



NantKwest Announces Durable Complete Responses in Phase I Trial of aNK Cell Therapy in Patients with Relapsed Hematological Malignancies

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42% Of Patients Exhibited A Response, With Two Complete Responses In A Phase 1 Study Of 12 Patients With A Patient In Complete Remission 10 Years After Failing Transplant Therapy For Hodgkin's Lymphoma, And A Second Patient In Complete Remission 2 Years After Failing Transplant Therapy In Multiple Myeloma

CULVER CITY, Calif.--(BUSINESS WIRE)--Jul. 31, 2017-- NantKwest Inc. (Nasdaq:NK), a pioneering, next-generation, clinical-stage immunotherapy company focused on harnessing the unique power of the immune system using natural killer (NK) cells to treat cancer, infectious diseases, and inflammatory diseases, today announced the final results of a phase I clinical trial of the company's aNK cell therapy platform in relapsed hematological malignancies.

The data published in the journal [Oncotarget](#) by investigators at Princess Margaret Cancer Centre in Toronto, Canada, demonstrated continuing evidence of safety and efficacy, with an overall response rate of 42% and no evidence of grade 3 or 4 adverse events from the infusions. Of note 2 out of the 12 patients in the safety study with relapsed Hodgkin's Lymphoma and Multiple Myeloma, demonstrated durable complete response with single agent aNK therapy, and remain free of disease to date, 10 years and 2 years respectively.

"Our study was designed to assess safety and preliminary evidence of efficacy in patients with relapsed, refractory hematological malignancies whose disease recurred after autologous hematopoietic cell transplantation (AHCT). In this heavily pretreated patient population that has a particularly poor prognosis, we demonstrated safety with minimal toxicity and showed preliminary evidence of efficacy, taking advantage of the unique properties of natural killer (NK) cells as an immunotherapeutic agent," said Armand Keating, MD, FRCP(C), Director, Cell Therapy Program, Princess Margaret Cancer Centre and University Health Network.

Dr. Keating continued, "In this clinical study completed in 2015 of 12 patients with lymphoma and multiple myeloma who had relapsed after AHCT for refractory/relapsed disease, we report encouraging results with four patients (33%) currently alive and two complete responses, one for over two years and the second for over 10 years and conclude that aNK cell therapy warrants further clinical investigation."

Patrick Soon-Shiong, Chairman and CEO of NantKwest commented, "Consistent with previous studies, Dr. Keating's clinical trial results, reporting a 42% overall response rate, provide additional clinical validation of the unique potential to deliver long-term remissions with limited toxicity using the company's novel NK cell therapy. Our aNK cell therapy is currently in an ongoing Phase II clinical study in Merkel cell carcinoma and represent a critical, foundational component in the company's recently launched NANT Cancer Vaccine clinical trial program."

Dr. Soon-Shiong continued, "We believe our product portfolio of novel off-the-shelf NK cell therapies is unique in offering a more uniform, consistent and optimized product potency with minimal toxicity and we remain focused on translating these unique advantages to patient care as rapidly as possible."

aNK Cell Therapy Platform

NantKwest's aNK cell therapy platform is being developed as an allogeneic, off-the-shelf therapy, offering a potent, standardized, uniform and consistent product, further optimized to enhance the key capability of natural killer cells to directly target and kill cancer cells. This novel cell therapy is currently in an ongoing Phase II clinical trial in Merkel cell carcinoma and is a critical, foundational component in the company's recently launch NANT Cancer Vaccine clinical trial program.

About NANT Cancer Vaccine

The NANT Cancer Vaccine is the first combination immunotherapy protocol to orchestrate the delivery of metronomic low dose radiation and chemotherapy with molecularly informed tumor associated antigen vaccines and natural killer cells, to activate the innate and adaptive immune system and to induce immunogenic cell death. By inducing immunogenic cell death and protecting as well as enhancing the innate and adaptive immune system, the NANT Cancer Vaccine seeks to attain long-term sustainable remission of multiple tumor types with lower toxicity and higher efficacy than current standards of care.

About NantKwest

NantKwest (Nasdaq:NK) is 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. 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.

Our 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, we believe NantKwest is uniquely positioned to be the premier immunotherapy company and transform medicine by delivering living drugs in a bag and bringing novel NK cell-based therapies to routine clinical care. For more information please visit www.nantkwest.com.



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Jen Hodson

jhodson@nantworks.com