



## **Achilles Therapeutics doses first patient in Phase I/II Study in advanced non-small cell lung cancer**

**Stevenage, UK 23 June 2020** – Achilles Therapeutics (“Achilles”), a clinical stage biopharmaceutical company developing personalised cancer immunotherapies, today announced that it has dosed the first patient in a Phase I/II CHIRON study of a clonal neoantigen T cell (cNeT) therapy in patients with advanced non-small cell lung cancer (NSCLC). In May 2020, Achilles dosed the first patient with cNeT in its Phase I/II THETIS study in recurrent or metastatic malignant melanoma.

Achilles’ precision tumour-infiltrating lymphocyte (TIL) therapy uses cutting edge genomics to selectively target patient specific clonal neoantigens – targets which are believed to be present on all tumour cells – this approach has the potential to transform the treatment of cancer.

The CHIRON study is an open-label, multi-centre Phase I/II trial evaluating the safety, tolerability and clinical activity of cNeT therapy as a single dose in adult patients with advanced metastatic NSCLC. The trial is expected to recruit approximately 40 patients and report interim data in the first half of 2021. Recruitment is ongoing across sites in the UK, with additional sites to open in the US and Europe. [Link to Study](#).

“The cNeT dosing of the first patient with NSCLC marks another important milestone for Achilles. Our opportunity to serve patients is tremendous as NSCLC remains one of the most prevalent and poorly served of the solid tumours,” said **Dr Iraj Ali, CEO of Achilles Therapeutics**. “As with our melanoma study, the CHIRON study is an entirely personalised cell therapy designed to be exquisitely specific and effective and has the potential to help us fundamentally change how certain cancers are treated.”

“We have been working closely with the Achilles team to design and set up this study across the UK, and are delighted to be dosing the first NSCLC patient with this innovative experimental cell therapy here at University College London Hospital (UCLH), the lead clinical site,” said **Dr Martin Forster, Associate Professor in Medical Oncology and Study Chief Investigator**.

Achilles is developing personalised T cell therapies for solid tumours targeting clonal neoantigens: protein markers unique to each patient that are present on the surface of all cancer cells. Using its PELEUS™ bioinformatics platform, Achilles can identify clonal neoantigens from each patient’s unique tumour profile which are present on every cancer cell. Achilles uses its proprietary process to manufacture T cells (cNeT) which exquisitely target a specific set of clonal neoantigens in each patient. Targeting



multiple clonal neoantigens that are present on all cancer cells, but not on healthy cells, reduces the risk that new mutations can induce immune evasion and therapeutic resistance, and allows individualised treatments to target and destroy tumours without harming healthy tissue.

- Ends -

## **Notes for Editors:**

### **About Achilles Therapeutics**

Achilles Therapeutics is a clinical stage, biopharmaceutical company developing personalised 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/II studies, the THETIS study in patients with recurrent or metastatic malignant melanoma and the CHIRON study in patients with advanced non-small cell lung cancer (NSCLC). Achilles uses DNA sequencing data from each patient, together with the proprietary PELEUS™ bioinformatics platform, to identify clonal neoantigens specific to that patient, and then develop personalised T cell-based therapies specifically targeting those clonal neoantigens.

Achilles was founded in 2016 by lead investor Syncona Ltd and in September 2019 the Company raised £100M in an oversubscribed Series B financing led by RA Capital, cornerstoned by Syncona and joined by new investors including Forbion, Invus, Perceptive Advisors and Redmile Group. For further information please visit the Company's website at: [www.achillestx.com](http://www.achillestx.com)

### **About Lung Cancer**

Lung cancer, which forms in the tissues of the lungs, usually within cells lining the air passages, is the leading cause of cancer death worldwide. Each year, more people die of lung cancer than die of colon, breast and prostate cancers combined. The two main types of lung cancer are non-small cell and small cell. Non-small cell lung cancer (NSCLC) is the most common type of lung cancer, accounting for about 85% of all cases. The five-year survival rate for patients diagnosed in the United States with any stage of lung cancer is estimated to be 18%.

### **About TRACERx**

The TRACERx (TRacking Cancer Evolution through therapy (Rx)) is a translational research study, led by Achilles founder, Professor Charles Swanton, aimed at transforming our understanding of cancer evolution and take a practical step towards an era of precision medicine.

Despite major advances in the understanding of cancer biology and the translation of these findings into novel therapeutics, the majority of patients with advanced melanoma fail to derive durable clinical benefit from existing standard-of-care



therapies. Through integrative analysis of genomic and immunological landscapes, the TRACERx study seeks to address this. Tumour specimens and peripheral blood are studied in highly relevant contexts at multiple stages of a patient's treatment journey, from potentially curative resections of locally-advanced disease, through to biopsies of lesions responding or refractory to systemic therapies in the setting of advanced disease.

Wherever possible, analyses will be performed in a longitudinal manner, allowing serial assessment of anti-tumour immunity, tumour-specific genomics and their interaction. Key objectives of the study include determination of spatial and temporal changes in immunological, genomic and transcriptomic landscapes, identification of novel molecular drivers, immunotherapeutic targets and assessment of the impact of cytotoxic, immune-modulatory and targeted therapies on both the tumour microenvironment and peripheral blood.

**Further information:**

**Achilles Therapeutics**

Dr Iraj Ali – Chief Executive Officer

+44 (0)1438 906 906

[media@achillestx.com](mailto:media@achillestx.com)

**Julia Wilson – Head of Communications**

+44 (0)7818 430877

[j.wilson@achillestx.com](mailto:j.wilson@achillestx.com)

**Consilium Strategic Communications**

Mary-Jane Elliott, Sukaina Virji, Melissa Gardiner

+44 (0) 203 709 5000

[achillestx@consilium-comms.com](mailto:achillestx@consilium-comms.com)

**US Investor Relations - Solebury Trout**

Lee Stern

+1 646-378-2922

[lstern@troutgroup.com](mailto:lstern@troutgroup.com)