regenerative medicine industry and the role of stem cells and cellular therapy in that industry, and the performance and planned expansion of the Company's contract development and manufacturing business. The Company's actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors. Factors that could cause future results to materially differ from the recent results or those projected in forward-looking statements include the "Risk Factors" described in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission ("SEC") on March 13, 2014, the Company's Current Report on Form 8-K filed with the SEC on May 8, 2014 and in the Company's other periodic

filings with the SEC. The Company's further development is highly dependent on future medical and research developments and market acceptance, which is outside of its control.

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