Nektar Therapeutics Presents Clinical Data for NKTR-255 in Patients with Relapsed/Refractory Hematologic Malignancies, Including Patients with Prior CAR-T Therapy, at the 63rd American Society of Hematology (ASH) Annual Meeting

December 13, 2021

SAN FRANCISCO, Dec. 13, 2021 /PRNewswire/ -- Nektar Therapeutics (NASDAQ:NKTR) announced two data presentations from the dose-escalation portion of its ongoing Phase 1 study of NKTR-255 in patients with relapsed/refractory hematologic malignancies at the 63rd American Society of Hematology (ASH) Annual Meeting.

Initial clinical results from the Phase 1 study of NKTR-255 in patients with relapsed/refractory (R/R) hematologic malignancies were presented by Nina Shah, M.D., Associate Professor, Department of Medicine, at the University of California San Francisco on Monday, December 13th. A pharmacodynamic analysis of CAR-T cell persistence in patients treated in the Phase 1 study who had received prior treatment with CAR-T therapy was also presented by Alexandre V. Hirayama, M.D., Fred Hutchison Cancer Research Center on Sunday, December 12th.

"The data presented at this year's ASH meeting underscore the potential of NKTR-255 and provide clinical evidence of its unique ability to trigger the induction of natural killer and CD8+ T cells and highlight its potential role in rescuing and enhancing CAR-T cell persistence," said Jonathan Zalevsky, Ph.D., Head of Research and Development at Nektar. "Engaging the full spectrum of IL-15 biology, NKTR-255 can be combined with multiple mechanisms to potentially improve their efficacy. The clinical data presented at ASH support the development of NKTR-255 in combination with anticancer agents that induce antibody dependent cellular toxicity as well as CAR-T therapies. We look forward to completing the dose escalation portion of this Phase 1 study in the first half of 2022 and further investigating NKTR-255 in combination with rituximab or daratumumab for patients with non-Hodgkin's lymphoma or multiple myeloma."

2021 ASH presentations are available for download at https://www.nektar.com/science/scientific-posters-and-presentations.

Highlights from the presentations are as follows:

Abstract #3134: *"Safety, Tolerability, PK/PD, and Preliminary Efficacy of NKTR-255, a Novel IL-15 Receptor Agonist, in Patients with Relapsed/Refractory Hematologic Malignancies,"* Shah, N., et al.

- NKTR-255 was well tolerated and early evidence of clinical activity was observed in this heavily pre-treated and highly refractory patient population with hematologic malignancies. Treatment-related adverse events were generally low-grade, transient and easily managed.
- Evidence of on-target biological activity was observed despite highly compromised bone marrow hematopoietic capacity; NKTR-255 led to expansion and proliferation of natural killer (NK) and CD8+ T cells.
- Among the 15 response-evaluable patients, 8 (53%) reported disease stabilization (5/8 [63%] patients with multiple myeloma (MM); 3/7 [43%] patients with non-Hodgkin lymphoma (NHL)).
- One patient with NHL (with 3 prior lines of therapy) was treated at the 1.5 µg/kg dose and experienced a metabolic response in a splenic target lesion at cycle 5.[1]
- Two patients with MM (with 3 prior lines of therapy) were treated at the 1.5 µg/kg and the 4.5 µg/kg doses and experienced disease stabilization for greater than 180 days.
- The maximum tolerated dose/recommended Phase 2 dose has not been reached and dose escalation of NKTR-255 is ongoing.

Abstract #2815: *"Pharmacodynamic Analysis of CAR-T Cell Persistence in Patients with Hematologic Malignancies Treated with NKTR-255, an IL-15 Receptor Agonist That Enhances CD8+ T cells: Preliminary results from a Phase 1 Study,"* Hirayama, A., et al.

- This is the first clinical safety and pharmacodynamic assessment of the effects of any IL-15 agent on CAR-T cell counts in relapsed/refractory NHL or MM patients who had progressed or relapsed after CAR-T therapy.
- Of the patients with detectable CAR-T cells in blood at baseline, 100% (4/4) showed an increase of CD3+ CAR-T cells following NKTR-255 treatment. NKTR-255 induced proliferation of CD8+ T cells and an increase of the total CD8+ cell fraction in all patients with CAR-T cells at baseline.
- These preliminary data suggest that NKTR-255 administration represents a potentially novel means of CAR-T augmentation through enhancement and persistence of CD8+ T cells via generation of long-term memory CD8+ and provides promising evidence of CAR-T cell rescue.
- Results support planned evaluation of NKTR-255 in combination with CAR-T therapy as a potential strategy to enhance the efficacy of CAR-T therapy.

