NexImmune Establishes Research Initiative with City of Hope to Focus on Novel Immunotherapeutic Approaches to Acute Myeloid Leukemia

October 27, 2020

City of Hope will combine its world-leading expertise with NexImmune technology to explore tumor escape mechanisms and to identify unique leukemia stem cell targets for next generation immunotherapeutics

GAITHERSBURG, MD - NexImmune, a clinical-stage biotechnology company developing unique non-genetically-engineered T cell immunotherapies, announced today that it has signed a research initiative related to its AIM nanoparticle technology with City of Hope, a world-renowned independent research and treatment center for cancer, diabetes and other life-threatening diseases.

City of Hope is a participating clinical site in the ongoing Phase 1/2 study of NEXI-001. The cancer center will leverage both patient samples from the ongoing NexImmune Phase 1/2 clinical study of NEXI-001 in acute myeloid leukemia (AML) patients with relapsed disease after allogeneic stem cell transplantation and the center's tumor repository bank of primary leukemia samples, one of the largest collections in the world, to drive the research.

NEXI-001 is a cellular product candidate that contains populations of naturally occurring CD8+ T cells directed against multiple antigen targets for AML, and it is the first clinical product generated by the Company's AIM nanoparticle technology.

"NexImmune has developed a unique and versatile technology platform that lends itself very effectively to important areas of ongoing research in the field of AML," said Guido Marcucci, M.D., Chair and Professor with City of Hope's Department of Hematologic Malignancies Translational Science. "Our collective goal is to translate future research findings into new, more effective T cell immunotherapies to the benefit of these very difficult to treat patients."

A key objective of the research will focus on the identification of new antigen targets that are expressed on both leukemic blasts as well as leukemic stem cells, and those which represent survival proteins to both. Once identified, these antigen targets will be loaded on NexImmune AIM-nanoparticles to expand antigen-specific CD8+ T cells, and evaluated in pre-clinical models for anti-tumor potency, tumor-specific killing, and response durability.

In addition, the research initiative will aim to further understand different mechanisms of tumor escape, such as tumor antigen and human leukocyte antigen (HLA) downregulation due to immune pressure.

"Research between NexImmune and City of Hope will inform a scientific understanding of how the immune system can address certain tumor escape mechanisms to more effectively fight aggressive cancers like AML, and how this might be accomplished with NexImmune's AIM technology and T cell products," said Monzr Al Malki, M.D., Director of City of Hope's Unrelated Donor BMT Program and Haploidentical Transplant Program and an Associate Clinical Professor with Department of Hematology and Hematopoietic Cell Transplantation. "Based on our current clinical experience with this technology, we're excited to learn what more this research will tell us."

"City of Hope is a world-class clinical research institution that has built one of the largest banks of leukemia samples in the world," said Han Myint, M.D., NexImmune Chief Medical Officer. "The depth of expertise that Drs. Marcucci, Al Malki and their team bring to this research initiative will help NexImmune continue to develop innovative products that can help patients with AML and other hard-to-treat cancers."

City of Hope is a leader in bone marrow transplantation. More than 16,000 stem cell and bone marrow transplants have been performed at City of Hope, and more than 700 are performed annually. City of Hope's BMT program is the only one in the nation that has had one-year survival above the expected rate for 15 consecutive years, based on analysis by the Center for International Blood and Marrow Transplant Research.

About NexImmune

NexImmune is a clinical-stage biotechnology company developing unique approaches to T cell immunotherapies based on its proprietary Artificial Immune Modulation (AIM) technology. The AIM technology is designed to generate a targeted T cell-mediated immune response and is initially being developed as a cell therapy for the treatment of hematologic cancers. AIM nanoparticles (AIM-np) act as synthetic dendritic cells to deliver immune-specific signals to targeted T cells and can direct the activation or suppression of cell-mediated immunity. In cancer, AIM-expanded T cells have demonstrated best-in-class anti-tumor properties as characterized by in vitro analysis, including a unique combination of anti-tumor potency, antigen target-specific killing, and long-term T cell persistence. The modular design of the AIM platform enables rapid expansion across multiple therapeutic areas, with both cell therapy and injectable products.

NexImmune's two lead T cell therapy programs, NEXI-001 and NEXI-002, are in Phase 1/2 clinical trials for the treatment of relapsed AML after allogeneic stem cell transplantation and multiple myeloma refractory to >3 prior lines of therapy, respectively. The Company's pipeline also has additional preclinical programs, including cell therapy and injectable product candidates, for the treatment of oncology, autoimmune disorders, and infectious diseases.

For more information visit: www.neximmune.com

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