

PROSPECTUS SUPPLEMENT (TO PROSPECTUS DATED JULY 1, 2019)



Trovagene, Inc.

**800,000 Shares of Common Stock**

**Series I Pre-Funded Warrants to Purchase up to 131,967 Shares of Common Stock  
and  
Shares of Common Stock underlying the Series I Pre-Funded Warrants**

We are offering 800,000 shares of our common stock, or Shares, and 131,967 Series I pre-funded warrants to purchase shares of our common stock, or Series I Warrants, to Lincoln Park Capital Fund, LLC, or Lincoln Park pursuant to the terms of a securities purchase agreement we have entered into with Lincoln Park, or the Purchase Agreement. This prospectus supplement and the accompanying base prospectus also relate to the issuance of shares of our common stock underlying the Series I Warrants upon exercise of the Series I Warrants.

In a concurrent private placement, we are selling to Lincoln Park 931,967 Series J warrants to purchase shares of our common stock, or the Series J Warrants, and collectively, with the Series I Warrants, the Warrants. The Series J Warrants and the shares of common stock represented by such Series J Warrants are being offered pursuant to an exemption from registration provided in Section 4(a)(2) under the Securities Act of 1933, as amended, or the Securities Act, and Rule 506(b) promulgated thereunder, and they are not being offered pursuant to this prospectus supplement and the accompanying prospectus.

We are offering the Shares and Warrants to Lincoln Park at an aggregate purchase price of \$1,000,000.60.

The Series I Warrants will have an exercise price of \$0.01 per share, are immediately exercisable and will expire five years from the date of issuance. The Series J Warrants will have an exercise price of \$0.948 per share, will be exercisable 6 months from the date of issuance, and will expire five years from the date they become exercisable. The Warrants are not listed on any securities exchange and we do not expect to list the Warrants on any national securities exchange or other trading market.

Our common stock is listed on the NASDAQ Capital Market under the symbol "TROV." On March 27, 2020, the last reported sale price of our common stock on the NASDAQ Capital Market was \$1.07 per share.

As of March 30, 2020, the aggregate market value of our outstanding common stock held by non-affiliates, or public float, was \$22,215,410, which was calculated based on 10,190,555 shares of outstanding common stock held by non-affiliates and on a price per share of \$2.18, the last reported sale price of our common stock on the NASDAQ Capital Market on February 12, 2020. During the 12 calendar month period that ends on, and includes, the date of this prospectus supplement, we have sold securities with an aggregate market value of \$6,568,904 pursuant to General Instruction I.B.6 of Form S-3.

**Investing in our securities involves risks. See "Risk Factors" beginning on page S-9 of this prospectus supplement, page 10 of the accompanying prospectus and under similar headings in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus.**

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.**

Delivery of the securities offered hereby is expected to be made against payment therefor on or about March 31, 2020.

The date of this prospectus supplement is March 30, 2020

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## ABOUT THIS PROSPECTUS SUPPLEMENT

You should rely only on the information contained in or incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information in this prospectus supplement, the accompanying prospectus, and the documents incorporated by reference in this prospectus supplement and the accompanying prospectus is accurate only as of the date of those respective documents. Our business, financial condition, results of operations and prospects may have changed since those dates. You should read this prospectus supplement, the accompanying prospectus, and the documents incorporated by reference in this prospectus supplement and the accompanying prospectus in their entirety before making an investment decision. You also should read and consider the information in the documents to which we have referred you in the section of this prospectus supplement entitled “Information Incorporated by Reference” and the sections of the accompanying prospectus entitled “Information Incorporated by Reference” and “Where You Can Find More Information.”

This prospectus supplement and the accompanying prospectus form a part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the “Commission”) utilizing a “shelf” registration process. This document contains two parts. The first part consists of this prospectus supplement, which provides you with specific information about this offering. The second part, the accompanying prospectus, provides more general information, some of which may not apply to this offering. Generally, when we refer only to the “prospectus,” we are referring to both parts combined. This prospectus supplement may add to, update or change information contained in the accompanying prospectus. To the extent that any statement we make in this prospectus supplement is inconsistent with statements made in the accompanying prospectus or any documents incorporated by reference herein or therein, the statements made in this prospectus supplement will be deemed to modify or supersede those made in the accompanying prospectus and such documents incorporated by reference herein and therein.

**For investors outside the United States, we have not done anything that would permit this offering or possession or distribution of this prospectus supplement in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourselves about and to observe any restrictions relating to this offering and the distribution of this prospectus supplement outside of the United States.**

As permitted by the rules and regulations of the Commission, the registration statement, of which this prospectus supplement and the accompanying prospectus form a part, includes additional information not contained in this prospectus supplement or the accompanying prospectus. You may read the registration statement and the other reports we file with the Commission at the Commission’s web site or at the Commission’s offices described below under the heading “Where You Can Find Additional Information.”

Trademarks, service marks or trade names of any other companies appearing in this prospectus supplement are the property of their respective owners. Use or display by us of trademarks, service marks or trade names owned by others is not intended to and does not imply a relationship between us and, or endorsement or sponsorship by, the owners of the trademarks, service marks or trade names.

## PROSPECTUS SUPPLEMENT SUMMARY

*The following summary highlights certain of the information contained elsewhere in or incorporated by reference into this prospectus supplement. Because this is only a summary, however, it does not contain all the information you should consider before investing in our securities and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information included elsewhere in or incorporated by reference into this prospectus supplement. Before you make an investment decision, you should read this entire prospectus supplement and the accompanying prospectus carefully, including the risks of investing in our securities discussed under the section of this prospectus supplement entitled “Risk Factors” and similar headings in the other documents that are incorporated by reference into this prospectus supplement. You should also carefully read the information incorporated by reference into this prospectus supplement, including our financial statements, and the exhibits to the registration statement of which this prospectus supplement is a part.*

*Unless the context otherwise requires, references to “we,” “our,” “us,” “Trovagene” or the “Company” in this prospectus supplement mean Trovagene, Inc.*

### Overview

We are a clinical-stage, oncology therapeutics company, taking a precision medicine approach to target cancers that are in need of new treatment options including KRAS-mutated metastatic colorectal cancer (“mCRC”), metastatic castrate-resistant prostate cancer (“mCRPC”) and acute myeloid leukemia (“AML”). By integrating biomarkers into our clinical development programs, we will be able to identify patients who are most likely to respond to treatment across a number of cancer types and associated indications.

Our drug candidate, onvansertib (formerly known as PCM-075), is a first-in-class, third-generation, oral and highly-selective Polo-like Kinase 1 (“PLK1”) adenosine triphosphate (“ATP”) competitive inhibitor. PLK1 is essential for precisely regulating the cell division and maintaining genome stability in mitosis (cell division), spindle assembly, and DNA damage response. Studies have shown that PLK1 is over-expressed in most cancers, which is associated with poor prognosis in patients. Data has shown that blocking the expression of PLK1 by kinase inhibitors can effectively inhibit proliferation and induce apoptosis (death) of tumor cells.

On March 15, 2017, we announced the licensing of onvansertib, a PLK1 inhibitor, from Nerviano Medical Sciences S.r.l. (“Nerviano”), the largest oncology research and development company in Italy and a leader in protein kinase drug development (Polo-like Kinase Inhibitors).

We believe onvansertib is the only PLK1 selective ATP competitive inhibitor administered orally with apparent antitumor activity in different preclinical models currently in clinical development. The Polo-like Kinase family consists of 5 members (PLK1-PLK5) and they are involved in multiple functions in cell division, including the regulation of centrosome maturation, checkpoint recovery, spindle assembly, cytokinesis, apoptosis and many others. PLK1 plays a crucial role in the regulation of mitotic checkpoints. The over-expression of PLK1 can lead to immature cell division with aneuploidy, a hallmark of cancer. PLK1 is over-expressed in a wide variety of hematologic and solid tumor malignancies including colorectal, prostate, lung, breast, as well as leukemias and lymphomas. In addition, several studies have shown that over-expression of PKL1 correlates with poor prognosis.

Onvansertib has been tested in-vivo in different xenograft and transgenic models at times suggesting tumor growth inhibition or tumor regression when used in combination with other therapies. Onvansertib has been tested for antiproliferative activity on a panel of 148 tumor cell lines and appeared highly active with an IC<sub>50</sub> (a measure concentration for 50% target inhibition) below 100 nM in 75 cell lines and IC<sub>50</sub> values below 1 uM in 133 out of 148 cell lines.

Onvansertib was developed to have high selectivity for PLK1, to be administered orally, and to have a relatively short drug half-life of approximately 24 hours compared to previous pan Polo-like inhibitors. A Phase 1

safety study was successfully completed in patients with advanced metastatic solid tumors and published in 2017 in *Investigational New Drugs*. We have three active Investigational New Drug (“IND”) applications in place with the U.S. Food and Drug Administration (“FDA”), and three ongoing clinical studies. The first study is TROV-052 (ClinicalTrials.gov Identifier NCT03303339), a Phase 1b/2 open-label clinical trial of onvansertib in combination with standard-of-care low-dose cytarabine (“LDAC”) or decitabine for patients with relapsed or refractory AML. The second study is TROV-053 (ClinicalTrials.gov Identifier NCT03414034), a Phase 2 open-label clinical trial of onvansertib in combination with Zytiga® (abiraterone acetate)/prednisone, all administered orally, for patients with metastatic Castration-Resistant Prostate Cancer (“mCRPC”). The third study is TROV-054 (ClinicalTrials.gov Identifier NCT03829410), a Phase 1b/2 open-label clinical trial of onvansertib in combination with FOLFIRI (folinic acid, fluorouracil and irinotecan) and Avastin® (bevacizumab) for patients with mCRC, who have a KRAS mutation.

Development of onvansertib, as part of a combination regimen with already approved drugs, has the potential to bring new treatment options to patients across a wide array of cancers. Onvansertib has shown preclinical antitumor activity as a single agent and synergy (interaction of discrete drugs such that the total effect is greater than the sum of the individual effects) in combination with numerous different chemotherapeutics and targeted therapies, such as Zytiga® (abiraterone acetate), Avastin® (bevacizumab), Camptosa® (irinotecan), Gemzar® (gemcitabine), Beleodaq® (belinostat), Venclexta® (venetoclax), quizartinib (AC220), a development stage FLT3 inhibitor, Taxol® (paclitaxel), and Velcade® (bortezomib) in AML, mCRPC, mCRC and other hematologic and solid tumor cancers.

On October 18, 2017, we announced results of preclinical research indicating potential synergy of onvansertib with abiraterone acetate in C4-2 prostate cancer cells. This synergy assessment study was conducted by Dr. Michael Yaffe M.D., Ph.D. FACS, and David H. Koch Professor of Biology and Biological Engineering at Massachusetts Institute of Technology (“MIT”). The results appeared to indicate that the combination of onvansertib with Zytiga® (abiraterone) decreased cell viability in mCRPC tumor cells and the apparent synergy observed was greater than the expected effect of combining the two drugs. Zytiga® is indicated for use in combination with prednisone for the treatment of patients with mCRPC who have received prior chemotherapy containing docetaxel. We believe there is an unmet medical need to improve on the resistance to hormone therapy and extend the benefit of response to abiraterone for mCRPC patients.

On April 23, 2019, we announced results of preclinical research demonstrating synergy of onvansertib in combination with Venclexta® (venetoclax) in a cell model of venetoclax-resistance AML. The data further supports our ongoing onvansertib clinical development program in patients with relapsed or refractory AML. We believe there is an opportunity to treat patients, who have relapsed following first-line treatment with venetoclax, with onvansertib in combination with a hypomethylating agent such as decitabine or azacitadine.

Our strategy includes integrating a predictive clinical biomarker approach into our onvansertib clinical development programs, which we believe may enable us to tailor treatment to specific sub-populations of patients who are most likely to respond and have a positive clinical impact. PLK1 uniquely phosphorylates translational control tumor protein (“TCTP”) to form pTCTP and inhibition of this enzymatic activity by onvansertib appears to be predictive of patient response to treatment.

