# 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): December 3, 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 **55121** (Zip Code)

(Address of Principal Executive Offices)

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  $\boxtimes$ 

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. o

#### Item 8.01 Other Events.

On December 3, 2018, an interview with Richard Gabriel involving the Company's subsidiary, TumorGenesis, was made available. A transcript of the interview is attached hereto as Exhibit 99.1.

The information contained in this report may be considered a filing under Rule 425 under the Securities Act of 1933 and deemed filed under Rule 14a-12 of the Securities Exchange Act of 1934.

#### 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. Description

99.1 Transcript of Interview, December 3, 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: December 3, 2018

#### Transcript of Interview

#### [Text Appearing on Screen]

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#### [Transcript of Interview]

[Mike Ellen] Hi I'm Mike Ellen. You're watching CEO Live TV. Today we're joined by Richard Gabriel. He is the Chief Operating Officer at TumorGenesis, a wholly owned subsidiary of Precision Therapeutics, which trades on the NASDAQ under ticker AIPT. Precision Therapeutics is a company applying artificial intelligence to personalized medicine and drug discovery. Good morning Richard, thanks for being on the show.

[Richard Gabriel] Good morning Mike, it's a pleasure to be here.

[Ellen] What problem in precision medicine is TumorGenesis trying to solve?

[Gabriel] Well, pharma and biotech have been in a large crisis for a number of years. It costs today about \$2.6 billion to get a drug approved in R&D; and you have to count lost profits to the investors, because it takes about ten years from start to finish, and in oncology in particular the failure rate is about 80% of the drugs. So just to give you an example, in 2017 there were 16 drugs approved by the FDA in oncology, that's for a patient population of 1.7 million people that enter with cancer every year in the United States. So the pharma solution that we have, TumorGenesis puts the patient at the heart of its development and of the new technologies that will help its CRO clients. Our clients would be pharma and biotech companies. Because primarily the reason for this is, all the old cell lines which were immortalized cell lines and some of them being well over 50 years old have been completely abandoned. They've been replaced by personalized medicine. Deep gene sequencing, artificial intelligence machine learning, all new tools. What we've developed is what we call a cancer cell environment. Before that Pharma and biotech were talking to the immortalized cell lines, they weren't talking to the individual patients.

So we're changing all that. The paradigm has shifted and we're moving on, and TumorGenesis's approach to this problem and what makes it different than what's currently out there. Because before, the immortalized cell lines were actually the control point, so if the patient sample matched the immortalized cell line response then pharma just went ahead and went into development. Well, they found out that you know with an 80% drug failure, I mean the math speaks for itself. You don't really have to be a genius to figure that out that it wasn't working. So what we've done is, we put the patient right at the heart of the discovery and development in clinical trials so it's focused on what we call the really poor outcome cancers. Our first is ovarian, we have triple negative breast cancer, we have melanoma and glioma. So why is it different. We're growing the patient tumors in a way that we mimic the tumors' micro environment inside the patient. So just forget about immortalized cell lines, they don't work. Forget about the patient-derived xenograft mouse model because it takes too long, it's too expensive, it is you know up to 32 weeks and it costs twenty five to forty five thousand dollars per patient. And you can't screen a lot of drugs, you can only pick one or two, So what we at we do at TumorGenesis is we have what we call the cell cancer capture. The cancer cell captures the cancer cell culture. And then the screening is the only viable solution, and you build your database from the patients. What the patient's cancer is telling you, not from a bunch of immortalized cell lines that are defunct.

[Ellen] And can you tell us a little bit more or break down for us in simple terms to how your approach works.

[Gabriel] Well to keep it very simple, what we're doing what TumorGenesis has done, is it has built a mechanical architecture that's been laced with cancer cell food and "sweets" that fool the patient cancer cells into behaving as if they were still inside the patient. That's simplistically what we've done.

[Ellen] And has your approach ever been done before, and if so are you engaging the original team to accelerate the process of TumorGenesis?

[Gabriel] Yes it has been done before and I'm also a GLG Pharma I'm the chief operating officer there. We had two compounds and the two compounds. One was a repurposed drug and the second one was to do chemical energy. Both of them have great animal data that showed very low toxicity and were very potent against metastatic cancer cells as well as cancer stem cells, which caused the metastasis. But the NCI cancer cell lines, the immortalized cell lines, said they were "crap". So we were confused, so we found this new technology, we talked to the inventors and they said, well we know what's wrong, we know how to do this, and so we have them gave them the two compounds. They ran the compounds, and now the animal data matches the in vitro data. So those two compounds would have been thrown out by any biotech and pharma company. So that's the power of this technology, it brings a new discovery paradigm back into clinical development. So the inventors and myself included are now advisors and members of this technology and our goal is to bring this into the market as soon as possible.

