



Hemogenyx Pharmaceuticals plc

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("Hemogenyx" or the "Company")

CAR-T Cells are Effective Against AML *in vitro*

Hemogenyx Pharmaceuticals plc (LSE: HEMO), the biopharmaceutical group developing new therapies and treatments of blood diseases, is pleased to announce the following update on its activities.

As previously announced, Hemogenyx's CDX product has the potential to treat Acute Myeloid Leukemia (AML) directly as well as providing a benign conditioning regimen for blood stem cell replacement therapy. The Company has now carried out extensive work developing treatments for AML and has to date obtained encouraging results.

Hemogenyx has successfully constructed and *in vitro* tested Chimeric Antigen Receptor (CAR) programmed T cells (HEMO-CAR-T) for the potential treatment of Acute Myeloid Leukemia (AML). HEMO-CAR-T was constructed using Hemogenyx's proprietary humanized monoclonal antibody against a target on the surface of AML cells. The Company has demonstrated that HEMO-CAR-T is able to programme human T cells (convert them into HEMO-CAR-T) to identify and destroy human AML-derived cells *in vitro*.

Following the successful completion of these tests, *in vivo* tests of the efficacy of HEMO-CAR-T against AML are being conducted utilising a model of AML using Advanced peripheral blood Hematopoietic Chimera (ApbHC) – humanized mice developed by Immugenyx, LLC, a wholly-owned subsidiary of Hemogenyx.

Vladislav Sandler, Chief Executive Officer, commented, "*We are encouraged by this new data which demonstrates our continuing progress in the development of novel treatments for blood cancers such as AML. Development of HEMO-CAR-T expands Hemogenyx's pipeline and advances it into a cutting-edge area of cell-based immune therapy. We are excited to have developed another product candidate that should, if successful, provide a new and potentially effective treatment for blood cancers for which survival rates are currently very poor.*"

About AML and CAR-T

AML, the most common type of acute leukemia in adults, has poor survival rates (a five-year survival rate of less than 25% in adults) and is currently treated using chemotherapy, rather than the potentially more benign and effective form of therapy being developed by Hemogenyx. The successful development of the new therapy for AML would have a major impact on treatment and survival rates for the disease.

CAR-T therapy is a treatment in which a patient's own T cells, a type of immune cell, are modified to recognize and kill the patient's cancer cells. The procedure involves: isolating T cells from the patient, modifying the isolated T cells in a laboratory using a CAR gene construct (which allows the cells to recognize the patient's cancer); amplifying (growing to large numbers) the newly modified cells; and re-introducing the cells back into the patient.

Market Abuse Regulation (MAR) Disclosure

Certain information contained in this announcement would have been deemed inside information for the purposes of Article 7 of Regulation (EU) No 596/2014 until the release of this announcement.

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About Hemogenyx Pharmaceuticals plc

Hemogenyx Pharmaceuticals plc ("Hemogenyx") is a publicly traded company (LSE: HEMO) headquartered in London, with its wholly-owned US operating subsidiaries, Hemogenyx LLC and Immugenyx LLC, located at its state-of-the-art research facility in New York City and a wholly-owned Belgian subsidiary, Hemogenyx-Cell SPRL, located in Liège.

Hemogenyx is a pre-clinical stage biopharmaceutical group developing new medicines and treatments to bring the curative power of bone marrow transplantation to a greater number of patients suffering from otherwise incurable life-threatening diseases. Hemogenyx is developing several distinct and complementary product candidates, as well as a platform technology that it uses as an engine for novel product development.

For more than 50 years, bone marrow transplantation has been used to save the lives of patients suffering from blood diseases. The risks of toxicity and death that are associated with bone marrow transplantation, however, have meant that the procedure is restricted to use only as a last resort. Hemogenyx's technology has the potential to enable many more patients suffering from devastating blood diseases such as leukemia and lymphoma, as well as severe autoimmune diseases such as multiple sclerosis, aplastic anemia and systemic lupus erythematosus (Lupus), to benefit from bone marrow transplantation.