



Nkarta Therapeutics Reports Potent Natural Killer Cell Anti-Cancer Activity In Preclinical Tumor Model

November 9, 2018

NK cell potency and persistence significantly improved using cell engineering technology

60% increase in cytotoxicity observed with Nkarta NK cells relative to control NK cells

Single in vivo administration of engineered NK Cells led to durable tumor suppression in a xenograft model

SOUTH SAN FRANCISCO, Calif. – November 9, 2018 – Nkarta Therapeutics, a privately-held cell therapy company developing Natural Killer (NK) cell therapies to fight cancer, today announced preclinical data highlighting the anti-cancer activity of engineered NK cells in a presentation at the Society of Immunotherapy for Cancer meeting being held in Washington D.C. The scientific poster, entitled “Co-expression of a chimeric NKG2D receptor with membrane bound IL-15 enhances natural killer cell function and long-term persistence in vitro and in vivo”, is being presented by Luxuan Buren, Ph.D., Senior Scientist at Nkarta.

Nkarta’s proprietary technology includes expansion and genetic engineering of NK cells for enhanced expression of both the tumor targeting receptor NKG2D and of IL-15, which prolongs the persistence and potency of these cytotoxic cells. In a challenging xenograft osteosarcoma model, a single injection of Nkarta’s NK cells resulted in dramatic tumor shrinkage and complete suppression of the tumor for over 2 months.

“Natural Killer cells have a distinct role in our bodies to help us fight pathogens and cancer,” said James Trager, senior vice president of Research and Development at Nkarta. “However, when cancer progresses it can overwhelm the natural defense mechanism of these cells. Our technology can reinvigorate NK cells, significantly enhancing their native tumor recognition and killing. We look forward to generating additional preclinical data to support advancement into the clinic in the future.”

About Nkarta’s NK Cell Therapy

Natural Killer cells have the unique ability to discriminate between healthy cells and cancer cells. They are a key component of the innate immune system and are responsible for a selective and rapid attack on tumor cells. Innate immunity provides an immediate and broad recognition of cellular stress and dysfunction, while adaptive immunity is an evolved process whereby the immune system is taught to recognize and remember very specific antigens associated with pathogens and somatic mutations. NK cells, through a sequence of subsequent immune stimulatory activity, also have the power to awaken the adaptive immune system, thereby producing a powerful, multi-factorial immune response against its target. For patients who are affected by cancer, the immune response is not sufficient to address the disease. Nkarta is developing proprietary methods of boosting the immune response through Natural Killer cell-based therapies. The company’s novel and differentiated technology is focused on producing allogeneic therapies that overcome the challenges of the naturally-occurring immune response, which include 1) engineering enhanced NK cell recognition of their tumor targets, 2) generating an abundant supply of NK cells, and 3) improving their persistence for sustained activity in the body.

Nkarta’s goal is to offer a versatile and robust approach to cancer therapy that is easily combined with other therapies and can be produced off-the-shelf to ultimately improve outcomes for patients.

About Nkarta

Nkarta Therapeutics was founded on the proprietary, robust and well characterized Natural Killer (NK) cell expansion technology pioneered by Dario Campana, MD, PhD. The company is focused on leveraging the natural potent power of NK cells to identify and kill abnormal cells and recruit adaptive immune effectors to generate responses that are specific and durable. Nkarta is combining its NK expansion platform technology with proprietary cell engineering technologies to build differentiated allogeneic cell therapy candidates for the treatment of cancer. Founded in 2015, the company’s investors include SR One, NEA and Novo Ventures. For more information, please visit the company’s website at www.nkartatx.com.

Contact:

Nadir Mahmood
415-582-4927
nmahmood@nkartatx.com

Sylvia Wheeler
swheeler@wheelhouselsa.com