### **Onvansertib Phase 1 Safety Study in Solid Tumors**

A Phase 1 safety study of onvansertib was completed in patients with advanced metastatic solid tumor cancers and published in July 2017, in the peer-reviewed journal *Investigational New Drugs*. Dr. Glen Weiss, Medical Oncologist at Goodyear, AZ and affiliated with Cancer Treatment Centers of America at Western Regional Medical Center, was the principal investigator and first author of the publication, entitled “*Phase 1 Dose-Escalation Study of NMS-1286937, an Orally Available Polo-like Kinase 1 Inhibitor, in Patients with Advanced or Metastatic Solid Tumors*” This study evaluated first-cycle dose limiting toxicities and related maximum tolerated dose with data indicating a manageable safety profile for onvansertib (also known as PCM-075 and NMS-1286937) for the treatment of advanced or metastatic solid tumors, with transient adverse events that were likely related to the drug’s mechanism of action. The authors believe that data from preclinical work, coupled with the results of the Phase 1

trial, suggest that onvansertib could become a new therapeutic option for the treatment of solid tumor and hematologic cancers.

In this trial, onvansertib was administered orally, once daily for five consecutive days, every three weeks, to evaluate first cycle dose-limiting toxicities and related maximum tolerated dose in adult subjects with advanced/metastatic solid tumors. The study was also intended to evaluate onvansertib's pharmacokinetic profile in plasma, its anti-tumor activity, and its ability to modulate intracellular targets in biopsied tissue. The study identified thrombocytopenia and neutropenia as the primary toxicities, which is consistent with the expected mechanism of action of onvansertib and results from preclinical studies. These hematologic toxicities were reversible, with recovery usually occurring within 3 weeks. No GI disorders, mucositis, or alopecia was observed, confirming that bone marrow cells are the most sensitive to onvansertib inhibition with the applied dosing schedule.

We are utilizing the existing IND applications to develop onvansertib in solid tumors as part of our clinical development expansion plans, with our initial focus in mCRPC and mCRC.

### **Onvansertib Phase 2 Study in metastatic Castration-Resistant Prostate Cancer**

On December 14, 2017, we announced the submission of our Phase 2 protocol of onvansertib in combination with abiraterone acetate (Zytiga® - Johnson & Johnson) for the treatment of mCRPC, to the FDA and our active solid tumor IND. In this multi-center, open-label, Phase 2 trial, onvansertib in combination with the standard dose of Zytiga® and prednisone, all administered orally, will be evaluated for safety and efficacy. The primary efficacy endpoint is the proportion of patients achieving disease control after 12 weeks of study treatment, as defined by lack of Prostate Specific Antigen ("PSA") progression in patients who are showing signs of early progressive disease (rise in PSA but minimally symptomatic or asymptomatic) while currently receiving androgen deprivation therapy ("ADT"), abiraterone and prednisone.

This ongoing Phase 2 clinical study is being conducted at three Harvard Medical sites: Beth Israel Deaconess Medical Center, Dana Farber Cancer Institute and Massachusetts General Hospital, in Boston Massachusetts. Dr. David Einstein at the Genitourinary Oncology Program at Beth Israel Deaconess Medical Center and Harvard Medical School is the principal investigator for the Phase 2 mCRPC trial.

### **Onvansertib Phase 1b/2 Study in metastatic Colorectal Cancer**

In December 2018, we submitted a new IND application and protocol for our Phase 1b/2 trial of onvansertib in combination with FOLFIRI and Avastin® (bevacizumab) for the second-line treatment of mCRC with a KRAS mutation. On January 16, 2019, we received notification from the FDA that the "study may proceed" and on January 29, 2019, we announced an agreement with PoC Capital, LLC to fund the clinical development program. In this open-label, Phase 1b/2 trial, onvansertib in combination with standard-of-care FOLFIRI and Avastin® is being evaluated for safety and efficacy. The trial will enroll up to 44 patients to assess the safety and preliminary efficacy of the combination regimen.

This ongoing Phase 1b/2 clinical study is being conducted at two prestigious cancer centers: USC Norris Comprehensive Cancer Center and The Mayo Clinic Arizona. Dr. Heinz-Josef Lenz Associate Director for Clinical Research and Co-Leader of the Gastrointestinal Cancers Program at the USC Norris Comprehensive Cancer Center, is the principal investigator for the Phase 1b/2 mCRC trial.

### **Onvansertib Phase 1b/2 Study in Acute Myeloid Leukemia**

In June 2017, we announced the submission of our IND application and our Phase 1b/2 protocol of onvansertib in combination with standard-of-care chemotherapy for the treatment of AML to the FDA. In July 2017, we received notification from the FDA that our Phase 1b/2 clinical trial of onvansertib in patients with AML "may proceed". On October 9, 2017, we announced that the FDA granted Orphan Drug Designation to onvansertib for the treatment of AML. We initiated our Phase 1b/2 AML trial in November 2017 and enrolled our first patient in

February 2018. On August 29, 2018, we announced that the European Medicinal Agency granted Orphan Drug Designation to onvansertib for the treatment of AML in the European Union (“EU”).

The Phase 1b/2 clinical study is an open-label trial to evaluate the safety and anti-leukemic activity of onvansertib in combination with standard-of-care chemotherapy in patients with AML. Phase 1b is a dose escalation trial to evaluate the safety, tolerability, dose and scheduling of onvansertib, and to determine a recommended clinical treatment dose for the Phase 2 continuation trial.

Pharmacokinetics of onvansertib and correlative biomarker activity will be assessed throughout the Phase 1b and Phase 2 segments of the trial. The Phase 2 continuation trial is open-label with administration of the recommended onvansertib clinical dose in combination with standard-of-care chemotherapy to further evaluate safety and assess efficacy. Doses of onvansertib will be administered orally each day on Days 1-5, in a 21-28-day cycle in both Phase 1b and Phase 2.

In 2019, we completed the Phase 1b segment of this trial and began enrolling patients in Phase 2. A total of eight sites are conducting this trial, which is being led by Hematologist Amer Zeidan, MBBS, MHS, Assistant Professor of Medicine at Yale School of Medicine, Hematology expert at Yale Cancer Center.

### **Optimizing Drug Development with Correlative Biomarker Analysis using Circulating Tumor DNA**

We have significant experience and expertise with biomarkers and technology in cancer, including CRC and AML. We are using our Precision Cancer Medicine™ (“PCM™”) technology to measure PLK1 enzymatic activity to potentially identify patients most likely to respond to onvansertib and to measure patient therapy response. The TCTP is phosphorylated by PLK1 at residue serine 46 (pTCTP) and has been shown to be a specific marker of PLK1 activity in-vivo in preclinical models. In our ongoing clinical trial in AML, we validated that pTCTP and TCTP are present and can be detected by capillary Western-Blot (“WB”) in peripheral blood mononuclear cells (“PBMC”) isolated from healthy donors and AML patients, 24-hours after blood collection. As an exploratory objective of the Phase 1b segment of the trial, we are assessing the extent of PLK1 inhibition by onvansertib in patients receiving treatment and plan to use this information and methodology going forward in the Phase 2 continuation trial, and beyond. In our ongoing clinical trial in KRAS-mutated mCRC, we are quantitatively assessing changes in the KRAS mutational burden with a simple blood test. Decreases in KRAS are highly predictive of radiographic response observed as tumor regression.

Technological advancements in the molecular characterization of cancers have enabled researchers to identify an increasing number of key molecular drivers of cancer progression. These discoveries have led to multiple novel anticancer therapeutics, and clinical benefit in selected patient populations. As a clinical-stage oncology therapeutics company developing targeted therapies to treat leukemias, lymphomas and solid tumor cancers, our objective is to optimize drug development by using our proprietary PCM™ expertise and biomarker strategy as part of our approach.

Our laboratory in San Diego, California, enables us to use our technology platform to optimize drug development and patient care. In the clinical development of our drug candidate, onvansertib, correlative biomarker analyses are being used to help inform decisions in the evaluation of dose-response and optimal regimen for desired pharmacologic effect and safety. Additionally, some biomarkers can be used as a surrogate endpoint for efficacy and/or toxicity, as well as predicting patients’ response by identifying certain patient populations that are more likely to respond to the drug therapy.

### **Company Information**

We were incorporated in the State of Florida on April 26, 2002. On July 2, 2004, we acquired Xenomics, a California corporation, which was in business to develop and commercialize urine-based molecular diagnostics technology. In January 2010, we re-domesticated our state of incorporation from Florida to Delaware and our name was changed to Trovogene, Inc. Our principal executive offices are located at 11055 Flintkote Avenue, San Diego, CA 92121, and our telephone number is 858-952-7570. Our website address is [www.trovageneoncology.com](http://www.trovageneoncology.com). The

information on our website is not part of this prospectus supplement. We have included our website address as a factual reference and do not intend it to be an active link to our website.



## THE OFFERING

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| Securities being offered                           | This prospectus supplement and the accompanying base prospectus relate to the offer, issuance and sale of 800,000 Shares and 131,967 Series I Warrants to Lincoln Park pursuant to the Purchase Agreement, and the shares of our common stock underlying the Series I Warrants. Each Series I Warrant shall be exercisable immediately upon issuance and for a period of five years thereafter. The aggregate exercise price of the Series I Warrants, except for a nominal exercise price of \$0.01 per share, is being pre-funded to the Company by Lincoln Park on the date such warrants are issued and, consequently, no additional consideration other than the nominal exercise price of \$0.01 per share is required to be paid to exercise the Series I Warrants. The Series I Warrants may be exercised on a “cashless” basis under certain circumstances set forth in the Series I Warrants. There is no established public trading market for the Series I Warrants, and we do not expect a market to develop.  |
| Common stock to be outstanding after this offering | 11,010,337 shares   |
| Use of proceeds                                    | We intend to use the net proceeds from this offering for clinical development of our product candidate(1), working capital and other general corporate purposes. See “Use of Proceeds” on page S-6.   |
| Risk factors                                       | See the “Risk Factors” section of this prospectus supplement and in the documents incorporated by reference in this prospectus supplement for a discussion of factors to consider before deciding to invest in our securities.  |
| Concurrent Private Placement                       | In a concurrent private placement, we are issuing and selling to Lincoln Park 931,967 Series J Warrants to purchase up to 931,967 shares of our common stock. We will receive gross proceeds from the concurrent private placement transaction solely to the extent such Series J Warrants are exercised for cash. The Series J Warrants will be exercisable beginning on September 30, 2020 (the “Initial Exercise Date”) at an exercise price of \$0.948 per share and will expire five years from the Initial Exercise Date (or five-and-a-half years from the date such warrants are issued). The exercise price of the Series J Warrants and the shares of our common stock issuable upon the exercise of the Series J Warrants will be subject to adjustment in the event of any stock dividends and splits, reverse stock split, recapitalization, reorganization or similar transaction, as described in the Series J Warrants. The Series J Warrants may be exercised on a “cashless” basis under certain circumstances set forth in the Series J Warrants. The Series J Warrants and the shares of common stock underlying the Series J Warrants are being offered, issued and sold by us pursuant to the exemption from the registration requirements of the Securities Act provided in Section 4(a)(2) of the Securities Act and Rule 506(b) of |

Regulation D promulgated thereunder. None of the Series J Warrants or the shares of common stock underlying the Series J Warrants are being offered or sold pursuant to this prospectus supplement or the accompanying base prospectus.

NASDAQ Capital Market symbol

“TROV”

Unless we indicate otherwise, all information in this prospectus supplement is based on 10,210,337 shares of common stock outstanding as of March 30, 2020 and excludes as of that date:

- 877 shares of common stock issuable upon conversion of our outstanding shares of Series A convertible preferred stock, or our Series A Convertible Preferred Stock;
- 975,233 shares of our common stock issuable upon exercise of outstanding stock options under our stock incentive plans at a weighted average exercise price of \$13.10 per share;
- 9,584,410 shares of our common stock issuable upon exercise of outstanding warrants at a weighted average exercise price of \$4.34 per share; and
- 212,798 shares of common stock reserved for future grants and awards under our stock incentive plans.

