HemoShear Announces Collaboration with Pfizer Inc. To Help Identify and Predict Drug-Induced Vascular Injury for Early Stage Compounds

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[Charlottesville, VA – January 12, 2015] HemoShear, a privately held discovery stage biotechnology company, announced today a multi-year platform collaboration with Pfizer Inc. Under the terms of the agreement, which will combine the scientific and technical expertise of both companies, HemoShear will leverage its proprietary discovery platform with the aim to develop a predictive model for preclinical druginduced vascular injury (DIVI). Financial terms of the collaboration were not disclosed.

"The overall goal of the collaboration is to develop robust biological criteria and associated computational tools to reliably identify and predict DIVI in animals and, ultimately, to elucidate potential drug effects in humans," stated Dr. Brett Blackman, HemoShear Co-founder and Chief Scientific Officer.

The initial phase of the collaboration is designed to enable HemoShear and Pfizer to recreate the drivers of DIVI biology in the laboratory using HemoShear Translational Tissue Systems, potentially making it possible to interrogate the molecular effects as well as the underlying physiological and DIVI mechanisms.

DIVI poses a safety dilemma for the pharmaceutical industry because there are limitations to resolve the underlying drivers of vascular injury. In addition, there are no generally accepted, specific diagnostic or predictive biomarkers to understand when or why DIVI will occur nor are there models to select the safest compound prior to animal testing. Drugs in development may cause DIVI, such as inflammation or vascular lesions, in animals during testing for drug safety and toxicity. When this occurs, significant program delays and additional costs are incurred to investigate and explain the underlying biology and determine whether the compound is safe to move forward to human testing, or to determine if another compound would be safer. In some cases, decisions are made to stop the program altogether in theabsence of a clear understanding of the injury and whether an animal response translates to human response

"HemoShear is pleased to take this next exciting step in our relationship with Pfizer," said Vincent Aurentz, Chief Business Officer at HemoShear. "This collaboration demonstrates the need to better understand underlying molecular and biological mechanisms. We are excited to continue on our path to make a major impact on success in drug discovery."

HemoShear is also collaborating with several major pharmaceutical and biotechnology companies to discover drug candidates that target human vascular and liver diseases and expand development of HemoShear's novel human tumor microenvironment.

HemoShear is a discovery stage biotechnology company that is changing the way drugs are discovered and developed, departing from traditional cell culture and animal models in favor of translational tissue systems that accurately replicate human disease biology. HemoShear works in strategic collaborations with pharmaceutical and biotechnology companies and prestigious research institutions to discover new drugs across a wide range of diseases. Its transformational drug discovery platform integrates best-in-class human disease systems, a comprehensive biorepository, molecular and disease biology expertise, and cuttingedge computational biology. Together, they create a unique and powerful lens to interpret biological mechanisms and human disease at a level not possible until now. HemoShear's discovery advantage uncovers new targets, elucidates previously unknown mechanisms, identifies novel attributes of drugs, differentiates drug candidates, and predicts efficacy and safety of drugs before entering the clinic. Through its pioneering science, HemoShear's mission is to profoundly impact human health. **THINK HUMAN.**