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For Immediate Release

MaxCyte to Present on Development of Novel Tumor-Targeted Enhanced Potency T Cell Immunotherapy at The 15th Annual Meeting of the International Society of Cellular Therapy (ISCT)

Rapid, automated, closed system for transfection of Chimeric Antigen Receptor mRNA into T cells results in enhanced anti-tumor responses

Gaithersburg, MD, May 04, 2009 – MaxCyte will be presenting results on the development of an engineered tumor-targeted T cell therapy uniquely enabled by the use of MaxCyte® GT™ Flow Transfection System at the 15th Annual Meeting of the International Society of Cellular Therapy (ISCT) in San Diego. The presentation is entitled "**Scalable electroporation mediates efficient RNA-CAR transfection in expanded T cells with a dependence of expression duration on intracellular activation domains**" and will be presented as Poster #87 on May 5, 2009 at 5:00-6:00PM.

This study described in the presentation investigated the development of safe, robust, clinical scale, cGMP and regulatory-compliant process for transfecting T lymphocyte cells. The T Cells were transfected with messenger RNA (mRNA) encoding for chimeric antigen receptor (CAR) molecules that target specific cell surface markers on tumor cells. The engineered T cells demonstrate high viability, and robust and controlled expression of the protein encoded by CAR mRNA, and enhanced targeted cytotoxicity specifically directed against primary tumors and tumor cell lines expressing the tumor-specific molecule encoded by the CAR. This study was performed in collaboration with investigators at the Abramson Cancer Center at the University of Pennsylvania.

“We are very excited to be working with MaxCyte to continue to develop RNA transfection as a platform for delivering genes into lymphocytes. Our preliminary studies has shown that this approach has significant potential to overcome a number of the limitations associated with currently used delivery systems, and allow for the generation of lymphocytes with re-directed and potent specificity against cancer,” says Dr. Carl H. June, M.D., Professor of Pathology and Laboratory Medicine, and Director of Translational Research Programs at the Leonard and Madlyn Abramson Family Cancer Research Institute at the University of Pennsylvania, an expert in T cell immunotherapy and the senior author on this study. “We

look forward to continue to work productively with MaxCyte to further develop this very promising platform and move our studies into early clinical trials.”

“We are very excited to evaluate this promising technology in clinical studies because it has the potential to allow the safe, fast, and inexpensive clinical evaluation of multiple novel genetic constructs in T cells,” says Dr. Michael Kalos, Director of the Translational and Correlative Studies Laboratory at the Abramson Cancer Center of the University of Pennsylvania.

“Our results demonstrate effective translation of a safe (non-viral) and potent engineered T cell immunotherapy that exhibits enhanced and targeted anti-tumor activity directed specifically toward defined cell surface markers on tumor cells or tumor stem cells,” says Dr. Madhusudan V. Peshwa, Executive Vice President of Cellular Therapies at MaxCyte. “This collaboration serves as a case study of the potential enablement provided by the MaxCyte® GT™ Flow Transfection System in facilitating development, cGMP manufacture and delivery of safe and more effective cellular therapeutics.”

The MaxCyte® GT™ Flow Transfection System is a validated platform for optimizing the biological activity of cellular therapeutic products. The system, which is supported by US FDA Master File and CE marking, enables rapid and efficient transfection of any primary cell or cell line to achieve greater than 90% cell viability. A broad range of molecules (protein, drug, plasmid, mRNA, or siRNA) or combinations thereof, at volumes up to tens of billion cells, can be processed in less than 30 minutes. The system permits rapid, automated, cGMP-compliant, closed system cell processing for both cGMP facility and point-of-care use. The MaxCyte® GT™ Flow Transfection System enables cost-effective delivery with both autologous and allogeneic cellular therapies, customized for enhanced efficacy. MaxCyte® GT™ Flow Transfection System has been validated in a marketed oncology therapy and in multiple phase I/II clinical studies in oncology and regenerative medicine. MaxCyte has recently made available the MaxCyte® GT™ Flow Transfection System to academic and clinical investigators, who can download a technical brochure at: http://www.maxcyte.com/pdf/MaxCyte_Brochure_GT_8.5x11_FINAL.pdf.

About MaxCyte

MaxCyte is the leader in providing clinical/commercial cell modification technologies and technical expertise to enable the development of proprietary enhanced cellular therapeutics to global leaders in life sciences. MaxCyte’s unique transfection technology platform enables the discovery, development, manufacturing and delivery of innovative and important therapeutic products for a wide range of diseases. MaxCyte’s proprietary cell loading technology provides critical enablement for cell therapeutics targeting a broad range of chronic diseases by allowing the controlled modification of cell function. By providing unparalleled consistency, scalability, and loading efficiency while avoiding the inherent drawbacks of alternative methods, the MaxCyte GT™ Flow Transfection System enables the development of proprietary enhanced therapies that cannot otherwise be commercialized. MaxCyte’s clinical-grade cell loading technology platform is supported by an FDA Master File and well validated, with multiple products enabled by the MaxCyte technology in clinical development and on market. Building on these experiences, MaxCyte also offers the MaxCyte STX™ Scalable Transfection System as a product for sale to biopharmaceutical companies involved in the burgeoning area of cell-based drug screening and small molecule drug discovery.

For more information: <http://www.maxcyte.com>

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