



Hemogenyx Pharmaceuticals plc

20 February 2020

### **Hemogenyx Pharmaceuticals plc**

("Hemogenyx" or the "Company")

### **Hemogenyx's CAR-T Cells are Effective Against AML *in vivo***

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 to provide 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 highly encouraging results.

#### ***In vivo* testing of HEMO-CAR-T indicates anti-cancer activity in a mouse model**

As announced on 15 January 2020, Hemogenyx has successfully constructed and tested Chimeric Antigen Receptor (CAR) programmed T cells (HEMO-CAR-T) for the potential treatment of AML. HEMO-CAR was constructed using Hemogenyx's proprietary humanised monoclonal antibody, against a target on the surface of AML cells. The Company has now demonstrated *in vivo* that HEMO-CAR was able to programme human T cells (i.e. convert them into HEMO-CAR-T cells) to identify and destroy human AML derived cells.

#### **Additional engineering may improve safety and versatility of HEMO-CAR-T cells**

Following the successful completion of these tests, Hemogenyx is undertaking further engineering of HEMO-CAR to enhance the activity of the technology. The Company is introducing and testing a safety switch within the HEMO-CAR technology that is designed to control the level of activity of HEMO-CAR-T cells. The aim of this safety switch is to turn HEMO-CAR-T cells into a "tunable and controllable drug". The purpose of these efforts is to dramatically improve the safety and potential versatility of HEMO-CAR-T cells for the treatment of AML and/or conditioning of bone marrow transplants, as well as a number of additional potential indications.

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. The development of HEMO-CAR-T cells expands Hemogenyx's pipeline and advances it into a cutting-edge area of cell-based immune therapy. We are excited to have further 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 recognise 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 recognise 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.

### **Enquiries:**

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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 products, 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.