## RISK FACTORS

*An investment in our common stock involves a high degree of risk. Before deciding whether to invest in our common stock, you should consider carefully the risks described below and discussed under the section captioned “Risk Factors” in our most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q, which are each incorporated by reference in this prospectus supplement and the accompanying prospectus in their entirety, as well as any amendment or update to our risk factors reflected in subsequent filings with the SEC, together with other information in this prospectus supplement, the accompanying prospectus, and the information and documents incorporated by reference that we have authorized for use in connection with this offering. If any of these risks actually occur, our business, financial condition, results of operations or cash flows could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment.*

### **Risks Related to our Business**

***A pandemic, epidemic or outbreak of an infectious disease, such as COVID-19, may materially and adversely affect our business and operations.***

The recent outbreak of COVID-19 originated in Wuhan, China, in December 2019 and has since spread to multiple countries, including the United States and several European countries. On March 11, 2020, the World Health Organization declared the outbreak a pandemic. The COVID-19 pandemic is affecting the United States and global economies and may affect our operations and those of third parties on which we rely, including by causing disruptions in the supply of our product candidate and the conduct of current and future clinical trials. In addition, the COVID-19 pandemic may affect the operations of the FDA and other health authorities, which could result in delays of reviews and approvals, including with respect to our product candidate. The evolving COVID-19 pandemic is also likely to directly or indirectly impact the pace of enrollment in our clinical trials for at least the next several months and possibly longer as patients may avoid or may not be able to travel to healthcare facilities and physicians’ offices unless due to a health emergency and clinical trial staff can no longer get to the clinic. Such facilities and offices may also be required to focus limited resources on non-clinical trial matters, including treatment of COVID-19 patients, and may not be available, in whole or in part, for clinical trial services. Additionally, while the potential economic impact brought by, and the duration of the COVID-19 pandemic is difficult to assess or predict, the impact of the COVID-19 pandemic on the global financial markets may reduce our ability to access capital, which could negatively impact our short-term and long-term liquidity. The ultimate impact of the COVID-19 pandemic is highly uncertain and subject to change. We do not yet know the full extent of potential delays or impacts on our business, financing or clinical trial activities or on healthcare systems or the global economy as a whole. However, these effects could have a material impact on our liquidity, capital resources, operations and business and those of the third parties on which we rely.

### **Risks Related to this Offering**

***You will experience immediate dilution in the net tangible book value per share of the common stock you purchase.***

The public offering price per Share or Series I Warrant is substantially higher than our net tangible book value per share of common stock. After giving effect to the sale of 800,000 Shares and 131,967 Series I Warrants in this offering at the public offering price of \$1.073 per Share or Series I Warrant, and based on our net tangible book value as of December 31, 2019, if you purchase Shares or Series I Warrants in this offering you will suffer substantial and immediate dilution of \$0.133 per share in the net tangible book value of the common stock. This dilution figure deducts the estimated offering expenses payable from the public offering price. See “Dilution.”

***Because we will have broad discretion and flexibility in how the net proceeds from this offering are used, we may use the net proceeds in ways in which you disagree.***

We intend to use the net proceeds from this offering for clinical development of our product candidate, working capital and other general corporate purposes. See “Use of Proceeds” on page S-6. We have not allocated specific amounts of the net proceeds from this offering for any of the foregoing purposes. Accordingly, our management will have significant discretion and flexibility in applying the net proceeds of this offering. You will be relying on the judgment of our management with regard to the use of these net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the net proceeds are being used appropriately. It is possible that the net proceeds will be invested in a way that does not yield a favorable, or any, return for us. The failure of our management to use such funds effectively could have a material adverse effect on our business, financial condition, operating results and cash flow.

***You may experience future dilution as a result of future equity offerings and other issuances of our securities. In addition, this offering and future equity offerings and other issuances of our common stock or other securities may adversely affect our common stock price.***

In order to raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock at prices that may not be the same as the price per Share in this offering. We may not be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per Share paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our Common Stock or securities convertible into common stock in future transactions may be higher or lower than the price per share in this offering. In addition, we are issuing 931,967 Series J Warrants in a concurrent private placement. You will incur dilution upon exercise of any outstanding stock options, warrants or upon the issuance of shares of common stock under our stock incentive programs. In addition, the sale of shares in this offering and any future sales of a substantial number of shares of our common stock in the public market, or the perception that such sales may occur, could adversely affect the price of our common stock. We cannot predict the effect, if any, that market sales of those shares of common stock or the availability of those shares of common stock for sale will have on the market price of our common stock.

***There is no public market for the warrants to purchase shares of common stock being offered in this offering.***

There is no established public trading market for the Series I Warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply to list the Series I Warrants or Series J Warrants on any national securities exchange or other nationally recognized trading system, including the NASDAQ Capital Market. Without an active market, the liquidity of the warrants will be limited. The Warrants in this offering will be issued in physical form.

***Holders of our warrants will have no rights as a common stockholder until they acquire our common stock.***

Until you acquire shares of our common stock upon exercise of your Warrants, you will have no rights with respect to shares of our common stock issuable upon exercise of your warrants. Upon exercise of your warrants, you will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise date.

## USE OF PROCEEDS

We estimate that the net proceeds from the sale of the securities offered under this prospectus supplement, after deducting and estimated offering expenses payable by us will be \$980,000.

We intend to use the net proceeds from the sale of the shares for clinical development of our product candidate, working capital and for other general corporate purposes. The amounts and timing of our use of proceeds will vary depending on a number of factors, including the amount of cash generated or used by our operations. As a result, we will retain broad discretion in the allocation of the net proceeds of this offering. In addition, while we have not entered into any agreements, commitments or understandings relating to any significant transaction as of the date of this prospectus supplement, we may use a portion of the net proceeds to pursue acquisitions, joint ventures and other strategic transactions.

We will not receive any proceeds from the sale of common stock issuable upon exercise of the Series J Warrants that we are offering in the concurrent private placement unless and until such warrants are exercised. If the Series J Warrants are fully exercised for cash, we will receive additional proceeds of up to \$883,505

## DIVIDEND POLICY

We have never declared or paid cash dividends on our common stock. We currently intend to retain our future earnings, if any, for use in our business and therefore do not anticipate paying cash dividends in the foreseeable future. Payment of future dividends, if any, will be at the discretion of our board of directors after taking into account various factors, including our financial condition, operating results, current and anticipated cash needs and plans for expansion. Pursuant to the terms of the Series A Convertible Preferred Stock, dividends cannot be paid to the holders of our common stock so long as any dividends due on the Series A Convertible Preferred Stock remain unpaid.

## DILUTION

If you purchase Shares and/or Series I Warrants in this offering, your ownership interest will be diluted to the extent of the difference between the public offering price per security you will pay in this offering and the as adjusted net tangible book value per share of our common stock after giving effect to this offering. Net tangible book value per share is determined by dividing the number of outstanding shares of our common stock into our net tangible book value, which consists of total tangible assets (total assets less intangible assets) less total liabilities. As of December 31, 2019, we had a historical net tangible book value of \$7.3 million, or approximately \$0.85 per share.

Our pro forma net tangible book value as of December 31, 2019 is approximately \$8.8 million, or approximately \$0.91 per share of our common stock, after giving effect to the exercise of 1,005,072 Series H Warrants at \$1.56 per share in January 2020.

Purchasers participating in this offering will incur immediate, substantial dilution. After giving effect to the sale of securities in this offering at the public offering price of \$0.948 per security, and after deducting estimated offering expenses payable by us, our pro forma, as adjusted net tangible book value per share of our common stock at December 31, 2019 would have been approximately \$9.7 million, or \$0.94 per share. This represents an immediate increase in net tangible book value per share of our common stock of approximately \$0.03 per share to existing stockholders and an immediate dilution of approximately \$0.133 per share to purchasers in this offering. The following table illustrates this per share dilution:

|  |    |                     |
|--|----|---------------------|
| Public offering price per Share or Series I Warrant                              | \$ | 1.073               |
| Pro forma net tangible book value per share as of December 31, 2019              | \$ | 0.91                |
| Increase per share attributable to this offering                                 | \$ | <u>0.03</u>         |
| Pro forma, as adjusted net tangible book value per share as of December 31, 2019 | \$ | <u>0.94</u>         |
| Dilution in net tangible book value per share to new investors in this offering  | \$ | <u><u>0.133</u></u> |

The above discussion and table is based on 3,831,879 shares of common stock outstanding as of December 31, 2019 and excludes as of that date:

- 877 shares of common stock issuable upon conversion of outstanding Series A Convertible Preferred Stock;
- 1,015,418 shares of our common stock issuable upon exercise of outstanding stock options under our stock incentive plans at a weighted average exercise price of \$12.77 per share;
- 10,589,482 shares of our common stock issuable upon exercise of outstanding warrants at a weighted average exercise price of \$4.02 per share; and
- 167,888 shares of common stock reserved for future grants and awards under our stock incentive plans.

To the extent that any outstanding options or warrants are exercised, new options are issued under our stock incentive plans, or we otherwise issue additional shares of common stock in the future, at a price less than the public offering price, there will be further dilution to new investors.

## PRIVATE PLACEMENT TRANSACTION

In a concurrent private placement (the “Private Placement Transaction”), we are selling to Lincoln Park 931,967 Series J Warrants.

The Series J Warrants and the shares of our common stock issuable upon the exercise of the Series J Warrants are not being registered under the Securities Act, are not being offered pursuant to this prospectus supplement and the accompanying prospectus and are being offered pursuant to the exemption provided in Section 4(a)(2) under the Securities Act and Rule 506(b) promulgated thereunder. Accordingly, purchasers may only sell shares of common stock issued upon exercise of the Series J Warrants pursuant to an effective registration statement under the Securities Act covering the resale of those shares, an exemption under Rule 144 under the Securities Act or another applicable exemption under the Securities Act.

*Exercisability.* The Series J Warrants are exercisable six months after the date of issuance, and at any time thereafter up to the five year anniversary of the date of issuance, at which time any unexercised Series J Warrants will expire and cease to be exercisable.

*Exercise Price.* The Series J Warrants will have an exercise price of \$0.948 per share. The exercise price is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock and also upon any distributions of assets, including cash, stock or other property to our stockholders.

*Exercise Limitation.* A holder will not have the right to exercise any portion of the warrant if the holder (together with its affiliates) would beneficially own in excess of 4.99% (or, upon election of the holder, 9.99%) of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Series J Warrants. However, any holder may increase or decrease such percentage, provided that any increase will not be effective until the 61st day after providing notice of such election.

*Cashless Exercise.* If, at the time a holder exercises its Series J Warrant, there is no effective registration statement registering the resale of the shares underlying the warrant, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of common shares determined according to a formula set forth in the Series J Warrants.

*Transferability.* Subject to applicable laws, the Series J Warrants may be offered for sale, sold, transferred or assigned without our consent.

*Exchange Listing.* There is no established trading market for the Series J Warrants and we do not expect a market to develop. In addition, we do not intend to apply for the listing of the Series J Warrants on any national securities exchange or other trading market. Without an active trading market, the liquidity of the Series J Warrants will be limited.

*Fundamental Transactions.* If a fundamental transaction occurs, then the successor entity will succeed to, and be substituted for us, and may exercise every right and power that we may exercise and will assume all of our obligations under the Series J Warrants with the same effect as if such successor entity had been named in the Series J Warrants itself.

*Rights as a Stockholder.* Except as otherwise provided in the Series J Warrants or by virtue of such holder’s ownership of shares of our common stock, the holder of a Series J Warrant does not have the rights or privileges of a holder of our common stock, including any voting rights, until the holder exercises the Series J Warrant.

## DESCRIPTION OF SECURITIES WE ARE OFFERING

### Common Stock

The holders of our common stock are entitled to one vote per share. Our certificate of incorporation does not provide for cumulative voting. The holders of our common stock are entitled to receive ratably such dividends, if any, as may be declared by our board of directors out of legally available funds; however, the current policy of our board of directors is to retain earnings, if any, for operations and growth. Upon liquidation, dissolution or winding-up, the holders of our common stock are entitled to share ratably in all assets that are legally available for distribution. The holders of our common stock have no preemptive, subscription, redemption or conversion rights. The rights, preferences and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of any series of preferred stock, which may be designated solely by action of our board of directors and issued in the future.

### Series I Warrants

The following summary of certain terms and provisions of the Series I Warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by the provisions of the warrant.

*Exercisability.* The Series I Warrants are exercisable any time after the date of issuance, and at any time thereafter up to the five year anniversary of the date of issuance, at which time any unexercised Series I Warrants will expire and cease to be exercisable.

