



PRECISION
THERAPEUTICS

Predictive Oncology Subsidiary Helomics Collaborates with UPMC to Establish a Data and Artificial Intelligence-Driven Approach to Treating Ovarian Cancer

July 18, 2019

PITTSBURGH, July 18, 2019 (GLOBE NEWSWIRE) -- Predictive Oncology (Nasdaq: POAI) subsidiary Helomics, an artificial intelligence (AI) and data-driven functional precision medicine company with the mission of improving the standard of care for cancer patients through innovative data-driven products and services, today announced a joint collaborative agreement with UPMC to study the use of artificial intelligence to improve clinical decision making for ovarian cancer patients. Helomics is a subsidiary of Predictive Oncology Inc., a company focused on applying artificial intelligence to personalized medicine and drug discovery.

The collaboration will focus on using Helomics' artificial intelligence (AI) platform (D-CHIP™) to analyze the genomic and drug response profiles of women with ovarian cancer to determine predictive value in terms of response/non-response to therapy. The parties believe that the collaboration will demonstrate the value of using AI-powered, evidence-based decision making, in the context of specific treatments on specific genotypes, to predict clinical outcomes for this group of patients.

"Helomics has pioneered the testing of drugs on patients' own tumors to help oncologists individualize treatment options -- what we call functional precision medicine. We believe that by linking both the drug response profile and the genomic profile of the patient's tumor using a machine learning approach, we can provide 'multi-omic' predictive models that will have greater decision-making impact than just genomics alone, which in turn will positively benefit oncologists and their patients," commented Dr. Mark Collins, chief innovation officer at Helomics. "Working alongside both UPMC Enterprises and UPMC Magee-Womens Hospital provides us with the unique opportunity to potentially make a direct impact on how medicine is practiced at one of the leading women's medical facilities in the country. We look forward to discussing our findings with both the medical community and our stockholders as they develop."

More than 22,000 women are diagnosed with ovarian cancer in the U.S. each year, yet this patient group often has few predictive/prognostic options for selecting therapies. This results in a high recurrence rate and poorer overall survival.

"We believe that this effort will enhance our understanding of the molecular profiles of women with ovarian cancer by using the power of artificial intelligence to create predictive models of therapeutic success. We are excited about the potential for AI-powered, evidence-based decision making to increase our ability to bring about successful outcomes," said Dr. Robert Edwards, professor and chair of the Department of Obstetrics, Gynecology and Reproductive Sciences in the University of Pittsburgh School of Medicine and co-leader of the Breast and Ovarian Cancer Program at the UPMC Hillman Cancer Center.

Work performed under the collaboration will be funded in part by UPMC Enterprises. UPMC Enterprises, the commercialization and innovation arm of UPMC, was established to generate and enable exceptional health care innovations focusing on two main areas: translational science and digital health solutions.

About Predictive Oncology Inc.

Predictive Oncology (Nasdaq: POAI) operates through its three wholly owned subsidiaries, Helomics, TumorGenesis and Skyline Medical. Helomics applies artificial intelligence to its rich data gathered from patient tumors to both personalize cancer therapies for patients and drive the development of new targeted therapies in collaborations with pharmaceutical companies. Helomics' CLIA-certified lab provides clinical testing that assists oncologists in individualizing patient treatment decisions, by providing an evidence-based roadmap for therapy. In addition to its proprietary precision oncology platform, Helomics offers boutique CRO services that leverage its TruTumor™, patient-derived tumor models coupled to a wide range of multi-omics assays (genomics, proteomics and biochemical), and an AI-powered proprietary bioinformatics platform (D-CHIP) to provide a tailored solution to its clients' specific needs. Predictive Oncology's TumorGenesis subsidiary is developing a new rapid approach to growing tumors in the laboratory, which essentially "fools" cancer cells into thinking they are still growing inside a patient. Its proprietary Oncology Discovery Technology Platform kits will assist researchers and clinicians to identify which cancer cells bind to specific biomarkers. Once the biomarkers are identified they can be used in TumorGenesis' Oncology Capture Technology Platforms which isolate and help categorize an individual patient's heterogeneous tumor samples to enable the development of patient specific treatment options. Helomics and TumorGenesis are focused on ovarian cancer. Predictive Oncology's Skyline Medical subsidiary markets its patented and FDA cleared STREAMWAY System which automates the collection, measurement and disposal of waste fluid, including blood, irrigation fluid and others, within a medical facility, through both domestic and international divisions. The company has achieved sales in five of the seven continents through both direct sales and distributor partners. For more information, please visit www.predictive-oncology.com.

