

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

**Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): November 14, 2018

Precision Therapeutics Inc.

(Exact name of Registrant as Specified in its Charter)

Delaware

(State or Other Jurisdiction of Incorporation)

001-36790

(Commission File Number)

33-1007393

(IRS Employer Identification No.)

2915 Commers Drive, Suite 900

Eagan, Minnesota

(Address of Principal Executive Offices)

55121

(Zip Code)

Registrant's telephone number, including area code: **(651) 389-4800**

Former Name or Former Address, if Changed Since Last Report: Not Applicable

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 8.01 Other Events.

On November 14, 2018, Helomics Holding Corporation issued a press release attached hereto as Exhibit 99.1.

Additional Information and Where to Find It

This communication does not constitute an offer to sell or the solicitation of an offer to buy any securities or a solicitation of any vote or approval. This communication may be deemed to be solicitation material in respect of the proposed merger transaction between Precision and Helomics Holding Corporation ("Helomics"). In connection with the proposed transaction, Precision has filed a registration statement on Form S-4, containing a proxy statement/prospectus (the "S-4") with the Securities and Exchange Commission ("SEC"). This communication is not a substitute for the registration statement, definitive proxy statement/prospectus or any other documents that Precision has filed or may file with the SEC or that Precision or Helomics has sent or may send to their respective security holders in connection with the proposed transaction.

SECURITY HOLDERS OF HELOMICS ARE URGED TO READ ALL RELEVANT DOCUMENTS FILED WITH THE SEC, INCLUDING THE PROXY STATEMENT/PROSPECTUS, BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT THE PROPOSED TRANSACTION.

Investors and security holders will be able to obtain copies of the S-4, including the proxy statement/prospectus, and other documents filed with the SEC (when available) free of charge at the SEC's website, <http://www.sec.gov> after they are filed. Copies of documents filed with the SEC by Precision will be made available free of charge on Precision's website at www.precisiontherapeutics.com.

Item 9.01. Financial Statements and Exhibits.

- (a) Not applicable.
- (b) Not applicable.
- (c) Not applicable.
- (d) Exhibits.

Exhibit No.
[99.1](#)

Description
[Press Release dated November 14, 2018](#)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

PRECISION THERAPEUTICS INC.

By: /s/ Bob Myers

Name: Bob Myers

Title: Chief Financial Officer

Date: November 14, 2018

Filing under Rule 425 under the Securities Act of 1933 and deemed filed under Rule 14a-12 of the Securities Exchange Act of 1934 Filing by: Precision Therapeutics Inc.: SEC File Nos. 001-36790; and 333-221966

Helomics Corp Partners with UK 100,000 Genomes Project to Drive its Artificial Intelligence-Powered Precision Oncology Platform for Ovarian Cancer.

Helomics will utilize whole genome and outcome data from the U.K. 100,000 Genomes Project to advance its artificial intelligence-based platform for ovarian cancer.

PITTSBURGH and LONDON— November 14, 2018 – Helomics, a personalized healthcare company whose mission is to improve the standard of care for cancer through innovative precision oncology products and boutique CRO services, and Genomics England announced today that Helomics has become a full Discovery Forum partner. Helomics will utilize the rich de-identified genomics and clinical data set for the 100,000 Genomes Project to further develop its artificial intelligence-based precision oncology platform for ovarian cancer.

The 100,000 Genomes Project is a groundbreaking initiative, sequencing whole genomes of National Health Service patients with rare diseases and their families, as well as patients with common cancers. The aim is to transform healthcare through new diagnoses and personalized treatments. The Precision Medicine Market is set to exceed USD 96 billion by 2024; according to a research report by Global Market Insights, Inc. Helomics continues to be an innovative precision medicine company that will continue to show growth in this robust market in 2019 and beyond.