*Exercise Price.* The Series I Warrants will have an exercise price of \$0.01 per share. The exercise price is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock and also upon any distributions of assets, including cash, stock or other property to our stockholders.

*Exercise Limitation.* A holder will not have the right to exercise any portion of the warrant if the holder (together with its affiliates) would beneficially own in excess of 4.99% (or, upon election of the holder, 9.99%) of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Series I Warrants. However, any holder may increase or decrease such percentage, provided that any increase will not be effective until the 61st day after providing notice of such election.

*Cashless Exercise.* If, at the time a holder exercises its Series I Warrant, there is no effective registration statement registering, or the prospectus contained therein is not available for an issuance of the shares underlying the warrant to the holder, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of common shares determined according to a formula set forth in the Series I Warrants.

*Transferability.* Subject to applicable laws, the Series I Warrants may be offered for sale, sold, transferred or assigned without our consent.

*Exchange Listing.* There is no established trading market for the Series I Warrants and we do not expect a market to develop. In addition, we do not intend to apply for the listing of the Series I Warrants on any national securities exchange or other trading market. Without an active trading market, the liquidity of the Series I Warrants will be limited.

*Fundamental Transactions.* If a fundamental transaction occurs, then the successor entity will succeed to, and be substituted for us, and may exercise every right and power that we may exercise and will assume all of our obligations under the Series I Warrants with the same effect as if such successor entity had been named in the Series I Warrants itself.



*Rights as a Stockholder.* Except as otherwise provided in the Series I Warrants or by virtue of such holder's ownership of shares of our common stock, the holder of a Series I Warrant does not have the rights or privileges of a holder of our common stock, including any voting rights, until the holder exercises the Series I Warrant.

## **PLAN OF DISTRIBUTION**

Pursuant to this prospectus supplement and the accompanying prospectus, we are offering 800,000 Shares and 131,967 Series I Warrants at a public offering price of \$1.073 per Share or Series I Warrants. The securities are being offered directly to Lincoln Park without a placement agent, underwriter, broker or dealer.

The transfer agent and registrar for our common stock is Philadelphia Stock Transfer, Inc. Our common stock is listed on The Nasdaq Capital Market under the symbol "TROV."

## **LEGAL MATTERS**

The validity of the securities offered hereby will be passed upon for us by Sheppard, Mullin, Richter & Hampton, New York, New York. Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., New York, New York, is acting as counsel for Lincoln Park in connection with this offering.

## **EXPERTS**

The consolidated financial statements as of December 31, 2019 and 2018 and for each of the two years in the period ended December 31, 2019 incorporated by reference in this prospectus supplement have been so incorporated in reliance on the report of BDO USA, LLP, an independent registered public accounting firm (the report on the consolidated financial statements contains an explanatory paragraph regarding the Company's ability to continue as a going concern), incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

## **WHERE YOU CAN FIND MORE INFORMATION**

This prospectus supplement constitutes a part of the registration statement on Form S-3 that we have filed with the SEC under the Securities Act. As permitted by the SEC's rules, this prospectus supplement and any accompanying prospectus, which forms a part of the registration statement, do not contain all of the information that is included in the registration statement. You will find additional information about us in the registration statement. Any statement made in this prospectus supplement or any accompanying prospectus concerning legal documents are not necessarily complete and you should read the documents that are filed as exhibits to the registration statement or otherwise filed with the SEC for a more complete understanding of the document or matter.

We are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, and file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read our SEC filings, including the registration statement, over the Internet at the SEC's website at <http://www.sec.gov>. We also maintain a website at [www.trovagene.com](http://www.trovagene.com), at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not part of this prospectus.

You may also read and copy any document we file with the SEC at its public reference facilities at 100 F Street, N.E., Room 1580, Washington, DC 20549. You may also obtain copies of these documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities. You may also request a copy of these filings, at no cost, by writing or telephoning us at: 11055 Flintkote Avenue, San Diego, California, 92121, (858) 952-7570.

## INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

This prospectus supplement is part of the registration statement but the registration statement includes and incorporates by reference additional information and exhibits. The SEC permits us to “incorporate by reference” the information contained in documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents rather than by including them in this prospectus supplement. Information that is incorporated by reference is considered to be part of this prospectus supplement and you should read it with the same care that you read this prospectus supplement and the accompanying prospectus. Information that we file later with the SEC will automatically update and supersede the information that is either contained, or incorporated by reference, in this prospectus supplement, and will be considered to be a part of this prospectus supplement from the date those documents are filed.

We incorporate by reference the documents listed below, all filings filed by us pursuant to the Exchange Act after the date of the registration statement of which this prospectus supplement and the accompanying prospectus forms a part, and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the time that all securities covered by this prospectus supplement have been sold; provided, however, that we are not incorporating any information furnished under either Item 2.02 or Item 7.01 of any current report on Form 8-K:

- [our Annual Report on Form 10-K for the year ended December 31, 2019 filed on February 27, 2020;](#)
- [our Definitive Proxy Statement on Schedule 14A, filed on March 4, 2020;](#)
- Our Current Reports on Form 8-K filed [January 13, 2020](#), [January 21, 2020](#), [January 27, 2020](#), [January 29, 2020](#), [January 30, 2020](#), [February 5, 2020](#), [February 13, 2020](#), [March 5, 2020](#) and [March 31, 2020](#); and
- [the description of our common stock contained in our Registration Statement on Form 8-A filed with the Commission on May 23, 2012.](#)

Any statements made in a document incorporated by reference in this prospectus supplement are deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement in this prospectus supplement or in any other subsequently filed document, which is also incorporated by reference, modifies or supersedes the statement. Any statement made in this prospectus supplement is deemed to be modified or superseded to the extent a statement in any subsequently filed document, which is incorporated by reference in this prospectus supplement, modifies or supersedes such statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement.

The information relating to us contained in this prospectus supplement should be read together with the information in the documents incorporated by reference. In addition, certain information, including financial information, contained in this prospectus supplement, the accompanying prospectus or incorporated by reference in this prospectus supplement and the accompanying prospectus should be read in conjunction with documents we have filed with the SEC.

We will provide to each person, including any beneficial holder, to whom a prospectus supplement is delivered, at no cost, upon written or oral request, a copy of any or all of the information that has been incorporated by reference in the prospectus supplement but not delivered with the prospectus supplement. Requests for documents should be by writing to or telephoning us at the following address: Trovagene, Inc., 11055 Flintkote Avenue, Suite B, San Diego, CA 92121; (858) 952-7570. Exhibits to these filings will not be sent unless those exhibits have been specifically incorporated by reference in such filings.

PROSPECTUS



Trovagene, Inc.

**Common Stock**  
**Preferred Stock**  
**Debt Securities**  
**Warrants**  
**Units**

We may offer and sell, from time to time in one or more offerings, any combination of common stock, preferred stock, debt securities, warrants to purchase common stock, preferred stock or debt securities, or any combination of the foregoing, either individually or as units comprised of one or more of the other securities, having an aggregate initial offering price not exceeding \$150,000,000.

This prospectus provides a general description of the securities we may offer. Each time we sell a particular class or series of securities, we will provide specific terms of the securities offered in a supplement to this prospectus. The prospectus supplement and any related free writing prospectus may also add, update or change information contained in this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. You should read carefully this prospectus, the applicable prospectus supplement and any related free writing prospectus, as well as any documents incorporated by reference herein or therein before you invest in any of our securities.

The specific terms of any securities to be offered, and the specific manner in which they may be offered, will be described in one or more supplements to this prospectus. This prospectus may not be used to consummate sales of any of these securities unless it is accompanied by a prospectus supplement. Before investing, you should carefully read this prospectus and any related prospectus supplement.

Our common stock is presently listed on The Nasdaq Capital Market under the symbol "TROV." On June 21, 2019, the last reported sale price of our common stock was \$2.55 per share. The applicable prospectus supplement will contain information, where applicable, as to any other listing on The Nasdaq Capital Market or any securities market or other exchange of the securities, if any, covered by the prospectus supplement. Prospective purchasers of our securities are urged to obtain current information as to the market prices of our securities, where applicable.

These securities may be sold directly by us, through dealers or agents designated from time to time, to or through underwriters, dealers, or through a combination of these methods on a continuous or delayed basis. See "*Plan of Distribution*" in this prospectus. We may also describe the plan of distribution for any particular offering of our securities in a prospectus supplement. If any agents, underwriters or dealers are involved in the sale of any securities in respect of which this prospectus is being delivered, we will disclose their names and the nature of our arrangements with them in a prospectus supplement. The price to the public of such securities and the net proceeds we expect to receive from any such sale will also be included in a prospectus supplement.

The aggregate market value of our outstanding common stock held by non-affiliates was approximately \$19,624,009 which was calculated based on 5,441,363 shares of outstanding common stock held by non-affiliates as of June 24, 2019, and a price per share of \$3.62, the closing price of our common stock on May 3, 2019. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell securities pursuant to this registration statement with a value more than one-third of the aggregate market value of our common stock held by non-affiliates in any 12-month period, so long as the aggregate market value of our common stock held by non-affiliates is less than \$75.0 million. In the event that subsequent to the effective date of this registration statement, the aggregate market value of our outstanding common stock held by non-affiliates equals or exceeds \$75.0 million, then the one-third limitation on sales shall not apply to additional sales made pursuant to this registration statement. We have sold \$3,530,946 of securities pursuant to General Instruction I.B.6 of Form S-3 during the 12 calendar months prior to, and including, the date of this registration statement.

**Investing in our securities involves various risks. See "*Risk Factors*" contained herein for more information on these risks. Additional risks will be described in the related prospectus supplements under the heading "*Risk Factors*." You should review that section of the related prospectus supplements for a discussion of matters that investors in our securities should consider.**

**Neither the U.S. Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities, or passed upon the adequacy or accuracy of this prospectus or any accompanying prospectus supplement. Any representation to the contrary is a criminal offense.**

The date of this prospectus is July 1, 2019.

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## ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the U.S. Securities and Exchange Commission, or SEC, using a “shelf” registration process. Under this shelf registration statement, we may sell from time to time in one or more offerings of common stock and preferred stock, various series of debt securities and/or warrants to purchase any of such securities, either individually or as units comprised of a combination of one or more of the other securities in one or more offerings up to a total dollar amount of \$150,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we sell any type or series of securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of that offering.

This prospectus does not contain all of the information included in the registration statement. For a more complete understanding of the offering of the securities, you should refer to the registration statement, including its exhibits. We may add, update or change in a prospectus supplement or free writing prospectus any of the information contained in this prospectus or in the documents we have incorporated by reference into this prospectus. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. This prospectus, together with the applicable prospectus supplement, any related free writing prospectus and the documents incorporated by reference into this prospectus and the applicable prospectus supplement, will include all material information relating to the applicable offering. You should carefully read both this prospectus and the applicable prospectus supplement and any related free writing prospectus, together with the additional information described under “*Where You Can Find More Information*,” before buying any of the securities being offered.

We have not authorized any dealer, agent or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus, any accompanying prospectus supplement or any related free writing prospectus that we may authorize to be provided to you. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or an accompanying prospectus supplement, or any related free writing prospectus that we may authorize to be provided to you. This prospectus, the accompanying prospectus supplement and any related free writing prospectus, if any, do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus, the accompanying prospectus supplement or any related free writing prospectus, if any, constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. You should not assume that the information contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference (as our business, financial condition, results of operations and prospects may have changed since that date), even though this prospectus, any applicable prospectus supplement or any related free writing prospectus is delivered or securities are sold on a later date.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in this prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

This prospectus may not be used to consummate sales of our securities, unless it is accompanied by a prospectus supplement. To the extent there are inconsistencies between any prospectus supplement, this prospectus and any documents incorporated by reference, the document with the most recent date will control.

As permitted by the rules and regulations of the SEC, the registration statement, of which this prospectus forms a part, includes additional information not contained in this prospectus. You may read the registration statement and the other reports we file with the SEC at the SEC’s web site or at the SEC’s offices described below under the heading “*Where You Can Find Additional Information*.”