[Ellen] Well Richard can you give us your timeline and milestones involved in growing the first human tumor outside the body.

[Gabriel] Yeah sure the first target is ovarian cancer. We're looking at the first and second quarter, acquiring these ovarian cancer cell lines before the end of the year. Of the 25 ovarian cancer cell types, 14 of them represent about 90% of ovarian cancer so we hope to begin screening those against drug combinations in the second or third quarter. And we're looking for early adopters, so we're talking to pharma companies now and biotech companies about early adopters, so we could try to speed that up.

[Ellen] And how does the TumorGenesis strategy fit within Precision Therapeutics' pivot to precision medicine?

[Gabriel] Well TumorGenesis is focused on building the kits that will be used in clinical trials as well as by companies such as GLG pharma and other biotech companies in their own clinical trials in their own development. So again it's focused on fooling the cancer cells so that they behave as if they were still inside the patient. We feed them what they want, and then we screen drugs against them in multiple combinations and in multiple dilutions, so and we can do that within a six to nine week period. Now that's a very powerful tool and we couple all of this with where Precision Therapeutics is, is with artificial intelligence, machine learning and a patient's genetics as well as the cancer genetics which are important you can't rely, you know, treating cancer it's a multi-disciplined, it's a team effort, so the TumorGenesis part of this is to make sure that we're providing the best environment possible for each individual patient's tumor and then the rest of the team helps build out the information into a more powerful tool. And you know we have about 30,000 ovarian cancer cells in the database with our CLIA partner, so we hope that to add to that and there's been a recent move with the thousand genomes again the UK with ovarian cancer as well. So that's where we're going with it.

[Ellen] And Richard how large is the market for drug discovery services based on the Genesis platform and what is your confidence level in getting into the market?

[Gabriel] Well our confidence level is really high, because if you remember, I told you about the xenograft mouse and rat model which is 32 weeks, you know you can shorten it to maybe 25, but it's 25 to 32 weeks from the implantation of tumor. And these mice aren't cheap and the rats aren't cheap, you know, they cost anywhere from 100 to 150 bucks a pop. So for 25 grand you don't get a lot of mice, you don't get a lot of rats. The pharma outsourcing market is about \$2.15 billion of that, since the NCI abandoned the immortal cell lines. \$400 million of that is in the mouse and rat model. The department is currently using now. That's our sweet spot we're going right after that market, because, we're six to nine weeks, we're more robust, we're more reliable. We're going to be able to build a database that our clients are going to be able to go to and look at it and this is all centered around artificial intelligence, machine learning. And the ability then to take large amounts of information from diverse patient populations, because each patient is different, each cancer is different within each patient. And then look across all of that to be able to pick the best combination for the patients. So there's the clinical trials market and then there's also the individual patient. So the CLIA partner, which is Helomics Corporation, has screened over a hundred and fifty thousand cancer patients in the drug combination and has that in their database so that is the strength. TumorGenesis is building the kits in combination with the artificial intelligence and machine learning. And Precision Therapeutics, you can go to the website it's www.precisiontherapeutics.com and our symbol on the Nasdaq is AIPT. And that stands for artificial intelligence/precision therapeutics.

I want to thank everyone for listening and especially our shareholders. Really appreciate your support.

[Ellen] Thank you Richard, and thank you as well again for taking the time to join us, and as we continue to follow this developing story we hope to get back to you soon for an update.

[Gabriel] Oh I'd be happy to do that anytime you want, Mike and I really appreciate this opportunity to speak to the audience and especially thanks to our shareholders and any new shareholders that are coming on board. We appreciate you, thank you.

[Ellen] Great thank you Richard take care. You've been watching CEO Live TV and we have been talking again to Mr. Richard Gabriel. He is the Chief Operating Officer of TumorGenesis, a wholly owned subsidiary of Precision Therapeutics, which trades on Nasdaq under the ticker AIPT as Richard mentioned, to learn more about them, please visit their website at: www.precisiontherapeutics.com.