NKTR-255 is currently being evaluated in dose-escalation in a Phase 1 study in patients with R/R non-Hodgkin's lymphoma and R/R multiple myeloma (NCT04136756) and in a Phase 1b/2 trial in combination with ERBITUX® for the treatment of R/R colorectal cancer and R/R squamous cell carcinoma of the head and neck (NCT04616196). In collaboration with Merck KGaA, Darmstadt, Germany, Nektar will also be investigating NKTR-255 in combination with BAVENCIO®, a PD-L1 inhibitor, in patients with locally advanced or metastatic urothelial carcinoma in the randomized Phase II JAVELIN Bladder Medley study.

About NKTR-255

NKTR-255 is a novel polyethylene glycol-conjugate of recombinant human interleukin-15, which was designed to retain all known receptor binding interactions of the IL-15 molecule. The investigational candidate is uniquely designed to overcome known challenges of recombinant IL-15 and other IL-15 agonists, which are rapidly cleared from the body and have shown diminishing response to successive doses. Through an extended circulating half-life and optimal engagement of the IL-15Rα/IL-2Rβγ receptor complex, NKTR-255 enhances functional natural killer cell populations and formation of long-term CD8+ mediated immunological memory, which may lead to sustained anti-tumor immune response.

About Nektar

Nektar Therapeutics is a biopharmaceutical company with a robust, wholly owned R&D pipeline of investigational medicines in oncology, immunology and virology well as a portfolio of approved partnered medicines. Nektar is headquartered in San Francisco, California, with additional operations in Huntsville, Alabama and Hyderabad, India. Further information about the company and its drug development programs and capabilities may be found online at http://www.nektar.com.

[1]SOURCE: Shah N, et al. SITC 2020 and Nektar Therapeutics

ERBITUX® is a registered trademark of ImClone LLC., a wholly-owned subsidiary of Eli Lilly and Company, Indianapolis, IN, USA.

BAVENCIO® is a registered trademark of Merck KGaA, Darmstadt, Germany.

This press release contains forward-looking statements which can be identified by words such as: "can," "may," "will," "design," "support," "potential" and similar references to future periods. Examples of forward-looking statements include, among others, statements we make regarding the therapeutic potential of, and future development plans for, NKTR-255, as well as the availability of results and outcomes from clinical and preclinical studies of our drug candidates. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based only on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, anticipated events and trends, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of our control. Our actual results may differ materially from those indicated in the forward-looking statements. Therefore, you should not rely on any of these forward-looking statements. Important factors that could cause our actual results to differ materially from those indicated in the forward-looking statements include, among others: (i) our statements regarding the therapeutic potential of NKTR-255 are based on preclinical and clinical findings and observations and are subject to change as research and development continue; (ii) NKTR-255 is an investigational agent and continued research and development for this drug candidate is subject to substantial risks, including negative safety and efficacy findings in ongoing clinical studies (notwithstanding positive findings in earlier preclinical and clinical studies); (iii) NKTR-255 is in various stages of clinical development and the risk of failure is high and can unexpectedly occur at any stage prior to regulatory approval; (iv) the timing of the commencement or end of clinical trials and the availability of clinical data may be delayed or unsuccessful due to regulatory delays, slower than anticipated patient enrollment, manufacturing challenges, changing standards of care, evolving regulatory requirements, clinical trial design, clinical outcomes, competitive factors, or delay or failure in ultimately obtaining regulatory approval in one or more important markets; (v) patents may not issue from our patent applications for our drug candidates, patents that have issued may not be enforceable, or additional intellectual property licenses from third parties may be required; and (vi) certain other important risks and uncertainties set forth in our Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 5, 2021. Any forward-looking statement made by us in this press release is based only on information currently available to us and speaks only as of the date on which it is made. We undertake no obligation to update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.

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63rd-american-society-of-hematology-ash-annual-meeting-301442811.html

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