



**PRECISION**  
THERAPEUTICS

## **Precision Therapeutics' Subsidiary Helomics to Collaborate with Viome to Explore the Impact of the Gut Microbiome on Ovarian Cancer**

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MINNEAPOLIS, April 09, 2019 (GLOBE NEWSWIRE) -- Precision Therapeutics Inc. (NASDAQ: AIPT) ("Precision" or "the Company") today announced a collaboration between its wholly owned subsidiary, Helomics, and Viome, a new kind of healthcare company transforming health at the molecular level, to study the link between the gut microbiome and ovarian cancer.

The collaboration will start with a pilot study to determine what changes occur in the gut microbiome during ovarian cancer therapy and how those changes might impact outcomes. The companies intend to apply the results from this study to develop innovative and holistic approaches to help oncologists better personalize and optimize ovarian cancer therapy.

"Helomics pioneered using knowledge gained from drug response and genomic profiling of the patient's living tumor to help individualize ovarian cancer therapy. The collaboration with Viome is groundbreaking, generating data from the microbiome combined with our existing data and using our respective artificial intelligence (AI) platforms, to offer an innovative holistic and personalized approach to helping oncologists choose the best treatment options for patients with ovarian cancer," commented Gerald Vardzel, president of Helomics. "We are pleased to move forward with Viome in this collaborative effort as it represents a significant opportunity to monetize our technology and expertise with distinct insights that could lead to new treatment options that improve the health and wellbeing of cancer patients."

The study will utilize Helomics' proprietary drug response and genomic profiling of the patients' tumors, coupled with its AI-powered bioinformatics platform, D-CHIP, combined with Viome's proprietary microbiome analysis platform and artificial intelligence (AI) platform. The study will investigate if the gut microbiome differs between ovarian cancer patients and those without cancer. Additionally, it aims to reveal how different cancer treatments impact the gut microbiome, and whether the gut microbiome has an impact on either the effectiveness and/or toxicity of various cancer treatments.

"We are excited to kick off this novel study to help the millions of women suffering from ovarian cancer," says Naveen Jain, CEO and founder of Viome. "We believe the outcome of our work will be revolutionary and will offer powerful insights and effective treatments for patients."

In addition, Viome will also explore the role of nutrition and the gut microbiome in ovarian cancer patients post-treatment in order to develop personalized food recommendations using Viome technology to support and restore the immune system, appetite, and sleep patterns weakened by cancer treatment. Another goal of this research study is to demonstrate that improving the gut microbiome through nutrition can play an important role in taking a holistic approach to treating ovarian cancer. Results will be shared at the conclusion of the study.

"This collaboration with Viome is the first of what we envision will be further collaborations in artificial intelligence and data driven precision medicine, as a consequence of the completion of Precision Therapeutics' acquisition of Helomics. We believe that progress in personalized medicine is primarily a data problem and therefore applying an artificial intelligence approach has the potential for huge impact," commented Dr. Carl Schwartz, chief executive officer of Precision Therapeutics. "The addition of Helomics to our company represents an important step forward for Precision Therapeutics, as it opens the door to creating new personalized, holistic therapy options for cancer using AI-powered bioinformatics, that, holding true to our corporate brand, more precisely tailor both existing therapies and the search for new therapies based on the patient's individual tumor profile."

### **About Precision Therapeutics Inc.**

Precision Therapeutics (NASDAQ: AIPT) operates in two business lines, operated through three wholly-owned subsidiaries. The company's two business lines include applying artificial intelligence to personalized medicine and drug discovery to provide personalized medicine solutions for patients and clinicians as well as clients in the pharmaceutical, diagnostic, and biotech industries; and the production and sales of the FDA-approved STREAMWAY® System for a fully-automated, direct-to-drain medical fluid disposal system. For additional information, please visit [www.precisiontherapeutics.com](http://www.precisiontherapeutics.com).

Precision's recently acquired, wholly owned subsidiary, Helomics, is an AI and data-driven precision medicine company dedicated to improving the standard of care for cancer patients (especially gynecological) through innovative research and development partnerships with pharmaceutical, diagnostic, biotechnology, and academic organizations, leading to better and more personalized treatments and diagnostic technologies for cancer. 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 our client's specific needs.

Its second wholly-owned subsidiary, TumorGenesis, is developing a new rapid approach to growing tumors in the laboratory, which essentially "fools" the cancer cells into thinking they are still growing inside the patient.

Finally, the company's STREAMWAY System produced by our Skyline Medical division fully automates the collection, measurement, and disposal of waste fluids and is designed to: 1) reduce overhead costs to hospitals and surgical centers; 2) improve compliance with OSHA and other regulatory agency safety guidelines; 3) improve efficiency in the operating room, and radiology and endoscopy departments, thereby leading to greater profitability; and 4) provide greater environmental stewardship by helping to eliminate the approximately 50 million potentially disease-infected

canisters that go into landfills each year in the U.S. and virtually eliminates staff exposure to blood, irrigation fluid and other potentially infectious fluids found in the healthcare environment. Antiquated manual fluid handling methods that require hand carrying and emptying filled fluid canisters present an exposure risk and potential liability. For additional information, please visit [www.skylinemedical.com](http://www.skylinemedical.com).

#### **About Viome**

Viome is a new kind of healthcare company transforming health at the molecular level. The company uses advanced technology developed for National Security at the Los Alamos National Lab to analyze all the genes expressed by our gut microbiome and the biochemicals produced by these organisms to assess if they are converting ingredients in the foods that we are eating into nutrients that our body needs or toxins that are causing inflammation in the body. From there, Viome's AI platform recommends a precise, personalized nutrition plan that outlines the exact foods to eat, and those to avoid. To learn more about Viome, visit [www.viome.com](http://www.viome.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](http://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](http://www.sec.gov).

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