NantKwest to Present Data on the First Next Generation GMP-Grade NK Cell Line for Combination Immunotherapy with Rituximab, Trastuzumab, and Daratumumab at Upcoming AACR Cancer Conference

April 15, 2016

Positive Preclinical Data Of The First "Off The Shelf," GMP-Grade, IL-2-Independent NK Cell Line Expressing The High-Affinity Fc-Receptor To Augment Antibody Therapeutics

CULVER CITY, Calif. – **April 15, 2016** - NantKwest Inc. (Nasdaq:NK), a pioneering, next generation, clinical-stage immunotherapy company focused on harnessing the unique power of our immune system using natural killer (NK) cells to treat cancer, infectious diseases and inflammatory diseases, today announced that the company will be presenting an abstract at the upcoming American Association of Cancer Research Annual Meeting (AACR).

The abstract will be presented on April 18, 2016 at the 107th Annual Meeting of the American Association for Cancer Research in New Orleans, Louisiana.

"NantKwest is rapidly advancing next generation, NK cell-based immunotherapies that are designed to dramatically improve clinical outcomes for cancer patients. We are pleased to have been invited to present additional preclinical data associated with our high affinity natural killer cell program, haNK, at the upcoming AACR meeting," said Patrick Soon-Shiong, MD, Chairman and CEO of NantKwest. "This latest preclinical data further validates NantKwest's unique approach to harnessing the power of the innate immune system using natural killer cells as therapeutic agents and also helps guides the design of clinical trials for the haNK program and transition this program into human clinical trials in the second half of 2016. These trials will be part of Cancer Moonsot 2020 initiative (www. Cancermoonshot 2020.org) to further the acceleration of combination immunotherapy with monoclonal antibodies such as rituximab, trastuzumab, and daratumumab."

The presentation details are as follows:

Title: An 'off the shelf,' GMP-grade, IL-2-independent NK cell line expressing the high-affinity Fc-receptor to augment antibody therapeutics

Presentation Time: Monday, Apr 18, 2016, 1:00 PM - 5:00 PM, Location: Section 25, Poster Board Number: 14

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Abstract Summary
A GMP-grade plasmid-transfected variant of NK-92 expressing the high-affinity CD16 receptor was developed utilizing a novel transfection vector containing the erIL-2 gene, enabling the resulting haNK cells to grow independently of IL-2. Using limiting dilution, clones having identical surface molecule expression to the parent cell line were generated and shown to have long-term expression of CD16. The haNK cells displayed high ADCC in combination with rituximab, trastuzumab, and daratumumab against target cell lines that were not killed by the parental NK-92 cells. In summary, haNK cells are a potent and versatile platform for cellular immunotherapy, and clinical trials of these novel "off the shelf" high-affinity NK cells are scheduled for 2016.

About NantKwest Inc.
NantKwest (Nasdaq:NK) is a next generation, clinical-stage immunotherapy company focused on harnessing the unique power of our immune system using natural killer (NK) cells to treat cancer, infectious diseases and inflammatory diseases. NK cells are the body's first line of defense due to the innate ability of NK cells to rapidly identify and destroy cells under stress, such as cancer or virally-infected cells.

NantKwest's unique NK cell-based platform, with the capacity to grow active killer cells as a biological cancer therapy, has been designed to induce cell death against cancer or infected cells by three different modes of action: (1) Direct killing using activated NK cells (aNK) that release toxic granules directly into the cell through cell to cell contact, (2) Antibody-mediated killing using haNKs, which are NK cells engineered to incorporate a high affinity receptor that binds to an administered antibody, enhancing the cancer cell killing effect of that antibody, and (3) Targeted activated killing using taNKs, which are NK cells engineered to incorporate chimeric antigen receptors (CARs) to target tumor-specific antigens found on the surface of cancer cells.

NantKwest's aNK, haNK and taNK platform addresses certain limitations of T cell therapies including the reduction of risk of serious "cytokine storms" reported after T cell therapy. As an "off-the-shelf" therapy, NantKwest's NK cells do not rely on a patient's own often compromised immune system. In Phase 1 clinical trials in patients with late stage cancer, NantKwest's NK cells have been successfully administered as an outpatient infusion therapy without any reported severe side effects, even at doses of 10 billion cells.

By leveraging an integrated and extensive genomics and transcriptomics discovery and development engine, together with a pipeline of multiple, clinical-stage, immuno-oncology programs that include a Phase 2 trial for a rare form of melanoma and the planned initiation of a clinical trial of NK cells targeted to breast cancer, NantKwest believes it is uniquely positioned to be the premier immunotherapy company and to transform medicine by delivering living drugs in a bag and bringing novel NK cell-based therapies to routine clinical care.

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