“We are excited to partner with Genomics England and gain access to the rich, de-identified, genomic and clinical data of the 100,000 Genomes Project. We intend to apply our state-of-the-art machine learning to this dataset to expand the capabilities of our precision oncology platform, which helps oncologists offer individualized treatment options for ovarian cancer patients. We anticipate this to be the first of several projects, leading ultimately to bringing the benefits of Helomics precision oncology to ovarian cancer patients within the NHS,” commented Gerald Vardzel, President and CEO of Helomics Corp.

Expanding on the scientific goals of the project, Dr. Mark Collins, VP of Innovation and Strategy at Helomics, said, “The promise of precision oncology is therapy tailored to the patient’s own cancer, yet the reality is that while we can identify alterations in the DNA of the patient’s tumor most of these mutations are not actionable with current drugs. The goal of this project is to combine genomic profiling of the patient tumor (from the Genomics England data), with the drug response of the patient’s own tumor, grown in the laboratory (Helomics unique dataset), utilizing the power of machine learning to create a “virtual” model of the tumor. We can then use this model to guide the oncologist in selecting appropriate standard of care drugs to best treat the patient, as well in partnership with pharma companies to develop the next generation of precision therapies.”

Commenting on the new Discovery Forum Partner, Joanne Hackett, Chief Commercial Officer of Genomics England, said, “We’re delighted to work with Helomics and their precision oncology products to maximize the benefits to patients. As part of the Discovery Forum, Helomics will collaborate with other companies at the forefront of genomics and technology, to ensure that we turn research findings into treatments, diagnostics and benefits for patients as soon as possible.”

Additional Information and Where to Find It

This communication does not constitute an offer to sell or the solicitation of an offer to buy any securities or a solicitation of any vote or approval. This communication may be deemed to be solicitation material in respect of the proposed transaction between Precision Therapeutics Inc. (“Precision”) and Helomics. In connection with the proposed transaction, Precision has filed a registration statement on Form S-4, containing an exchange offer prospectus, a proxy statement for the annual meeting of the stockholders of Precision, an information statement and other detailed information regarding the proposed merger and related matters (the “S-4”) with the SEC.

Each of Precision and Helomics plans to mail the proxy statement/prospectus/information statement contained in the Form S-4 to its stockholders at a future date. The Form S-4 and proxy statement/prospectus/information statement contains important information about Precision, Helomics, the merger and related matters. Investors and stockholders should read carefully the proxy statement/prospectus/information statement and the other documents filed with the SEC in connection with the merger before they make any decision with respect to the merger. A copy of the merger agreement with respect to the merger has been filed by Precision as an exhibit to its Form 8-K dated October 26, 2018.

The identity of people who, under SEC rules, may be considered “participants in the solicitation” of Helomics stockholders in connection with the proposed merger, and a description of their interests, is disclosed in the S-4 filing made by Precision.

This communication is not a substitute for the registration statement, definitive proxy statement/prospectus/information statement or any other documents that Precision has filed or may file with the SEC or that Precision or Helomics may send to their respective security holders in connection with the proposed transaction.

SECURITY HOLDERS OF HELOMICS ARE URGED TO READ ALL RELEVANT DOCUMENTS FILED WITH THE SEC, INCLUDING THE PROXY STATEMENT/PROSPECTUS/INFORMATION STATEMENT, BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT THE PROPOSED TRANSACTION.

The proxy statement/prospectus/information statement, the Form 8-K and all other documents filed with the SEC in connection with the merger will be made available to investors free of charge on Precision’s website at www.precisiontherapeutics.com. In addition, the proxy statement/prospectus, the Form 8-K and all other documents filed with the SEC in connection with the merger will be made available to investors free of charge by calling or writing to:

*Bob Myers, Chief Financial Officer
Precision Therapeutics Inc.
2915 Commers Drive, Suite 900
Eagan, MN 55121
Tel: 651-389-4806*

In addition to the Form S-4, the proxy statement/prospectus/information statement and the other documents filed with the SEC in connection with the merger, Precision is obligated to file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any reports, statements and other information filed with the SEC at the SEC's public reference rooms at 450 Fifth Street, N.W., Washington, D.C. 20549 or at the other public reference rooms in New York, New York and Chicago, Illinois. Please call the SEC at 1-800-SEC-0330 for further information on the public reference rooms. Filings with the SEC are also available to the public from commercial document-retrieval services and at the website maintained by the SEC at www.sec.gov.

