Humacyte, JDRF Collaborating to Develop Insulin-Producing Biovascular Pancreas to Treat Type 1 Diabetes

New York, N.Y. and Durham, N.C., April 27, 2023 - Humacyte, Inc. (Nasdaq: HUMA), a biotechnology company pioneering the development and manufacturing of off-the-shelf, universally implantable bioengineered human tissues and organ systems, and JDRF International (JDRF), the leading global organization funding type 1 diabetes (T1D) research, today announced a new collaboration to advance the development of Humacyte's Biovascular Pancreas (BVP) product candidate.

Humacyte's BVP is designed to deliver insulin-producing islets using Humacyte's investigational tissue-engineered blood vessel, the Human Acellular Vessel™ (HAV™). JDRF will provide Humacyte with funding to support the development and testing of the BVP.

"We are proud to be collaborating with JDRF, one of the leading organizations in the world focused on T1D research," said Dr. Laura Niklason, founder and CEO of Humacyte. "Humacyte's HAV technology, combined with insulin-producing islets, may constitute a groundbreaking development in the treatment of T1D in the future. Successful development of the BVP could improve the lives of millions of patients, and their families, who are suffering with this chronic and debilitating disease."

"JDRF is committed to supporting the development of cell replacement therapies that could one day offer cures for type 1 diabetes," said Esther Latres, JDRF vice president of research. "Through the successful replacement of lost or damaged insulin-producing cells, Humacyte's Biovascular Pancreas has the potential to solve roadblocks in the delivery of insulin-producing cells, and change the lives of those living with the disease. We're excited to support the ongoing development of this technology."

The BVP would enable the delivery and survival of insulin-producing islets inside the body, using Humacyte's bioengineered HAV as a "carrier" for delivery of the islets into the patient. Such technology could overcome many of the hurdles currently associated with implantation of islets into diabetic patients, increasing the effectiveness of treating T1D patients with islet cells. The HAV and BVP are investigational products and have not been approved for sale by the Food and Drug Administration or any international regulatory agency.

About Humacyte

Humacyte, Inc. (Nasdaq: HUMA) is developing a disruptive biotechnology platform to deliver universally implantable bioengineered human tissues, advanced tissue constructs, and organ systems designed to improve the lives of patients and transform the practice of medicine. The company develops and manufactures acellular tissues to treat a wide range of diseases, injuries, and chronic conditions. Humacyte's initial opportunity, a portfolio of Human Acellular Vessels (HAVs), is currently in late-stage clinical trials targeting multiple vascular applications, including vascular trauma repair, arteriovenous access for hemodialysis, and peripheral arterial disease. Preclinical development is also underway in coronary artery bypass grafts, pediatric heart surgery, treatment of type 1 diabetes, and multiple novel cell and tissue applications. Humacyte's 6mm HAV for arteriovenous (AV) access for performing hemodialysis was the first product candidate to receive the FDA's Regenerative Medicine Advanced Therapy (RMAT) designation and has also received FDA Fast Track designation. The HAV received priority designation for the treatment of vascular trauma by the U.S. Secretary of Defense. For more information, visit www.Humacyte.com.

About JDRF

JDRF's mission is to accelerate life-changing breakthroughs to cure, prevent and treat T1D and its complications. To accomplish this, JDRF has invested more than $2.5 billion in research funding since our inception. We are an organization built on a grassroots model of people connecting in their local communities, collaborating regionally and globally for efficiency and broader fundraising impact, and uniting on a global stage to pool resources, passion, and energy. We collaborate with academic institutions, policymakers, and corporate and industry partners to develop and deliver a pipeline of innovative therapies to people living with T1D. Our staff and volunteers throughout the United States and our five international affiliates are dedicated to advocacy, community engagement, and our vision of a world without T1D. For more information, please visit jdrf.org or follow us on Twitter (@JDRF), Facebook (@myjdrf), and Instagram (@jdrfhq).

About Type 1 Diabetes (T1D)

T1D is an autoimmune condition that causes the pancreas to make very little insulin or none at all. This leads to dependence on insulin therapy and the risk of short or long-term complications, which can include highs and lows in blood sugar; damage to the kidneys, eyes, nerves, and heart; and even death if left untreated. Globally, it impacts nearly 9 million people. Many believe T1D is only diagnosed in childhood and adolescence, but diagnosis in adulthood is common and accounts for nearly 50% of all T1D diagnoses. The onset of T1D has nothing to do with diet or lifestyle. While its causes are not yet entirely understood, scientists believe that both genetic factors and environmental triggers are involved. There is currently no cure for T1D.

Humacyte Forward-Looking Statements

This press release contains forward-looking statements that are based on beliefs and assumptions and on information currently available. In some cases, you can identify forward-looking statements by the following words: "may," "will," "could," "would," "should," "expect," "intend," "plan," "anticipate," "believe," "estimate," "predict," "project," "potential," "continue," "ongoing" or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. These statements involve risks, uncertainties and other factors that may cause actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Although we believe that we have a reasonable basis for each forward-looking statement contained in this press release, we caution you that these statements are based on a combination of facts and factors currently known by us and our projections of the future, about which we cannot be certain. Forward-looking statements in this press release include, but are not limited to, statements regarding the initiation, timing, progress, and results of our preclinical and clinical trials; the anticipated characteristics and performance of our HAVs; our ability to successfully complete, preclinical and clinical trials for our HAVs; the anticipated benefits of our HAVs relative to existing alternatives; the benefits and risks related to our humanitarian efforts in the Ukraine; the anticipated commercialization of our HAVs and our ability to manufacture at commercial scale; the implementation of our business model and strategic plans for our business; our rights and obligations under our partnership with Fresenius Medical Care; the scope of protection we are able to establish and maintain for intellectual property rights covering our HAVs and related technology; the timing or likelihood of regulatory filings and approvals; timing, scope, and rate of reimbursement for our HAVs; the outcome of our ongoing discussions with the FDA concerning the design of our ongoing V005 Phase 2/3 clinical trial, including determination of trial size, and the scope of any approved indication for our HAVs; and our estimated available market opportunity. We cannot assure you that the forward-looking statements in this press release will prove to be accurate. These forward-looking statements are subject to a number of significant risks and uncertainties that could cause actual results to differ materially from expected results, including, among others, changes in applicable laws or regulations, the possibility that Humacyte may be adversely affected by other economic, business, and/or

competitive factors, the impact of COVID-19 on Humacyte's business, and other risks and uncertainties, including those included under the header "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2022, filed by Humacyte with the SEC and in future SEC filings. Most of these factors are outside of Humacyte's control and are difficult to predict. Furthermore, if the forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. The forward-looking statements in this press release represent our views as of the date of this press release. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this press release.

Humacyte Investor Contact:
Joyce Allaire
LifeSci Advisors LLC
+1-617-435-6602
jallaire@lifesciadvisors.com
investors@humacyte.com

Humacyte Media Contact:
Rich Luchette
Precision Strategies
+1-202-845-3924
rich@precisionstrategies.com
media@humacyte.com