### Company References

In this prospectus “the Company,” “we,” “us,” and “our” refer to Trovagene, Inc., a Delaware corporation, and its subsidiaries, unless the context otherwise requires.

## SUMMARY

### Overview

We are a clinical-stage, oncology therapeutics company, taking a precision medicine approach to develop targeted therapies for the treatment of patients with leukemias, lymphomas and solid tumor cancers. By integrating biomarkers into our clinical development programs, we will be able to identify patients who are most likely to respond to treatment across a number of cancer types and associated indications where there is a significant medical need to provide new therapeutic options.

Our drug candidate, onvansertib (formerly known as PCM-075), is a first-in-class, 3rd generation, oral and highly-selective Polo-like Kinase 1 (“PLK1”) adenosine triphosphate (“ATP”) competitive inhibitor. PLK1 is essential for precisely regulating the cell division and maintaining genome stability in mitosis (cell division), spindle assembly, and DNA damage response. Studies have shown that PLK1 is highly expressed in most cancers, and its over-expression is associated with poor prognosis in patients. Data has shown that blocking the expression of PLK1 by kinase inhibitors can effectively inhibit the proliferation of and induce apoptosis (death) of tumor cells.

On March 15, 2017, we announced the licensing of onvansertib (PCM-075), a PLK1 inhibitor, from Nerviano Medical Sciences S.r.l. (“Nerviano”), the largest oncology research and development company in Italy and a leader in protein kinase drug development (Polo-like Kinase Inhibitors).

Onvansertib is the only PLK1 selective ATP competitive inhibitor, administered orally with apparent antitumor activity in different preclinical models currently in clinical development. The Polo-like Kinase family consists of 5 members (PLK1-PLK5) and they are involved in multiple functions of cell division, including the regulation of centrosome maturation, checkpoint recovery, spindle assembly, cytokinesis, apoptosis and many others. PLK1 plays a crucial role in the regulation of mitotic checkpoints. The overexpression of PLK1 can lead to immature cell division with aneuploidy, a hallmark of cancer. PLK1 is over-expressed in a wide variety of hematologic and solid tumor malignancies including acute myeloid leukemia, prostate, lung, breast, and colorectal cancer. In addition, several studies have shown that over-expression of PLK1 correlates with poor prognosis.

Onvansertib has been tested in-vivo in different xenograft and transgenic models at times suggesting tumor growth inhibition or tumor regression when used in combination with other therapies. The antiproliferative activity of onvansertib was evaluated on a panel of 148 tumor cell lines and appeared highly active with an IC50 (a measure concentration for 50% target inhibition) below 100 nM in 75 cell lines and IC50 values below 1 uM in 133 out of 148 cell lines.

Onvansertib was developed to have high selectivity for PLK1, to be administered orally, and to have a relatively short drug half-life of approximately 24 hours compared to previous pan Polo-like inhibitors. A Phase 1 safety study was successfully completed in patients with advanced metastatic solid tumors and published in 2017 in *Investigational New Drugs*. We have three active Investigational New Drug (“IND”) applications in place with the U.S. Food and Drug Administration (“FDA”), and three ongoing clinical studies. The first study is TROV-052 (ClinicalTrials.gov Identifier NCT03303339), a Phase 1b/2 open-label clinical trial of onvansertib in combination with standard-of-care low-dose cytarabine (“LDAC”) or decitabine for patients with relapsed or refractory Acute Myeloid Leukemia (“AML”). The second study is TROV-053 (ClinicalTrials.gov Identifier NCT03414034), a Phase 2 open-label clinical trial of onvansertib in combination with Zytiga® (abiraterone acetate)/prednisone, all administered orally, for patients with metastatic Castration-Resistant Prostate Cancer (“mCRPC”) and the third study is TROV-054 (ClinicalTrials.gov Identifier NCT03829410), a Phase 1b/2 open-label clinical trial of onvansertib in combination with FOLFIRI (folinic acid, fluorouracil and irinotecan) and Avastin® (bevacizumab) for patients with metastatic Colorectal Cancer (“mCRC”), who have a KRAS mutation.

Development of onvansertib, as part of a combination regimen with already approved drugs, has the potential to bring new treatment options to patients across a wide array of cancers. Onvansertib has shown preclinical antitumor activity as a single agent and synergy (interaction of discrete drugs such that the total effect is greater than the sum of the individual effects) in combination with numerous different chemotherapeutics and targeted therapies, such as Zytiga® (abiraterone acetate), Avastin® (bevacizumab), Camptosa® (irinotecan), Gemzar® (gemcitabine), Beleodaq® (belinostat), Venclexta® (venetoclax), quizartinib (AC220), a development stage FLT3 inhibitor, Taxol® (paclitaxel), and Velcade® (bortezomib) in AML, mCRPC, mCRC and other hematologic and solid tumor cancers.

On August 16, 2017, we announced results of preclinical research indicating potential synergy of onvansertib with an investigational FLT3 Inhibitor, quizartinib by Daiichi Sankyo, in FLT3 mutant xenograft mouse models. This synergy assessment study was conducted for us by a third-party contract research group. Approximately one third of AML patients

harbor FLT3-mutated blood cancer cells. In the fourth quarter of 2018, the FDA approved Xospata (gilteritinib) by Astellas, which joins Rydapt® (midostaurin) by Novartis for the treatment of adult patients with AML that are FLT3 mutation-positive. A third FLT3 inhibitor, quizartinib by Daiichi Sankyo, is currently under review by the FDA. We believe that a combination of onvansertib with a FLT3 inhibitor for AML patients with a FLT3 mutation could extend treatment response and possibly slow or reduce resistance to FLT3 activity.

On August 21, 2017, we announced results of preclinical research indicating potential synergy of onvansertib with a histone deacetylase (“HDAC”) inhibitor in Non-Hodgkin Lymphoma (“NHL”) cell lines. This synergy assessment study was conducted by Dr. Steven Grant, Associate Director for Translational Research and co-Leader, Developmental Therapeutics Program, Massey Cancer Center. Patients with relapsed or refractory NHL, such as cutaneous T-cell lymphoma and peripheral T-cell lymphoma, may be prescribed approved HDAC inhibitors and we believe this continues to be an area of unmet medical need. Dr. Grant’s data appeared to indicate that the combination of onvansertib with Beleodaq® (belinostat), an HDAC inhibitor indicated for the treatment of patients with relapsed or refractory peripheral T-cell lymphoma, reduced cancer cells by up to 80% in two different forms of NHL (aggressive double-hit B-cell lymphoma and mantle cell lymphoma) cell lines.

On October 18, 2017, we announced results of preclinical research indicating potential synergy of onvansertib with abiraterone acetate in C4-2 prostate cancer cells. This synergy assessment study was conducted by Dr. Michael Yaffe M.D., Ph.D. FACS, David H. Koch Professor of Biology and Biological Engineering at Massachusetts Institute of Technology (“MIT”). The results appeared to indicate that the combination of onvansertib with Zytiga® (abiraterone) decreased cell viability in mCRPC tumor cells and the apparent synergy observed was greater than the expected effect of combining the two drugs. Zytiga® is indicated for use in combination with prednisone for the treatment of patients with mCRPC who have received prior chemotherapy containing docetaxel. We believe there is an unmet medical need to improve on the resistance to hormone therapy and extend the benefit of response to abiraterone for mCRPC patients.

Our strategy includes integrating a predictive clinical biomarker approach into our onvansertib clinical development program, which we believe may enable us to tailor treatment to specific sub-populations of patients who are most likely to respond and have a positive clinical impact. PLK1 uniquely phosphorylates translational control tumor protein (“TCTP”) to form pTCTP and inhibition of this enzymatic activity by onvansertib appears to be predictive of patient response to treatment.

### **Onvansertib Phase 1 Safety Study in Solid Tumors**

A Phase 1 safety study of onvansertib was completed in patients with advanced metastatic solid tumor cancers and published in July, 2017, in the peer-reviewed journal *Investigational New Drugs*. Dr. Glen Weiss, Medical Oncologist at Goodyear, AZ and affiliated with Cancer Treatment Centers of America at Western Regional Medical Center, was the principal investigator and first author of the publication, entitled “*Phase 1 Dose-Escalation Study of NMS-1286937, an Orally Available Polo-like Kinase 1 Inhibitor, in Patients with Advanced or Metastatic Solid Tumors.*” This study evaluated first-cycle dose limiting toxicities and related maximum tolerated dose with data indicating a manageable safety profile for onvansertib (also known as PCM-075 and NMS-1286937) for the treatment of advanced or metastatic solid tumors, with transient adverse events that were likely related to the drug’s mechanism of action. The authors believe that data from preclinical work, coupled with the results of the Phase 1 trial, suggest that onvansertib could become a new therapeutic option for the treatment of solid tumor and hematologic cancers.

In this trial, onvansertib was administered orally, once daily for five consecutive days, every three weeks, to evaluate first cycle dose-limiting toxicities and related maximum tolerated dose in adult subjects with advanced/metastatic solid tumors. The study was also intended to evaluate onvansertib’s pharmacokinetic profile in plasma, its anti-tumor activity, and its ability to modulate intracellular targets in biopsied tissue. The study identified thrombocytopenia and neutropenia as the primary toxicities, which is consistent with the expected mechanism of action of onvansertib and results from preclinical studies. These hematologic toxicities were reversible, with recovery usually occurring within 3 weeks. No gastrointestinal disorders, mucositis, or alopecia was observed, confirming that bone marrow cells are the most sensitive to onvansertib inhibition with the applied dosing schedule.

We are utilizing the existing IND applications to develop onvansertib in solid tumors as part of our clinical development expansion plans, with our initial focus in mCRPC and mCRC.

### **Onvansertib Phase 2 Study in metastatic Castration-Resistant Prostate Cancer**

On December 14, 2017, we announced the submission of our Phase 2 protocol of onvansertib in combination with abiraterone acetate (Zytiga® - Johnson & Johnson) for the treatment of mCRPC, to the FDA and our active solid tumor IND. In



this multi-center, open-label, Phase 2 trial, onvansertib in combination with the standard dose of Zytiga® and prednisone, all administered orally, will be evaluated for safety and efficacy. The primary efficacy endpoint is the proportion of patients achieving disease control after 12 weeks of study treatment, as defined by lack of Prostate Specific Antigen (“PSA”) progression in patients who are showing signs of early progressive disease (rise in PSA but minimally symptomatic or asymptomatic) while currently receiving androgen deprivation therapy (“ADT”), abiraterone and prednisone.

This ongoing Phase 2 clinical study is being conducted at three Harvard Medical sites: Beth Israel Deaconess Medical Center, Dana Farber Cancer Institute and Massachusetts General Hospital, in Boston Massachusetts. Dr. David Einstein at the Genitourinary Oncology Program at Beth Israel Deaconess Medical Center and Harvard Medical School is the principal investigator for the Phase 2 mCRPC trial.

### **Onvansertib Phase 1b/2 Study in metastatic Colorectal Cancer**

In December, 2018, we submitted a new IND application and protocol for our Phase 1b/2 trial of onvansertib in combination with FOLFIRI and Avastin® (bevacizumab) for the second-line treatment of metastatic Colorectal Cancer with a KRAS mutation. On January 16, 2019, we received notification from the FDA that the “study may proceed” and on January 29, 2019, we announced an agreement with PoC Capital, LLC to fund the clinical development program. In this open-label, Phase 1b/2 trial, onvansertib in combination with standard-of-care FOLFIRI and Avastin® is being evaluated for safety and efficacy. The trial, “*A Phase 1b/2 Study of Onvansertib (PCM-075) in Combination with FOLFIRI and Bevacizumab for Second-Line Treatment of Metastatic Colorectal Cancer in Patients with a KRAS Mutation*” will enroll up to 44 patients. We plan to conduct this trial at two prestigious cancer centers: USC Norris Comprehensive Cancer Center and The Mayo Clinic Arizona, with initiation anticipated in mid-2019.

