Imaging Mass Cytometry Utilized to Seek Molecular Links between African Ancestry and Aggressive Forms of Breast and Prostate Cancer

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IMC Studies Part of New York Genome Center's Polyethnic-1000 Initiative Advancing Understanding of Racial Disparities in the Prevalence of Cancer Types

SOUTH SAN FRANCISCO, Calif., Nov. 08, 2021 (GLOBE NEWSWIRE) -- Fluidigm Corporation (NASDAQ:FLDM), an innovative biotechnology tools provider with a vision to improve life through comprehensive health insight, today announced that Imaging Mass Cytometry™ (IMC™) is being utilized in studies led by researchers at Weill Cornell Medicine to identify molecular links between African ancestry and aggressive forms of breast and prostate cancer and investigate these as a source of racial disparities in cancer outcomes.

The studies, *Links between Ancestry and Outcome Disparity in Breast and Prostate Cancer Patients Across the African Diaspora in New York City*, and *Novel Complex Structural Variants and Epigenetic Alterations Link Genomes of Prostate Cancer in African Americans with Outcome Disparity*, are funded by the New York Genome Center's Polyethnic-1000 initiative and the Department of Defense office of Congressionally Directed Medical Research Programs, (CDMRP), respectively. Weill Cornell Medicine researchers, as well as those from collaborating institutions, are conducting these studies.

The mission of the Polyethnic-1000 initiative is to deepen understanding of the contributions ethnicities make to the incidence and behavior of cancers, thereby improving outcomes, especially for those who currently lack access to the most recent advances in medical science. The program seeks to bring genomic innovation to patient populations that are generally under-represented in research. Polyethnic-1000 is a multi-institutional network of collaborators throughout New York City and beyond, including scientists, pathologists, institutional review boards and administrators.

"While the focus for the Polyethnic-1000 and other initiatives has been genomic-based studies, the team felt that the addition of a proteomics approach could yield invaluable insights about ways in which cancer is prevented, diagnosed and treated in this population," said Juan Miguel Mosquera, MD, MSc, Director of Research Pathology at the Englander Institute for Precision Medicine and Professor of Pathology and Laboratory Medicine at Weill Cornell Medicine, a lead researcher of the studies. "Integrative analyses of genomic data with CyTOF® data may enable new discoveries regarding the structure of disease tissue at the single-cell level, including the role of immune cells."

Fluidigm® CyTOF technology is the basis for Imaging Mass Cytometry, which is used in the company's Hyperion™ Imaging System.

Olivier Elemento, PhD, Director of the Englander Institute for Precision Medicine and Professor of Physiology and Biophysics at Weill Cornell Medicine, added, "The unique spatial aspects of Imaging Mass Cytometry on the Hyperion Imaging System may offer deep insights into the mechanisms of disease progression that make it suitable for these important studies."

The Polyethnic-1000 initiative is also funding projects investigating pancreatic and lung cancer in Asian American patients and the role of ethnicity in bladder cancer, as well as studies in endometrial, urothelial and multiple myeloma in African Americans. A study of colorectal cancer in African Americans may also include research performed with the Hyperion Imaging System.

Black Americans have the highest death rate of any racial group for most cancers. More than 70,000 African Americans die of cancer each year.

"Collaborative efforts such as the Polyethnic-1000 and CDMRP initiatives are essential to finding solutions to global human health issues," said Chris Linthwaite, Fluidigm President and CEO. "Racial and ethnic disparity in cancer is an important issue to address through comprehensive scientific inquiry that can provide insights into new approaches to prevention and treatment.

"Combining the high-parameter imaging capabilities of Imaging Mass Cytometry with genomic research can be powerful, and we are pleased that the researchers have chosen the Hyperion Imaging System as a core tool in their efforts to seek insights that may lead to answers."

Findings from the projects will be shared with the research community. Data will be stored in a repository maintained by the New York Genome Center that will serve as a global resource for efforts to understand the roles of ethnic diversity in cancer.

About Fluidigm

Fluidigm (Nasdaq:FLDM) focuses on the most pressing needs in translational and clinical research, including cancer, immunology, and immunotherapy. Using proprietary CyTOF and microfluidics technologies, we develop, manufacture, and market multi-omic solutions to drive meaningful insights in health and disease, identify biomarkers to inform decisions, and accelerate the development of more effective therapies. Our customers are leading academic, government, pharmaceutical, biotechnology, plant and animal research, and clinical laboratories worldwide. Together with them, we strive to increase the quality of life for all. For more information, visit fluidigm.com.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including, among others, statements regarding the potential benefits of research conducted using Fluidigm technology and products. Forward-looking statements are subject to numerous risks and uncertainties that could cause actual results to differ materially from currently anticipated results, including but not

limited to risks relating to challenges inherent in developing, manufacturing, launching, marketing, and selling new products; potential product performance and quality issues; intellectual property risks; competition; uncertainties in contractual relationships; and reductions in research and development spending or changes in budget priorities by customers. Information on these and additional risks and uncertainties and other information affecting Fluidigm business and operating results is contained in Fluidigm's Annual Report on Form 10-K for the year ended December 31, 2020, and in its other filings with the Securities and Exchange Commission. These forward-looking statements speak only as of the date hereof. Fluidigm disclaims any obligation to update these forward-looking statements except as may be required by law.

Available Information
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