



Hemogenyx Pharmaceuticals plc

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Hemogenyx Pharmaceuticals plc

("Hemogenyx" or the "Company")

Approval and Issuance of U.S. Hu-PHEC Patent

Hemogenyx Pharmaceuticals plc (LSE: HEMO) is pleased to announce that a patent application entitled *Post-Natal Hemogenic Endothelial Cells and their isolation and use* has been approved by the United States Patent and Trademark Office. The patent will be issued on 25 February 2020 as Patent Number 10,570,373.

Post-Natal Hemogenic Endothelial Cells ("Hu-PHECs") were posited and discovered by Hemogenyx's Co-Founder and CEO Dr Vladislav Sandler while working at Cornell University. The patent application was filed in 2014 and Hemogenyx was granted a world-wide exclusive sub-licensable licence for the patent by Cornell in 2015.

If fully and successfully developed, the Hu-PHEC technology would provide a new form of blood stem cell replacement therapy and potentially eliminate the principal problems that arise from the existing forms of treatment.

Hu-PHECs are a special sub-class of progenitor stem cell that generates hematopoietic stem cells (HSCs): bone marrow cells that give rise to all major types of blood cells. Hu-PHECs are thought to be cancer-free as they do not accumulate blood cancer-related mutations and/or chromosomal rearrangements. This makes them a perfect candidate for patient-specific, or autologous, bone marrow/HSC transplantations. This approach can potentially be used to treat blood cancers and auto-immune diseases with superior results. Importantly, it would remove the need to find a matching bone marrow donor, significantly expanding the number of patients who could be treated and it would also reduce the problem of transplant rejection which can occur under existing therapies.

Hu-PHEC-based technology presents several important advantages compared to other existing and developing technologies. Most of these advantages are due to the fact that Hu-PHECs are a naturally occurring cell type found in adult and postnatal mammalian tissues. They can be isolated and do not require heavy manipulation before use. In addition, Hu-PHECs can be propagated *in vitro*, allowing the introduction of therapeutic genes and gene modifications, and making them a prime candidate for curative gene therapy applications.

Dr Vladislav Sandler, CEO & Co-Founder of Hemogenyx, commented: "*The issue of this patent is significant for the Company as it solidifies and protects Hemogenyx's position as a leader in the area of cell therapy and helps to place Hu-PHECs at the foundation of the development of novel methods of combatting blood cancers and auto-immune diseases.*"

Further information about the development of Hu-PHEC technology can be found on Hemogenyx's web site:

<https://hemogenyx.com/technology/hu-phec>

This announcement contains inside information for the purposes of Article 7 of Regulation (EU) 596/2014.

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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 two 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.