### **Onvansertib Phase 1b/2 Study in Acute Myeloid Leukemia**

In June, 2017, we announced the submission of our IND application and our Phase 1b/2 protocol of onvansertib in combination with standard-of-care chemotherapy for the treatment of AML to the FDA. In July, 2017, we received notification from the FDA that our Phase 1b/2 clinical trial of onvansertib in patients with AML “may proceed”. On October 9, 2017, we announced that the FDA granted Orphan Drug Designation to onvansertib for the treatment of AML. We initiated our Phase 1b/2 AML trial in November, 2017 and enrolled our first patient in February, 2018. On August 29, 2018, we announced that the European Medicinal Agency granted Orphan Drug Designation to onvansertib for the treatment of AML in the European Union (“EU”).

The Phase 1b/2 is an open-label trial to evaluate the safety and anti-leukemic activity of onvansertib in combination with standard-of-care chemotherapy in patients with AML. Phase 1b is a dose escalation trial to evaluate the safety, tolerability, dose and scheduling of onvansertib, and to determine a recommended clinical treatment dose for the Phase 2 continuation trial.

Pharmacokinetics of onvansertib and correlative biomarker activity will be assessed throughout the Phase 1b and Phase 2 segments of the trial. The Phase 2 continuation trial is open-label with administration of the recommended onvansertib clinical dose in combination with standard-of-care chemotherapy to further evaluate safety and assess efficacy. Doses of onvansertib will be administered orally each day on Days 1-5, in a 21 - 28-daycycle in both Phase 1b and Phase 2.

To date, we have completed the first five dose escalation treatment cohorts (12 mg/m<sup>2</sup>), 18 mg/m<sup>2</sup>), 27 mg/m<sup>2</sup>), 40 mg/m<sup>2</sup>) and 60 mg/m<sup>2</sup>) in the Phase 1b segment of this trial. A total of nine sites are conducting this trial, which is being led by Hematologist Jorge Cortes, M.D., Deputy Department Chair, Department of Leukemia, Division of Cancer Medicine, The University of Texas MD Anderson Cancer Center and Hematologist Amer Zeidan, MBBS, MHS, assistant professor of Medicine at Yale School of Medicine, Hematology expert at Yale Cancer Center.

### **Optimizing Drug Development with Correlative Biomarker Analysis using Circulating Tumor DNA**

We have significant experience and expertise with biomarkers and technology in cancer, including AML. We are using our Precision Cancer Medicine (“PCM®”) technology to measure PLK1 enzymatic activity to potentially identify patients most likely to respond to onvansertib and to measure patient therapy response. The TCTP is phosphorylated by PLK1 at residue serine 46 (pTCTP) and has been shown to be a specific marker of PLK1 activity in-vivo in preclinical models. In our ongoing clinical trial in AML, we validated that pTCTP and TCTP are present and can be detected by capillary Western-Blot (“WB”) in peripheral blood mononuclear cells (“PBMC”) isolated from healthy donors and AML patients, 24-hours after blood collection. As an exploratory objective of the Phase 1b segment of the trial, we are assessing the extent of PLK1 inhibition by



onvansertib in patients receiving treatment and plan to use this information and methodology going forward in the Phase 2 continuation trial, and beyond.

Technological advancements in the molecular characterization of cancers have enabled researchers to identify an increasing number of key molecular drivers of cancer progression. These discoveries have led to multiple novel anticancer therapeutics and clinical benefit in selected patient populations. As a clinical-stage oncology therapeutics company developing targeted therapies to treat leukemias, lymphomas and solid tumor cancers, our objective is to optimize drug development by using our proprietary PCM® expertise and biomarker strategy as part of our approach.

Our laboratory in San Diego, California, enables us to use our technology platform to optimize drug development and patient care. In the clinical development of our drug candidate, onvansertib, correlative biomarker analysis are being used to help inform decisions in the evaluation of dose-response and optimal regimen for desired pharmacologic effect and safety. Additionally, some biomarkers can be used as a surrogate endpoint for efficacy and/or toxicity, as well as predicting patients' response by identifying certain patient populations that are more likely to respond to the drug therapy.

### **Operating Segment and Geographic Information**

We operate in one business segment, using one measurement of profitability to manage our business. We do not assess the performance of our geographic regions on measures of revenue or comprehensive income or expense. In addition, all of our principal operations, assets and decision-making functions are located in the U.S. We do not produce reports for, or measure the performance of, our geographic regions on any asset-based metrics. Therefore, geographic information is not presented for revenues or long-lived assets.

### **Company Information**

We were incorporated in the State of Florida on April 26, 2002. On July 2, 2004, we acquired Xenomics, a California corporation, which was in business to develop and commercialize urine-based molecular diagnostics technology. In 2007, we changed our fiscal year end from January 31 to December 31 and in January 2010, we re-domesticated our state of incorporation from Florida to Delaware and our name was changed to Trovogene, Inc. We have trademarks for the name TROVAGENE, TROVAGENE PRECISION CANCER MEDICINE and TROVAGENE ONCOLOGY. Our principal executive offices are located at 11055 Flintkote Avenue, San Diego, CA 92121, and our telephone number is 858-952-7570. Our website address is [www.trovageneoncology.com](http://www.trovageneoncology.com). The information on our website is not part of this prospectus supplement. We have included our website address as a factual reference and do not intend it to be an active link to our website.

### **The Securities We May Offer**

We may offer shares of our common stock and preferred stock, various series of debt securities and warrants to purchase any of such securities, either individually or in units, from time to time under this prospectus, together with any applicable prospectus supplement and related free writing prospectus, at prices and on terms to be determined by market conditions at the time of offering. If we issue any debt securities at a discount from their original stated principal amount, then, for purposes of calculating the total dollar amount of all securities issued under this prospectus, we will treat the initial offering price of the debt securities as the total original principal amount of the debt securities. Each time we offer securities under this prospectus, we will provide offerees with a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities being offered, including, to the extent applicable:

- designation or classification;
- aggregate principal amount or aggregate offering price;
- maturity, if applicable;
- original issue discount, if any;
- rates and times of payment of interest or dividends, if any;
- redemption, conversion, exchange or sinking fund terms, if any;

- conversion or exchange prices or rates, if any, and, if applicable, any provisions for changes to or adjustments in the conversion or exchange prices or rates and in the securities or other property receivable upon conversion or exchange;
- ranking;
- restrictive covenants, if any;
- voting or other rights, if any; and
- important United States federal income tax considerations.

A prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update, or change information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part.

We may sell the securities to or through underwriters, dealers or agents or directly to purchasers. We, as well as any agents acting on our behalf, reserve the sole right to accept and to reject in whole or in part any proposed purchase of securities. Each prospectus supplement will set forth the names of any underwriters, dealers or agents involved in the sale of securities described in that prospectus supplement and any applicable fee, commission or discount arrangements with them, details regarding any over-allotment option granted to them, and net proceeds to us. The following is a summary of the securities we may offer with this prospectus.

### **Common Stock**

We currently have authorized 150,000,000 shares of common stock, par value \$0.0001 per share. As of June 24, 2019, 5,441,363 shares of common stock were issued and outstanding. We may offer shares of our common stock either alone or underlying other registered securities convertible into or exercisable for our common stock. Holders of our common stock are entitled to such dividends as our board of directors (the “Board of Directors” or “Board”) may declare from time to time out of legally available funds, subject to the preferential rights of the holders of any shares of our preferred stock that are outstanding or that we may issue in the future. Currently, we do not pay any dividends on our common stock. Each holder of our common stock is entitled to one vote per share. In this prospectus, we provide a general description of, among other things, the rights and restrictions that apply to holders of our common stock.

### **Preferred Stock**

We currently have authorized 20,000,000 shares of preferred stock, par value \$0.001. 277,100 shares are designated as Series A Convertible Preferred Stock, of which 60,600 shares are outstanding as of June 24, 2019, 8,860 shares are designated as Series B Convertible Preferred Stock, none of which are outstanding as of June 24, 2019 and 200,000 shares are designated as Series C Convertible Preferred Stock, none of which are outstanding as of June 24, 2019. Any authorized and undesignated shares of preferred stock may be issued from time to time in one or more additional series pursuant to a resolution or resolutions providing for such issue duly adopted by our Board of Directors (authority to do so being hereby expressly vested in the Board of Directors). The Board of Directors is further authorized, subject to limitations prescribed by law, to fix by resolution or resolutions the designations, powers, preferences and rights, and the qualifications, limitations or restrictions thereof, of any wholly unissued series of preferred stock, including without limitation authority to fix by resolution or resolutions the dividend rights, dividend rate, conversion rights, voting rights, rights and terms of redemption (including sinking fund provisions), redemption price or prices, and liquidation preferences of any such series, and the number of shares constituting any such series and the designation thereof, or any of the foregoing.

The rights, preferences, privileges, and restrictions granted to or imposed upon any series of preferred stock that we offer and sell under this prospectus and applicable prospectus supplements will be set forth in a certificate of designation relating to the series. We will incorporate by reference into the registration statement of which this prospectus is a part the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of shares of that series of preferred stock. You should read any prospectus supplement and any free writing prospectus that we may authorize to be provided to you related to the series of preferred stock being offered, as well as the complete certificate of designation that contains the terms of the applicable series of preferred stock.

## **Debt Securities**

We may offer general debt obligations, which may be secured or unsecured, senior or subordinated, and convertible into shares of our common stock. In this prospectus, we refer to the senior debt securities and the subordinated debt securities together as the “debt securities.” We may issue debt securities under a note purchase agreement or under an indenture to be entered between us and a trustee and forms of the senior and subordinated indentures are included as an exhibit to the registration statement of which this prospectus is a part. The indentures do not limit the amount of securities that may be issued under it and provides that debt securities may be issued in one or more series. The senior debt securities will have the same rank as all of our other indebtedness that is not subordinated. The subordinated debt securities will be subordinated to our senior debt on terms set forth in the applicable prospectus supplement. In addition, the subordinated debt securities will be effectively subordinated to creditors and preferred stockholders of our subsidiaries. Our Board of Directors will determine the terms of each series of debt securities being offered. This prospectus contains only general terms and provisions of the debt securities. The applicable prospectus supplement will describe the particular terms of the debt securities offered thereby. You should read any prospectus supplement and any free writing prospectus that we may authorize to be provided to you related to the series of debt securities being offered, as well as the complete note agreements and/or indentures that contain the terms of the debt securities. Forms of indentures have been filed as exhibits to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of debt securities being offered will be incorporated by reference into the registration statement of which this prospectus is a part from reports we file with the SEC.

## **Warrants**

We may offer warrants for the purchase of shares of our common stock or preferred stock or of debt securities. We may issue the warrants by themselves or together with common stock, preferred stock or debt securities, and the warrants may be attached to or separate from any offered securities. Any warrants issued under this prospectus may be evidenced by warrant certificates. Warrants may be issued under a separate warrant agreement to be entered into between us and the investors or a warrant agent. Our Board of Directors will determine the terms of the warrants. This prospectus contains only general terms and provisions of the warrants. The applicable prospectus supplement will describe the particular terms of the warrants being offered thereby. You should read any prospectus supplement and any free writing prospectus that we may authorize to be provided to you related to the series of warrants being offered, as well as the complete warrant agreements that contain the terms of the warrants. Specific warrant agreements will contain additional important terms and provisions and will be incorporated by reference into the registration statement of which this prospectus is a part from reports we file with the SEC.

## **Units**

We may offer units consisting of our common stock or preferred stock, debt securities and/or warrants to purchase any of these securities in one or more series. We may evidence each series of units by unit certificates that we will issue under a separate agreement. We may enter into unit agreements with a unit agent. Each unit agent will be a bank or trust company that we select. We will indicate the name and address of the unit agent in the applicable prospectus supplement relating to a particular series of units. This prospectus contains only a summary of certain general features of the units. The applicable prospectus supplement will describe the particular features of the units being offered thereby. You should read any prospectus supplement and any free writing prospectus that we may authorize to be provided to you related to the series of units being offered, as well as the complete unit agreements that contain the terms of the units. Specific unit agreements will contain additional important terms and provisions and will be incorporated by reference into the registration statement of which this prospectus is a part from reports we file with the SEC.