About UPMC

A \$20 billion health care provider and insurer, Pittsburgh-based UPMC is inventing new models of patient-centered, cost-effective, accountable care. The largest nongovernmental employer in Pennsylvania, UPMC integrates 87,000 employees, 40 hospitals, 700 doctors' offices and outpatient sites, and a 3.5 million-member Insurance Services Division, the largest medical insurer in western Pennsylvania. In the most recent fiscal year, UPMC contributed \$1.2 billion in benefits to its communities, including more care to the region's most vulnerable citizens than any other health care institution, and paid \$587 million in federal, state and local taxes. Working in close collaboration with the [University of Pittsburgh Schools of the Health Sciences](http://www.upmc.edu), UPMC shares its clinical, managerial and technological skills worldwide through its innovation and commercialization arm, UPMC Enterprises, and

through UPMC International. *U.S. News & World Report* consistently ranks UPMC Presbyterian Shadyside on its annual Honor Roll of America's Best Hospitals. For more information, go to UPMC.com.

Forward-looking Statements

Certain of the matters discussed in the press release contain forward-looking statements that involve material risks to and uncertainties in the Company's business that may cause actual results to differ materially from those anticipated by the statements made herein. Such risks and uncertainties include (i) risks related to the recent merger with Helomics, including the fact that the combined company will not be able to continue operating without additional financing; possible failure to realize anticipated benefits of the merger; costs associated with the merger may be higher than expected; the merger may result in disruption of the Company's and Helomics' existing businesses, distraction of management and diversion of resources; and the market price of the Company's common stock may decline as a result of the merger; (ii) risks related to our partnerships with other companies, including the need to negotiate the definitive agreements; possible failure to realize anticipated benefits of these partnerships; and costs of providing funding to our partner companies, which may never be repaid or provide anticipated returns; and (iii) other risks and uncertainties relating to the Company that include, among other things, current negative operating cash flows and a need for additional funding to finance our operating plan; the terms of any further financing, which may be highly dilutive and may include onerous terms; unexpected costs and operating deficits, and lower than expected sales and revenues; sales cycles that can be longer than expected, resulting in delays in projected sales or failure to make such sales; uncertain willingness and ability of customers to adopt new technologies and other factors that may affect further market acceptance, if our product is not accepted by our potential customers, it is unlikely that we will ever become profitable; adverse economic conditions; adverse results of any legal proceedings; the volatility of our operating results and financial condition; inability to attract or retain qualified senior management personnel, including sales and marketing personnel; our ability to establish and maintain the proprietary nature of our technology through the patent process, as well as our ability to possibly license from others patents and patent applications necessary to develop products; Predictive Oncology's ability to implement its long range business plan for various applications of its technology; Predictive Oncology's ability to enter into agreements with any necessary marketing and/or distribution partners and with any strategic or joint venture partners; the impact of competition, the obtaining and maintenance of any necessary regulatory clearances applicable to applications of Predictive Oncology's technology; and management of growth and other risks and uncertainties that may be detailed from time to time in the Company's reports filed with the SEC, which are available for review at www.sec.gov. This is not a solicitation to buy or sell securities and does not purport to be an analysis of Predictive Oncology's financial position. See Predictive Oncology's most recent Annual Report on Form 10-K, and subsequent reports and other filings at www.sec.gov.

Contacts:

Investor Relations
CORE IR
Bret Shapiro
(212) 896-1203
brets@coreir.com

Media
Jules Abraham
CORE IR
julesa@coreir.com
917-885-7378

Source: Predictive Oncology Inc.