New CAR-T Approach for the Treatment of T-Cell Lymphomas Presented at the 2016 American Society of Hematology Annual Meeting

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Autolus Limited, a biopharmaceutical company focused on the development and commercialisation of next-generation engineered T-cell therapies for hematological and solid tumors, announced that data on a new approach for the treatment of T-cell lymphomas were presented today by Dr Paul Maciocia, Cancer Institute, University College London (UK) at the American Society of Hematology 58th Annual Meeting in San Diego*.

T-cell lymphomas are a family of rare cancers of clonal origin with very poor outcome for patients in relapse. All T cell lymphomas express T cell receptor constant region beta chain (TRBC) which exists in each T cell as either TRBC1 or TRBC2 isoform. Analysis of normal T cells showed that immunity against Epstein-Barr virus (EBV), ANCA-associated vasculitis (AAV) and cytomegalovirus (CMV) is distributed evenly between TRBC1- and TRBC2-positive T cells, suggesting that depletion of either TRBC1- or TRBC2-positive T cell compartment should not impact viral immunity. A CAR with specificity for TRBC1 was tested in vitro and vivo and showed a high level of activity, eliminating all TRBC1 positive T cells, while preserving the TRBC2-positive T cells.

Commenting on the presentation, Professor David Linch, University College Hospital, London said:

> "There are very few treatment options for patients relapsing from T-cell lymphoma and their prognosis is poor. The data demonstrates that directing CAR-T cell therapy against a specific variant of TRBC has the potential to eliminate T cell lymphoma without eradicating the entire T cell compartment and thus preserving the patient's ability to fight viral disease."

The programme is currently in pre-clinical development with a Phase I clinical study expected to start in H2 2017.

– Ends –

* https://ash.confex.com/ash/2016/webprogram/Paper90...

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Notes for Editors:

About Autolus

Autolus is a private biopharmaceutical company, focused on the development and commercialisation of engineered T-cell immunotherapy products based on its proprietary T-cell programming technology. Autolus' shareholders include Syncona LLP, UCL Business PLC, Woodford Investment Management LLP and Arix Bioscience plc. For further information please visit the Company's website at: www.autolus.com

About T-Cell Lymphoma

Lymphoma is the most common blood cancer. It occurs when cells of the immune system called lymphocytes, a type of white blood cell, grow and multiply uncontrollably. Cancerous lymphocytes can travel to many parts of the body, including the lymph nodes, spleen, bone marrow, blood, or other organs, and form a tumour.

Non-Hodgkin's Lymphoma (NHL) is the most common classification of lymphoma and makes up approximately 4% of all cancers cases in the UK. Lymphomas can originate from two types of lymphocytes, B-cells and T-cells, with T-cell lymphomas being relatively rarer and accounting for only about 15% of NHL.

There are nineteen sub-types of T-cell lymphomas, all with relatively poor prognosis. Current treatment options are not very effective. The NCCN guidelines recommend clinical investigation as a preferred option when patients progress after initial treatment.