## RISK FACTORS

An investment in our securities involves a high degree of risk. This prospectus contains, and the prospectus supplement applicable to each offering of our securities will contain, a discussion of the risks applicable to an investment in our securities. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the heading “*Risk Factors*” in this prospectus and the applicable prospectus supplement, together with all of the other information contained or incorporated by reference in the prospectus supplement or appearing or incorporated by reference in this prospectus. You should also consider the risks, uncertainties and assumptions discussed under Item 1A, “*Risk Factors*,” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, filed with the SEC on March 6, 2019, and any updates described in our Quarterly Reports on Form 10-Q, all of which are incorporated herein by reference, and may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future and any prospectus supplement related to a particular offering. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations. The occurrence of any of these known or unknown risks might cause you to lose all or part of your investment in the offered securities.

## FORWARD-LOOKING STATEMENTS

This prospectus and any accompanying prospectus supplement, including the documents that we incorporate by reference, contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”) and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Any statements in this prospectus and any accompanying prospectus supplement about our expectations, beliefs, plans, objectives, assumptions or future events or performance are not historical facts and are forward-looking statements. These statements are often, but not always, made through the use of words or phrases such as “believe,” “will,” “expect,” “anticipate,” “estimate,” “intend,” “plan,” and “would.” For example, statements concerning financial condition, possible or assumed future results of operations, growth opportunities, industry ranking, plans and objectives of management, markets for our common stock and future management and organizational structure are all forward-looking statements. Forward-looking statements are not guarantees of performance. They involve known and unknown risks, uncertainties and assumptions that may cause actual results, levels of activity, performance or achievements to differ materially from any results, levels of activity, performance or achievements expressed or implied by any forward-looking statement.

You should read this prospectus and any accompanying prospectus supplement and the documents that we reference herein and therein and have filed as exhibits to the registration statement, of which this prospectus is part, completely and with the understanding that our actual future results may be materially different from what we expect. You should assume that the information appearing in this prospectus and any accompanying prospectus supplement is accurate as of the date on the front cover of this prospectus or such prospectus supplement only. Because the risk factors referred to on page 10 of this prospectus and incorporated herein by reference, could cause actual results or outcomes to differ materially from those expressed in any forward-looking statements made by us or on our behalf, you should not place undue reliance on any forward-looking statements. Further, any forward-looking statement speaks only as of the date on which it is made, and we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events. New factors emerge from time to time, and it is not possible for us to predict which factors will arise. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. We qualify all of the information presented in this prospectus and any accompanying prospectus supplement, and particularly our forward-looking statements, by these cautionary statements.

## USE OF PROCEEDS

Except as described in any prospectus supplement and any free writing prospectus in connection with a specific offering, we currently intend to use the net proceeds from the sale of the securities offered under this prospectus for general corporate purposes, including the development and commercialization of our products, research and development, general and administrative expenses, license or technology acquisitions, and working capital and capital expenditures. We may also use the net proceeds to repay any debts and/or invest in or acquire complementary businesses, products, or technologies, although we have no current commitments or agreements with respect to any such investments or acquisitions as of the date of this prospectus. We have not determined the amount of net proceeds to be used specifically for the foregoing purposes. As a result, our management will have broad discretion in the allocation of the net proceeds and investors will be relying on the judgment of our management regarding the application of the proceeds of any sale of the securities. Pending use of the net proceeds, we intend to invest the proceeds in short-term, investment-grade, interest-bearing instruments.

Each time we offer securities under this prospectus, we will describe the intended use of the net proceeds from that offering in the applicable prospectus supplement. The actual amount of net proceeds we spend on a particular use will depend on many factors, including, our future capital expenditures, the amount of cash required by our operations, and our future revenue growth, if any. Therefore, we will retain broad discretion in the use of the net proceeds.

## DESCRIPTION OF CAPITAL STOCK

### General

The following description of our capital stock, together with any additional information we include in any applicable prospectus supplement or any related free writing prospectus, summarizes the material terms and provisions of our common stock and the preferred stock that we may offer under this prospectus. While the terms we have summarized below will apply generally to any future common stock or preferred stock that we may offer, we will describe the particular terms of any class or series of these securities in more detail in the applicable prospectus supplement. For the complete terms of our common stock and preferred stock, please refer to our amended and restated certificate of incorporation, as amended and our bylaws that are incorporated by reference into the registration statement of which this prospectus is a part or may be incorporated by reference in this prospectus or any applicable prospectus supplement. The terms of these securities may also be affected by Delaware General Corporation Law (the “DGCL”). The summary below and that contained in any applicable prospectus supplement or any related free writing prospectus are qualified in their entirety by reference to our amended and restated certificate of incorporation, as amended, and our bylaws.

As of the date of this prospectus, our authorized capital stock consisted of 150,000,000 shares of common stock, \$0.0001 par value per share, and 20,000,000 shares of preferred stock, \$0.001 par value per share. Our Board may establish the rights and preferences of the preferred stock from time to time. As of June 24, 2019, there were 5,441,363 shares of our common stock issued and outstanding and 60,600 shares of Series A Convertible Preferred Stock are issued and outstanding.

### Common Stock

We are authorized to issue up to a total of 150,000,000 shares of common stock, par value \$0.0001 per share. Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of our stockholders. Holders of our common stock have no cumulative voting rights. All shares of common stock offered hereby will, when issued, be fully paid and nonassessable, including shares of common stock issued upon the exercise of common stock warrants or subscription rights, if any.

Further, holders of our common stock have no preemptive or conversion rights or other subscription rights. Upon our liquidation, dissolution or winding-up, holders of our common stock are entitled to share in all assets remaining after payment of all liabilities and the liquidation preferences of any of our outstanding shares of preferred stock. Subject to preferences that may be applicable to any outstanding shares of preferred stock, holders of our common stock are entitled to receive dividends, if any, as may be declared from time to time by our Board of Directors out of our assets which are legally available. Such dividends, if any, are payable in cash, in property or in shares of capital stock.

The holders of a majority of the shares of our capital stock, represented in person or by proxy, are necessary to constitute a quorum for the transaction of business at any meeting. If a quorum is present, an action by stockholders entitled to vote on a matter is approved if the number of votes cast in favor of the action exceeds the number of votes cast in opposition to the action, with the exception of the election of directors, which requires a plurality of the votes cast.

### Preferred Stock

Our board of directors has the authority, without further action by the stockholders, to issue up to 20,000,000 shares of preferred stock in one or more series and to fix the designations, powers, preferences, privileges, and relative participating, optional, or special rights as well as the qualifications, limitations, or restrictions of the preferred stock, including dividend rights, conversion rights, voting rights, terms of redemption, and liquidation preferences, any or all of which may be greater than the rights of the common stock. Our board of directors, without stockholder approval, can issue convertible preferred stock with voting, conversion, or other rights that could adversely affect the voting power and other rights of the holders of common stock. Preferred stock could be issued quickly with terms calculated to delay or prevent a change of control or make removal of management more difficult. Additionally, the issuance of preferred stock may have the effect of decreasing the market price of our common stock, and may adversely affect the voting and other rights of the holders of common stock. At present, we have no plans to issue any shares of preferred stock following this offering.

### Anti-Takeover Effects of Certain Provisions of our Certificate of Incorporation, Bylaws and the DGCL

We are governed by the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly traded Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. A business combination includes mergers, asset sales or other transactions resulting in a financial benefit to the stockholder. An interested stockholder is a person who, together with affiliates and

associates, owns (or within three years, did own) 15% or more of the corporation's voting stock, subject to certain exceptions. The statute could have the effect of delaying, deferring or preventing a change in control of our company.

Our amended and restated certificate of incorporation, as amended, and bylaws contain provisions that could have the effect of discouraging potential acquisition proposals or making a tender offer or delaying or preventing a change in control, including changes a stockholder might consider favorable. In particular, the certificate of incorporation and bylaws, as applicable, among other things:

- provide our board of directors with the ability to alter our bylaws without stockholder approval; and
- provide that vacancies on our board of directors may be filled by a majority of directors in office, although less than a quorum.

Such provisions may have the effect of discouraging a third-party from acquiring us, even if doing so would be beneficial to our stockholders. These provisions are intended to enhance the likelihood of continuity and stability in the composition of our board of directors and in the policies formulated by them, and to discourage some types of transactions that may involve an actual or threatened change in control of our Company. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal and to discourage some tactics that may be used in proxy fights. We believe that the benefits of increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure our Company outweigh the disadvantages of discouraging such proposals because, among other things, negotiation of such proposals could result in an improvement of their terms.

However, these provisions could have the effect of discouraging others from making tender offers for our shares that could result from actual or rumored takeover attempts. These provisions also may have the effect of preventing changes in our management.

### **Listing**

Our common stock is listed on The Nasdaq Capital Market under the trading symbol "TROV."

### **Transfer Agent and Registrar**

The Transfer Agent and Registrar for our common stock is Philadelphia Stock Transfer, Inc.

## DESCRIPTION OF DEBT SECURITIES

The following description, together with the additional information we include in any applicable prospectus supplements or free writing prospectuses, summarizes the material terms and provisions of the debt securities that we may offer under this prospectus. We may issue debt securities, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. While the terms we have summarized below will apply generally to any future debt securities we may offer under this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement or free writing prospectus. The terms of any debt securities we offer under a prospectus supplement may differ from the terms we describe below. However, no prospectus supplement shall fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness. As of the date of this prospectus, we have no outstanding registered debt securities. Unless the context requires otherwise, whenever we refer to the “indentures,” we also are referring to any supplemental indentures that specify the terms of a particular series of debt securities.

We will issue any senior debt securities under the senior indenture that we will enter into with the trustee named in the senior indenture. We will issue any subordinated debt securities under the subordinated indenture and any supplemental indentures that we will enter into with the trustee named in the subordinated indenture. We have filed forms of these documents as exhibits to the registration statement, of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

The indentures will be qualified under the Trust Indenture Act of 1939, as amended (the “Trust Indenture Act”). We use the term “trustee” to refer to either the trustee under the senior indenture or the trustee under the subordinated indenture, as applicable.

The following summaries of material provisions of the senior debt securities, the subordinated debt securities and the indentures are subject to, and qualified in their entirety by reference to, all of the provisions of the indenture and any supplemental indentures applicable to a particular series of debt securities. We urge you to read the applicable prospectus supplements and any related free writing prospectuses related to the debt securities that we may offer under this prospectus, as well as the complete indentures that contains the terms of the debt securities. Except as we may otherwise indicate, the terms of the senior indenture and the subordinated indenture are identical.

## General

The terms of each series of debt securities will be established by or pursuant to a resolution of our Board of Directors and set forth or determined in the manner provided in an officers' certificate or by a supplemental indenture. Debt securities may be issued in separate series without limitation as to aggregate principal amount. We may specify a maximum aggregate principal amount for the debt securities of any series. We will describe in the applicable prospectus supplement the terms of the series of debt securities being offered, including:

- the title;
- the principal amount being offered, and if a series, the total amount authorized and the total amount outstanding;
- any limit on the amount that may be issued;
- whether or not we will issue the series of debt securities in global form, and, if so, the terms and who the depository will be;
- the maturity date;
- whether and under what circumstances, if any, we will pay additional amounts on any debt securities held by a person who is not a United States person for tax purposes, and whether we can redeem the debt securities if we have to pay such additional amounts;
- the annual interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;
- whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
- the terms of the subordination of any series of subordinated debt;
- the place where payments will be made;
- restrictions on transfer, sale or other assignment, if any;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- the date, if any, after which, and the price at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;
- provisions for a sinking fund purchase or other analogous fund, if any, including the date, if any, on which, and the price at which we are obligated, pursuant thereto or otherwise, to redeem, or at the holder's option, to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;
- whether the indenture will restrict our ability or the ability of our subsidiaries, if any, to:
  - incur additional indebtedness;
  - issue additional securities;



- create liens;
  - pay dividends or make distributions in respect of our capital stock or the capital stock of our subsidiaries;
  - redeem capital stock;
  - place restrictions on our subsidiaries' ability to pay dividends, make distributions or transfer assets;
  - make investments or other restricted payments;
  - sell or otherwise dispose of assets;
  - enter into sale-leaseback transactions;
  - engage in transactions with stockholders or affiliates;
  - issue or sell stock of our subsidiaries; or
  - effect a consolidation or merger;
- whether the indenture will require us to maintain any interest coverage, fixed charge, cash flow-based, asset-based or other financial ratios;
  - a discussion of certain material or special United States federal income tax considerations applicable to the debt securities;
  - information describing any book-entry features;
  - the applicability of the provisions in the indenture on discharge;
  - whether the debt securities are to be offered at a price such that they will be deemed to be offered at an "original issue discount" as defined in paragraph (a) of Section 1273 of the Internal Revenue Code of 1986, as amended;
  - the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof;
  - the currency of payment of debt securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars; and
  - any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, including any additional events of default or covenants provided with respect to the debt securities, and any terms that may be required by us or advisable under applicable laws or regulations.

