

Precision Therapeutics' Subsidiary TumorGenesis and its Partner 48Hour Discovery Inc. Receive Alberta Innovates Product Demonstration Program Grant to Support Development of Novel Cancer Treatments

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Collaboration Receives \$300,000 CAD Grant to Further Develop and Commercialize TumorGenesis Oncology Discovery Technologies

MINNEAPOLIS, April 16, 2019 (GLOBE NEWSWIRE) -- Precision Therapeutics Inc. (NASDAQ: AIPT) ("Precision" or "the Company") today announced that its wholly owned subsidiary, TumorGenesis, is participating with 48Hour Discovery (48HD), a Canadian partner, in receiving a \$300,000 CAD grant through the Alberta Innovates Product Demonstration Program. The strategic collaboration will commercialize TumorGenesis' Oncology Discovery Platform Kits, with a set of proprietary reagents from 48HD's core technology to inform personalized treatment decisions in cancer treatments. The development of the TumorGenesis Oncology Discovery Platform Kits will have far-reaching effects around the globe for oncology drug discovery and development of treatments focused around precision medicine.

"This grant will provide additional funds to further drive the development of our proprietary Oncology Discovery Technology Platform kits, which will help researchers and clinicians identify which cancer cells bind to which biomarkers," said Richard Gabriel, COO of TumorGenesis, Inc. "These biomarker tags can then be used in the TumorGenesis Oncology Capture Technology Platforms to isolate and help characterize the heterogeneity of the patient's tumor sample."

"The TumorGenesis platform and its methodology for tagging a tumor's diverse cancer cell population is highly complementary to our Helomics discovery service business, which utilizes AI (Artificial Intelligence) and tumor genetic and drug response profiling. Our vision is to tag every patient's complex tumor cell populations first with biomarkers, then to separate cancer cells using those biomarkers, creating a unique 'fingerprint' of that tumor to deliver a personalized medicine approach to cancer diagnosis and treatment," said Dr. Carl Schwartz, CEO of Precision Therapeutics, Inc. "We are pleased to be a part of the Alberta Innovate program grant to support the development of this important technology platform and are looking forward to continuing our strong collaboration with 48Hour Discovery."

The underlying technology behind the Discovery Kits—molecular screening for biomarkers—has been developed at 48HD and is being offered on a limited basis as a service in the 48HD laboratories. The Discovery Kits to be commercialized in this project will offer a similar service, where a 48HD molecular library may be used to test tumor tissue at any Canadian cancer treatment center as well as cancer centers in the US and around the world. The kits will be a simple but elegant solution to target drug therapy, replacing a time-consuming and complex, multistep discovery process that currently guides the approach to therapy.

"We are grateful to Alberta Innovates for supporting 48Hour Discovery Inc. in its multi-year collaboration with TumorGenesis," says Dr. Ratmir Derda, CEO and founder of 48Hour Discovery. "There is a critical need to develop technologies to construct a live, clinically-relevant model of patient tumors that accurately respond to personalized therapy. By identifying molecules that bind to live cancer cells, our Discovery Kit provides the key step to understanding the microenvironment around each tumor cell, giving us more information on how to develop treatments to tackle the growth of these tumor cells."

About Precision Therapeutics Inc.

Precision Therapeutics (NASDAQ: AIPT), 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 Al-powered proprietary bioinformatics platform (D-CHIP) to provide a tailored solution to its clients' specific needs. Precision'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. Precision'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.pre

About 48Hour Discovery, Inc.

Founded in 2017, 48Hour Discovery Inc. aims to facilitate new drug discovery in the pharmaceutical and biotechnology industries with our advanced platform based on patented barcoded libraries, stream-lined workflow and open-access data management. The 48Hour Discovery Cloud houses a database of user curated content of >10,000 screens and provides easy-to-use search functions, data visualization and analysis. We are committed to building new technologies that make ligand discovery faster, easier, and more transparent. For more information, please visit 48hourdiscovery.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; Precision's ability to implement its long range business plan for various applications of its technology; Precision'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 Precision'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 Precision's financial position. See Precision's most recent Annual Report on Form 10-K, and subsequent reports and other filings at www.sec.gov.

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