Achilles Therapeutics Demonstrates cNeT Product Characterization and Post-Infusion Tracking in a Patient Case Study at the American Association for Cancer Research (AACR) 2021 Annual Meeting

April 10, 2021

LONDON, April 10, 2021 (GLOBE NEWSWIRE) -- Achilles Therapeutics plc (NASDAQ: ACHL), a clinical-stage biopharmaceutical company developing precision T cell therapies to treat solid tumors, today presented a patient case study from the Company's ongoing Phase I/IIa THETIS trial in metastatic or recurrent melanoma at the American Association for Cancer Research (AACR) Annual Meeting 2021. Through a comprehensive translational research program, data from Patient T-05 offer insight into the *in vivo* dynamics of clonal neoantigen T cells (cNeT) post-dosing and the potential to develop a potency-based release assay.

"As we move through our Phase I/IIa THETIS and CHIRON clinical programs in metastatic melanoma and advanced non-small cell lung cancer, it is important to quantify and characterize cNeT, the active component in our precision T cell therapy, prior to and after cell infusion," said **Dr Sergio Quezada**, **Chief Scientific Officer of Achilles**. "The data from this case study show a polyclonal response and demonstrate our ability to establish product specificity, polyclonal reactivities, monitor persistence and expansion, as well as derive associations to efficacy. These are important differentiators of our technology that provide a mechanistic understanding of TIL therapy and potentially lend themselves to a reproducible potency assay."

In a case study from the ongoing THETIS trial, a patient diagnosed with cutaneous melanoma received a three-cycle combination of ipilimumab and nivolumab which was stopped due to toxicity. In 2020, the patient had a recurrent lesion excised and cNeT manufactured through the VELOS^{TM} process. The specificity and fitness of the cNeT were measured by flow cytometric analysis of IFN-γ and TNF-α cytokines, markers of T cell activity. Up to 53% of the T cells in the manufactured product were reactive to the patient's own clonal neoantigens following stimulation. cNeT can be tracked after dosing by using peptides that incorporate patient-specific clonal mutations from the tumor to stimulate cells from the blood of the patient. By using ELISpot technology to detect cNeT that produce cytokine in response to this stimulus, the expansion and persistence of cNeT in circulation can be calculated.

Details of the poster presentation:

Poster Title: Characterization of a novel clonal neoantigen reactive T cell (cNeT) product through a comprehensive translational research program
Poster Number: 1508
Poster Session Category / Title: Immunology / Adoptive Cell Therapy

The poster and full session details can be found at www.aacr.org. The poster is also available in the Events & Presentations section of the Achilles website at https://ir.achillestx.com/events-and-presentations.

About Achilles Therapeutics
Achilles is a clinical-stage biopharmaceutical company developing precision T cell therapies targeting clonal neoantigens: protein markers unique to the individual that are expressed on the surface of every cancer cell. The Company has two ongoing Phase I/IIa trials, the CHIRON trial in patients with advanced non-small cell lung cancer (NSCLC) and the THETIS trial in patients with recurrent or metastatic melanoma. Achilles uses DNA sequencing data from each patient, together with its proprietary PELEUS™ bioinformatics platform, to identify clonal neoantigens specific to that patient, and then develop precision T cell-based product candidates specifically targeting those clonal neoantigens.

Forward-Looking Statements
This press release contains express or implied forward-looking statements that are based on our management's belief and assumptions and on information currently available to our management. Although we believe that the expectations reflected in these forward-looking statements are reasonable, these statements relate to future events or our future operational or financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. The forward-looking statements in this press release represent our views as of the date of this press release. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. You should therefore not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this press release.

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