About Helomics Corporation

Helomics is a Personalized Healthcare company located in Pittsburgh, PA. Helomics mission is to improve 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 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 a proprietary bioinformatics platform (D-CHIP) to provide a tailored solution to our client's specific needs. The D-CHIP platform is being built out in a joint venture with Precision Therapeutics Inc. (NASDAQ:AIPT), producer of the FDA-approved STREAMWAY® System for automated, direct-to-drain medical fluid disposal, to leverage the Helomics D-CHIP™ platform to develop and market new approaches for personalized cancer diagnosis and care.

Helomics® is headquartered in Pittsburgh, Pennsylvania where the company maintains state-of-the-art, CLIA-certified, clinical and research laboratories.

For more information, please visit: www.helomics.com

About Precision Therapeutics Inc.

Precision Therapeutics (NASDAQ:AIPT) operates in two business areas: first, 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 second, production of the FDA-approved STREAMWAY® System for automated, direct-to-drain medical fluid disposal. For additional information, please visit www.precisiontherapeutics.com.

Precision Therapeutics' medicine business is committed to improving the effectiveness of cancer therapy using the power of artificial intelligence (AI) applied to rich data diseases databases. This business has launched with Precision Therapeutics' investment in Helomics Corporation, a precision medicine company and integrated clinical contract research organization whose mission is to improve patient care by partnering with pharmaceutical, diagnostic, and academic organizations to bring innovative clinical products and technologies to the marketplace. In addition to its proprietary precision diagnostics for oncology, Helomics offers boutique CRO services that leverage their patient-derived tumor models, coupled to a wide range of multi-omics assays (genomics, proteomics and biochemical), and a proprietary bioinformatics platform (D-CHIP) to provide a tailored solution to our client's specific needs. Helomics is 25% owned by Precision Therapeutics. Helomics® is headquartered in Pittsburgh, Pennsylvania where the company maintains state-of-the-art, CLIA-certified, clinical and research laboratories. For more information, please visit www.Helomics.com.

Precision Therapeutics has also announced the formation of a subsidiary, TumorGenesis to pursue 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. Precision Therapeutics and Helomics have also announced a proposed joint venture with GLG Pharma focused on using their combined technologies to bring personalized medicines and testing to ovarian and breast cancer patients, especially those who present with ascites fluid (over one-third of patients). The growth strategy in this business includes securing new partnerships and considering acquisitions in the precision medicine space.

Sold through the Skyline Medical business of Precision Therapeutics, The STREAMWAY System 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. Skyline Medical's STREAMWAY System 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. For additional information, please visit www.skylinemedical.com.

About Genomics England

Genomics England is a company owned by the Department of Health and Social Care and was set up to deliver the 100,000 Genomes Project. This flagship project will sequence 100,000 whole genomes from NHS patients and their families.

Genomics England has four main aims:

- **to bring benefit to patients**
- **to create an ethical and transparent program based on consent**
- **to enable new scientific discovery and medical insights**
- **to kickstart the development of a UK genomics industry**

The project is focusing on patients with rare diseases, and their families, as well as patients with common cancers. For more information visit www.genomicsengland.co.uk.

Forward-looking Statements

Certain of the matters discussed in this announcement 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 (1) risks related to the proposed merger, including the fact that we may not complete the merger; we do not have complete information about Helomics; 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; delay in completion of the merger may significantly reduce the expected benefits; and the market price of the Company's common stock may decline as a result of the merger; (2) 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 (3) 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; the Company's ability to implement its long range business plan for various applications of its technology; the Company'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 the Company'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 Securities and Exchange Commission, 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 the Company's financial position. See the Company's most recent Annual Report on Form 10-K, and subsequent reports and other filings at www.sec.gov.

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