



## Achilles Therapeutics Announces Grant of US and European Patents

August 25, 2021

LONDON, Aug. 25, 2021 (GLOBE NEWSWIRE) -- Achilles Therapeutics plc (NASDAQ: ACHL), a clinical-stage biopharmaceutical company developing precision T cell therapies to treat solid tumors, today announced that US patent US 11,098,121 and European patent EP3347039B have been granted. The patents cover a method of identifying cancer patients that are likely to respond to a checkpoint inhibitor (CPI) by determining the total number of clonal neoantigens or the ratio of clonal to subclonal neoantigens in patients' cancer cells. Clonal neoantigens are neoantigens present on all tumor cells and absent from healthy tissue.

The patents are based on data showing that patients with higher numbers of clonal neoantigens respond better to checkpoint inhibitor therapies<sup>1</sup>. These initial findings have been confirmed in later studies showing that clonal tumor mutation burden was the strongest predictor of CPI response across seven different tumor types and three different classes of CPIs in over 1,000 CPI-treated patients<sup>2</sup>.

"This is another important step in building our intellectual property position around our precision T cell therapy platform, supporting our approach of targeting clonal neoantigens that we identify with our proprietary PELEUS<sup>®</sup> bioinformatics platform," said **Dr Iraj Ali, CEO of Achilles Therapeutics**. "This adds to the growing body of data underpinning our thesis that clonal neoantigens are the best targets in solid tumor therapy. Our technology allows us to prospectively determine and target all of a patient's unique, clonal neoantigens and expand the clonal neoantigen-reactive T cells, or cNeT, and ensure that these reactivities are present in the final medicinal product with use of our potency release assay."

The patents are assigned to Cancer Research Technology and licensed exclusively to Achilles in certain fields. The inventors include three of Achilles' co-founders, Dr Sergio Quezada, Chief Scientific Officer, Dr Karl Peggs, Chief Medical Officer, and Professor Charles Swanton, a Royal Society Napier Professor of Cancer and Chief Clinician at Cancer Research UK, as well as Group Leader at the Francis Crick Institute and UCL.

"Achilles continues to advance their development of precision T cell therapies for solid tumor cancers. These patents are illustrative of the pioneering work that Achilles and Cancer Research UK have done in the field of clonal neoantigens," said Tony Hickson, **Chief Business Officer of Cancer Research UK**.

<sup>1</sup>McGranahan et al 2016, Science, <https://science.sciencemag.org/content/351/6280/1463>

<sup>2</sup>Litchfield et al 2021, Cell, [https://www.cell.com/cell/pdf/S0092-8674\(21\)00002-7.pdf](https://www.cell.com/cell/pdf/S0092-8674(21)00002-7.pdf)

### 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<sup>™</sup> bioinformatics platform, to identify clonal neoantigens specific to that patient, and then develop precision T cell-based product candidates specifically targeting those clonal neoantigens.

### About Cancer Research UK's Commercial Partnerships Team

Cancer Research UK is the world's leading cancer charity dedicated to saving lives through research. Cancer Research UK's specialist Commercial Partnerships Team works closely with leading international cancer scientists and their institutes to protect intellectual property arising from their research and to establish links with commercial partners. Cancer Research UK's commercial activity operates through Cancer Research Technology Ltd., a wholly owned subsidiary of Cancer Research UK. It is the legal entity which pursues drug discovery research in themed alliance partnerships and delivers varied commercial partnering arrangements.

<http://commercial.cancerresearchuk.org/>

### 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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