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### **Hemogenyx Pharmaceuticals plc**

("Hemogenyx Pharmaceuticals" or the "Company")

#### **CBR Update**

Hemogenyx Pharmaceuticals plc (LSE: HEMO), the biopharmaceutical group developing new therapies and treatments for blood diseases, is pleased to announce that it has achieved proof of concept ("POC") for its Chimeric Bait Receptor ("CBR") platform technology. The Company has filed a seminal provisional patent application protecting its rights to the intellectual property ("IP") covering CBR. CBR is a novel platform technology that constitutes a new paradigm for treating viral infections.

The essence of the CBR based approach is programming immune cells using a novel type of modifiable synthetic receptor to destroy viral pathogens. This approach can also potentially be used to program immune cells to destroy malignant cells causing certain types of cancer.

Hemogenyx Pharmaceuticals initiated this project prior to the COVID-19 pandemic as a new approach to combat emerging or not yet known viral infections ("Disease X"). Data obtained during the initial period of development of the platform allowed the Company's scientists to expand the potential use of CBR into the area of cancer treatment. Detailed work has been undertaken by the scientists to prove the efficacy and widen the scope of the CBR platform and to file the provisional patent application. The Company's directors believe that the CBR platform is potentially very valuable and, so far as they are aware, no comparable developments are taking place.

It is important to emphasise that, although work to date has been focussed on certain viruses, in particular SARS-COV-2 which causes COVID-19, as well as on particular types of cancer, the platform is, in principle, applicable to almost any form of virus. The Company's directors believe it is likely to be of value in particular to combat emerging or rare forms of viral infection, treating sufferers of such viruses where effective vaccines or anti-viral drugs have not yet been developed or in cases where they have failed to be effective. These may include the SARS-COV-2 virus as it mutates into future variants and certainly new forms of harmful viruses – which scientists have warned to be highly likely in the coming years.

Major advantages of the CBR platform compared to other existing approaches of combatting viral infections are as follows:

- CBRs are insensitive to mutations of the targeted virus. For example, they work against known COVID-19 variants. In principle, any mutated form of the virus that remains capable of infecting cells will be attracted to the bait.
- CBRs are made from parts of naturally occurring proteins/receptors and endow immune cells with the ability to destroy invading pathogens.
- CBRs are modular synthetic receptors that can be reconfigured to attack almost any virus, bacteria or mammalian cells, including cancerous cells.

The scientists of Hemogenyx Pharmaceuticals have now developed an initial set of CBRs. One is a CBR to program human immune cells to neutralize the SARS-COV-2 virus. The Company has successfully demonstrated *in vitro* that immune cells programmed with the CBR against SARS-COV-2 selectively consume a live synthetic virus. Importantly, the function of CBR was not affected by known mutations of the spike protein that endows the SARS-COV-2 virus with the ability to infect cells. In collaboration with an as yet undisclosed partner, the Company is planning *in vivo* tests to demonstrate that CBR could be used against infectious replicating SARS-COV-2 virus. Work also continues to expand the potential use of CBR into the area of cancer treatment.

Having filed the patent application, Hemogenyx Pharmaceuticals is now able to move CBRs to the point of *in vivo* trials and will provide updates and more detailed scientific information to shareholders in due course.

Meanwhile the Company's CAR-T and CDX projects continue to make good progress.

Dr Vladislav Sandler, CEO & Co-Founder of Hemogenyx Pharmaceuticals, commented: "*We are pleased to be able to give shareholders fuller details of the CBR platform on which we have been working for a significant period of time. We believe it is a ground-breaking new approach to treat emerging viral infections and to potentially become an effective new form of cancer treatment.*"

#### **Enquiries:**

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### **About Hemogenyx Pharmaceuticals plc**

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

The Company is a pre-clinical stage biopharmaceutical group developing new medicines and treatments to treat blood and autoimmune disease and to bring the curative power of bone marrow transplantation to a greater number of patients suffering from otherwise incurable life-threatening diseases. Hemogenyx Pharmaceuticals is developing several distinct and complementary product candidates, as well as platform technologies that it uses as engines 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. The Company'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.