



Nkarta Therapeutics Presents Data at Aacr Demonstrating Proprietary NK Cell Engineering and Expansion Technology Enhances Potency and Cytotoxicity Of NK Cells

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SOUTH SAN FRANCISCO, Calif. – April 1, 2019 – Nkarta Therapeutics, a privately-held cell therapy company developing engineered Natural Killer (NK) cell therapies to fight cancer, today announced preclinical data were presented in a poster session at the American Association for Cancer Research Annual Meeting 2019 in Atlanta, Georgia. The data presented highlight the anti-cancer activity of Nkarta's engineered NK cells and demonstrate unprecedented expansion and activation of NK cells generated by the company's proprietary technologies. The poster, which was presented by Nkarta scientist, Mira Tohmé, Ph.D., described applications of contemporary measures of phenotypic, functional, and gene expression for the comprehensive and reproducible characterization of NK cell product candidates. The data showed that Nkarta's methods for NK cell expansion and engineering consistently generate cells with sustained, elevated phenotypic markers of cell activation, enhanced tumor recognition, resistance to apoptosis and potent cytotoxicity.

"The tumor killing potential of Natural Killer cells is widely appreciated in the cancer field. However, harnessing these cells in sufficient numbers, with high potency and sustained persistence has been challenging, and therefore precluded their clinical application," said James Trager, Ph.D., chief scientific officer of Nkarta. "Our engineered NK cells reproducibly surmount these hurdles in preclinical models. We have applied a battery of advanced analytic techniques to demonstrate that our cells are highly activated and significantly more potent in tumor cell killing than resting NK cells, even after expanding in numbers by many orders of magnitude. Our cells also have sustained persistence for potentially greater therapeutic impact. These methods for understanding the characteristics of our engineered NK cells is essential for the development and manufacturing of consistent cell therapy product candidates and will enable our development of informative markers of potency and efficacy."

Nkarta's proprietary technology includes expansion and genetic engineering of NK cells for enhanced expression of any number of tumor targeting receptors, including NKG2D, along with membrane bound IL-15, which prolongs the persistence and potency of these cytotoxic cells. The poster presented today demonstrates that NK cells expanded and transduced using Nkarta's methods upregulate multiple receptors responsible for the recognition and killing of tumor cells as well as for the prolonged survival and activity of NK cells. A Nanostring nCounter analysis of gene expression provided a comprehensive view of genes upregulated in response to NK cell stimulation, and correlative phenotypic analysis allowed the application of these findings to the identification of potential biomarkers of NK cell potency.

About Nkarta

Nkarta Therapeutics was founded on the proprietary, robust and well characterized Natural Killer (NK) cell expansion technology pioneered by Dario Campana. 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 generate an abundant supply of NK cells, engineer enhanced NK cell recognition of tumor targets, and improve persistence for sustained activity in the body for the treatment of cancer. Nkarta's goal is to develop off-the-shelf NK cell therapy product candidates to improve outcomes for patients. 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.

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