Cesca Therapeutics' Chief Technology Officer, Phil Coelho, Provides Deep Dive into the CAR-T Manufacturing Process in Cell & Gene Therapy

May 23, 2018

Wide-ranging interview discusses the shortcomings of the current CAR-T manufacturing process and the significant benefits of automation with CAR-TXpress™

RANCHO CORDOVA, Calif., May 23, 2018 (GLOBE NEWSWIRE) -- Cesca Therapeutics Inc. ("Cesca" or the "Company") (NASDAQ:KOOL), a market leader in automated cell processing and point-of-care, autologous cell-based therapies, today announced that Phil Coelho, chief technology officer of the Company's ThermoGenesis device division, was recently interviewed by *Cell & Gene Therapy Insights*. The article, "Driving CAR-T Manufacture Optimization through Technology Innovation," appears online (here) and in Volume 0404 2018 of the publication.

In a wide-ranging interview, Mr. Coelho provides a comprehensive overview of the challenges faced by today's CAR-T manufacturers, including lengthy treatment times and high costs, two significant obstacles to the more rapid uptake of these groundbreaking therapies. Notably, Mr. Coelho highlights the substantial loss (50-90%) of target cells that occurs during the current, manual process, as well as additional complications posed by use of traditional, and outdated, Ficoll or magnetic bead-based methods of cell selection and activation. Combating these avoidable cell losses is Cesca's CAR-TXpress platform, consisting of the X-Lab™, X-Wash™ and X-BACS™ automated modules, which employ the Company's proprietary Buoyancy Activated Cell Sorting (BACS) technology to more efficiently isolate a specific cell type from a complex mixture of cells, such as blood.

"We believe that our automated modules, when compared to legacy manual systems, provide meaningful performance gains in purifying mononuclear cells (MNCs), washing contaminants from cell fractions, antibody selection and activation of T-cells, while significantly shortening processing times," noted Mr. Coelho. "At a minimum, we expect a 10–20% improvement in processing performance at every manufacturing step than obtained from existing manual processes."

BACS microbubbles link to antibodies that bind to desired target cells. During centrifugation, the target cells float to the top of the host liquid, while the non-target cells sink to the bottom for automated depletion. Cesca recently presented a poster at the 2018 meeting of the International Society Cellular Therapy in Montreal, Canada, illustrating that BACS resulted in higher target cell recovery rates, with greater levels of viability and purity, relative to more traditional ficoll-based and magnetic bead-based isolation procedures.

In April, Cesca announced the commercial release of its X-Mini™ kit for the research market. The Company's X-Series™ products are currently being evaluated by several leading academic research institutions.

About Cell & Gene Therapy Insights

Cell and Gene Therapy Insights is a journal that addresses the important challenges and advances these converging fields face, publishing original research, reviews, commentary articles and clinical trial reports.

About Cesca Therapeutics Inc.

Cesca Therapeutics Inc. (the "Company") develops, commercializes and markets a range of automated technologies for CAR-T and other cell-based therapies. Its device division, ThermoGenesis Corp., provides a full suite of solutions for automated clinical biobanking, point-of-care applications, and automation for immuno-oncology. The Company is developing an automated, functionally-closed CAR-TXpress™ platform to streamline the manufacturing process for the emerging CAR-T immunotherapy market.

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