Predictive Oncology Launches New AI Platform for Vaccine and Drug Development Targeting Coronaviruses and Acute Respiratory Syndromes (COVID-19, MERS, and SARS)

March 12, 2020

With More Viral Outbreaks Expected, Predictive Oncology Expands AI Platforms to Aid in Vaccine and Drug Development

MINNEAPOLIS, March 12, 2020 (GLOBE NEWSWIRE) -- Predictive Oncology Inc. (NASDAQ: POAI) ("POAI" or "the Company"), a knowledge-driven company focused on applying artificial intelligence ("AI") to personalized medicine and drug discovery, today announces it will launch a new AI platform for vaccine and drug development targeting Coronaviruses and Acute Respiratory Syndromes (COVID-19, MERS, and SARS) through an operating agreement with Soluble Therapeutics. POAI has also signed a letter of intent with InventaBioTech to acquire Soluble Therapeutics, its assets and its HSC^{TM} Technology.

Global health experts are predicting an ever-increasing number of viral outbreaks like COVID-19, POAI is taking proactive measures to be part of the solution by applying artificial intelligence to aid in the development of new drugs and vaccines. Utilizing Soluble Therapeutics' HSC ^{TM} technology and its six machines, Soluble's computer system expects to be able to run over 12,000 computer simulations per machine to help generate new diagnostics, vaccines and therapeutics. Soluble's HSC ^{TM} technology has demonstrated efficacy with both new and existing vaccine and drug programs, ensuring the best delivery mechanisms to address new pandemics and battle cancers.

The market for biologicals that includes vaccines, proteins and antibodies used in disease treatment is projected to reach $479.7 billion by 2024 at a compound annual growth rate (CAGR) of 10.9%.* The capital the US Congress has allocated to fight COVID-19 is $8.0 billion dollars.

Protein formulation is often a bottleneck in protein-based drug development, and Soluble Therapeutics' technology directly addresses this bottleneck. Combining the HSC^{TM} technology with POAI's predictive modeling platform is expected to create a new rapid AI discovery platform that quickly and cost-effectively identifies potential therapeutic candidates. The HSC^{TM} technology accelerates the formulation process and is believed to achieve in a month what can take a team of scientists several months to a year to achieve. The HSC^{TM} technology only requires milligrams where a traditional formulation effort can require up to a gram of material.

HSC™ Technology is a self-contained, automated, chromatographic system that conducts high throughput, microcapillary, self-interaction chromatography screens, using additives and excipients commonly included in protein formulations. The data generated from these screens is analyzed by a predictive algorithm used to identify the optimal combination(s) of additives and excipients, resulting in increased solubility and physical stability of proteins. The system works in concert with a predictive algorithm of formulation parameters that can be exclusively accessed through Soluble Therapeutics.

The HSC™ Instrument, and underlying technology, has been validated over the past ten years via industry and academic collaborations. For biopharmaceutical clients and vaccine manufacturers, this means faster development times and quicker progression of molecules into the clinic. The COVID-19 vaccine development efforts by industry and government can benefit enormously using the Soluble HSC^{TM} technology with POAI's predictive modeling platform.

"Soluble has six customized machines in its facilities that can help identify the best solutions for vaccines, proteins or antibodies being developed to help fight the COVID-19 contagion. Through this operating partnership and acquisition, we are ready to assist in the development of viable treatment options that use biological, complex ingredients and formulations to speed up the pre-clinical and clinical development of treatments', said Carl Schwartz, CEO of Predictive Oncology.

"The combination of Soluble Therapeutics' technology with Predictive Oncology's AI capability has the potential to rapidly optimize formulations thereby accelerating the early phase of protein therapeutic development", said Dr. Larry DeLucas, co-inventor of the HSC™ technology.

Under the operating agreement, the Company and existing Soluble managers will operate the Soluble Therapeutics business pending the acquisition. The Company's acquisition of Soluble Therapeutics is subject to the completion of a definitive agreement and customary closing conditions and is expected to close in the second quarter of 2020.

*Global Biologics Market to touch US$479 Billion Dollars by 2024. Transparency Market Research. Feb 2018. Web.

About Predictive Oncology Inc.

Predictive Oncology (Nasdaq: POAI) operates through three segments (Domestic, International and other), which contain four subsidiaries; Helomics, TumorGenesis, Skyline Medical and Skyline Europe. 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 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 division 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.

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) the risk that the acquisition of Soluble Therapeutics will not be completed, or, if completed, that the Soluble Therapeutics technology does not provide anticipated benefits to the Company or involves higher costs than anticipated or other negative consequences, (ii) 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; (iii) 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 (iv) 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's ability to implement its long range business plan for various applications of its technology; Predictive'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'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's financial position. See Predictive's most recent Annual Report on Form 10-K, and subsequent reports and other filings at www.sec.gov.

Contact:
Bob Myers
651-389-4800
bmyers@skylinemedical.com

Source: Predictive Oncology Inc.

Source: Predictive Oncology Inc.