### **Conversion or Exchange Rights**

We will set forth in the applicable prospectus supplement the terms under which a series of debt securities may be convertible into or exchangeable for our common stock, our preferred stock or other securities (including securities of a third party). We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock, our preferred stock or other securities (including securities of a third party) that the holders of the series of debt securities receive would be subject to adjustment.

### **Consolidation, Merger or Sale**

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the indentures will not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise

dispose of all or substantially all of our assets. However, any successor to or acquirer of such assets must assume all of our obligations under the indentures or the debt securities, as appropriate. If the debt securities are convertible into or exchangeable for our other securities or securities of other entities, the person with whom we consolidate or merge or to whom we sell all of our property must make provisions for the conversion of the debt securities into securities that the holders of the debt securities would have received if they had converted the debt securities before the consolidation, merger or sale.

### **Events of Default under the Indenture**

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the following are events of default under the indentures with respect to any series of debt securities that we may issue:

- if we fail to pay interest when due and payable and our failure continues for 90 days and the time for payment has not been extended;
- if we fail to pay the principal, premium or sinking fund payment, if any, when due and payable at maturity, upon redemption or repurchase or otherwise, and the time for payment has not been extended;
- if we fail to observe or perform any other covenant contained in the debt securities or the indentures, other than a covenant specifically relating to another series of debt securities, and our failure continues for 90 days after we receive notice from the trustee or we and the trustee receive notice from the holders of at least 25% in aggregate principal amount of the outstanding debt securities of the applicable series; and
- if specified events of bankruptcy, insolvency or reorganization occur.

We will describe in each applicable prospectus supplement any additional events of default relating to the relevant series of debt securities.

If an event of default with respect to debt securities of any series occurs and is continuing, other than an event of default specified in the last bullet point above, the trustee or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series, by notice to us in writing, and to the trustee if notice is given by such holders, may declare the unpaid principal, premium, if any, and accrued interest, if any, due and payable immediately. If an event of default arises due to the occurrence of certain specified bankruptcy, insolvency or reorganization events, the unpaid principal, premium, if any, and accrued interest, if any, of each issue of debt securities then outstanding shall be due and payable without any notice or other action on the part of the trustee or any holder.

The holders of a majority in principal amount of the outstanding debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any waiver shall cure the default or event of default.

Subject to the terms of the indentures, if an event of default under an indenture shall occur and be continuing, the trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the trustee reasonable indemnity or security satisfactory to it against any loss, liability or expense. The holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred on the trustee, with respect to the debt securities of that series, provided that:

- the direction so given by the holder is not in conflict with any law or the applicable indenture; and
- subject to its duties under the Trust Indenture Act, the trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

The indentures will provide that if an event of default has occurred and is continuing, the trustee will be required in the exercise of its powers to use the degree of care that a prudent person would use in the conduct of its own affairs. The trustee, however, may refuse to follow any direction that conflicts with law or the indenture, or that the trustee determines is unduly prejudicial to the rights of any other holder of the relevant series of debt securities, or that would involve the trustee in personal

liability. Prior to taking any action under the indentures, the trustee will be entitled to indemnification against all costs, expenses and liabilities that would be incurred by taking or not taking such action.

A holder of the debt securities of any series will have the right to institute a proceeding under the indentures or to appoint a receiver or trustee, or to seek other remedies only if:

- the holder has given written notice to the trustee of a continuing event of default with respect to that series;
- the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made a written request and such holders have offered reasonable indemnity to the trustee or security satisfactory to it against any loss, liability or expense or to be incurred in compliance with instituting the proceeding as trustee; and
- the trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series other conflicting directions within 90 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities, or other defaults that may be specified in the applicable prospectus supplement.

We will periodically file statements with the trustee regarding our compliance with specified covenants in the indentures.

The indentures will provide that if a default occurs and is continuing and is actually known to a responsible officer of the trustee, the trustee must mail to each holder notice of the default within the earlier of 90 days after it occurs and 30 days after it is known by a responsible officer of the trustee or written notice of it is received by the trustee, unless such default has been cured or waived. Except in the case of a default in the payment of principal or premium of, or interest on, any debt security or certain other defaults specified in an indenture, the trustee shall be protected in withholding such notice if and so long as the Board of Directors, the executive committee or a trust committee of directors, or responsible officers of the trustee, in good faith determine that withholding notice is in the best interests of holders of the relevant series of debt securities.

#### **Modification of Indenture; Waiver**

Subject to the terms of the indenture for any series of debt securities that we may issue, we and the trustee may change an indenture without the consent of any holders with respect to the following specific matters:

- to fix any ambiguity, defect or inconsistency in the indenture;
- to comply with the provisions described above under “*Description of Debt Securities — Consolidation, Merger or Sale;*”
- to comply with any requirements of the SEC in connection with the qualification of any indenture under the Trust Indenture Act;
- to add to, delete from or revise the conditions, limitations and restrictions on the authorized amount, terms or purposes of issue, authentication and delivery of debt securities, as set forth in the indenture;
- to provide for the issuance of, and establish the form and terms and conditions of, the debt securities of any series as provided under “*Description of Debt Securities — General,*” to establish the form of any certifications required to be furnished pursuant to the terms of the indenture or any series of debt securities, or to add to the rights of the holders of any series of debt securities;
- to evidence and provide for the acceptance of appointment hereunder by a successor trustee;
- to provide for uncertificated debt securities and to make all appropriate changes for such purpose;

- to add such new covenants, restrictions, conditions or provisions for the benefit of the holders, to make the occurrence, or the occurrence and the continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default or to surrender any right or power conferred to us in the indenture; or
- to change anything that does not adversely affect the interests of any holder of debt securities of any series in any material respect.

In addition, under the indentures, the rights of holders of a series of debt securities may be changed by us and the trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series that is affected. However, subject to the terms of the indenture for any series of debt securities that we may issue or otherwise provided in the prospectus supplement applicable to a particular series of debt securities, we and the trustee may only make the following changes with the consent of each holder of any outstanding debt securities affected:

- extending the stated maturity of the series of debt securities;
- reducing the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption or repurchase of any debt securities; or
- reducing the percentage of debt securities, the holders of which are required to consent to any amendment, supplement, modification or waiver.

### **Discharge**

Each indenture provides that, subject to the terms of the indenture and any limitation otherwise provided in the prospectus supplement applicable to a particular series of debt securities, we may elect to be discharged from our obligations with respect to one or more series of debt securities, except for specified obligations, including obligations to:

- register the transfer or exchange of debt securities of the series;
- replace stolen, lost or mutilated debt securities of the series;
- maintain paying agencies;
- hold monies for payment in trust;
- recover excess money held by the trustee;
- compensate and indemnify the trustee; and
- appoint any successor trustee.

In order to exercise our rights to be discharged, we will deposit with the trustee money or government obligations sufficient to pay all the principal of, and any premium and interest on, the debt securities of the series on the dates payments are due.

### **Form, Exchange and Transfer**

We will issue the debt securities of each series only in fully registered form without coupons and, unless we otherwise specify in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. The indentures will provide that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The Depository Trust Company or another depository named by us and identified in a prospectus supplement with respect to that series. See “*Legal Ownership of Securities*” below for a further description of the terms relating to any book-entry securities.

At the option of the holder, subject to the terms of the indentures and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indentures and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange, we will make no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

If we elect to redeem the debt securities of any series, we will not be required to:

- issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or
- register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

### **Information Concerning the Trustee**

The trustee, other than during the occurrence and continuance of an event of default under an indenture, undertakes to perform only those duties as are specifically set forth in the applicable indenture and is under no obligation to exercise any of the powers given it by the indentures at the request of any holder of debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur. However, upon an event of default under an indenture, the trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs.

### **Payment and Paying Agents**

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest payment.

We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement, we will make interest payments by check that we will mail to the holder or by wire transfer to certain holders. Unless we otherwise indicate in the applicable prospectus supplement, we will designate the corporate trust office of the trustee as our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series.

All money we pay to a paying agent or the trustee for the payment of the principal of or any premium or interest on any debt securities that remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the debt security thereafter may look only to us for payment thereof.

### **Governing Law**

The indentures and the debt securities will be governed by and construed in accordance with the laws of the State of New York, except to the extent that the Trust Indenture Act is applicable.

### **Ranking Debt Securities**

The subordinated debt securities will be unsecured and will be subordinate and junior in priority of payment to certain other indebtedness to the extent described in a prospectus supplement. The subordinated indenture does not limit the amount of subordinated debt securities that we may issue. It also does not limit us from issuing any other secured or unsecured debt.

The senior debt securities will be unsecured and will rank equally in right of payment to all our other senior unsecured debt. The senior indenture does not limit the amount of senior debt securities that we may issue. It also does not limit us from issuing any other secured or unsecured debt.

## DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplements and free writing prospectuses, summarizes the material terms and provisions of the warrants that we may offer under this prospectus, which may consist of warrants to purchase common stock, preferred stock or debt securities and may be issued in one or more series. Warrants may be offered independently or together with common stock, preferred stock or debt securities offered by any prospectus supplement, and may be attached to or separate from those securities. While the terms we have summarized below will apply generally to any warrants that we may offer under this prospectus, we will describe the particular terms of any series of warrants that we may offer in more detail in the applicable prospectus supplement and any applicable free writing prospectus. The terms of any warrants offered under a prospectus supplement may differ from the terms described below. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness.

We may issue the warrants under a warrant agreement that we will enter into with a warrant agent to be selected by us. If selected, the warrant agent will act solely as an agent of ours in connection with the warrants and will not act as an agent for the holders or beneficial owners of the warrants. If applicable, we will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a Current Report on Form 8-K that we file with the SEC, the form of warrant agreement, including a form of warrant certificate, that describes the terms of the particular series of warrants we are offering before the issuance of the related series of warrants. The following summaries of material provisions of the warrants and the warrant agreements are subject to, and qualified in their entirety by reference to, all the provisions of the warrant agreement and warrant certificate applicable to a particular series of warrants. We urge you to read the applicable prospectus supplement and any applicable free writing prospectus related to the particular series of warrants that we sell under this prospectus, as well as the complete warrant agreements and warrant certificates that contain the terms of the warrants.

### General

We will describe in the applicable prospectus supplement the terms relating to a series of warrants, including:

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at, and currency in which, this principal amount of debt securities may be purchased upon such exercise;
- in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreements and the warrants;
- the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire;

- the manner in which the warrant agreements and warrants may be modified;
- United States federal income tax consequences of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants; and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.
- before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including:
  - in the case of warrants to purchase debt securities, the right to receive payments of principal of, or premium, if any, or interest on, the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture; or
  - in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

### **Exercise of Warrants**

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to us or the warrant agent as applicable.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

### **Enforceability of Rights by Holders of Warrants**

If selected, each warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

## DESCRIPTION OF UNITS

The following description, together with the additional information we may include in any applicable prospectus supplements and free writing prospectuses, summarizes the material terms and provisions of the units that we may offer under this prospectus.

While the terms we have summarized below will apply generally to any units that we may offer under this prospectus, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement. The terms of any units offered under a prospectus supplement may differ from the terms described below. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a Current Report on Form 8-K that we file with the SEC, the form of unit agreement that describes the terms of the series of units we are offering, and any supplemental agreements, before the issuance of the related series of units. The following summaries of material terms and provisions of the units are subject to, and qualified in their entirety by reference to, all the provisions of the unit agreement and any supplemental agreements applicable to a particular series of units. We urge you to read the applicable prospectus supplements related to the particular series of units that we sell under this prospectus, as well as the complete unit agreement and any supplemental agreements that contain the terms of the units.

### General

We may issue units comprised of one or more debt securities, shares of common stock, shares of preferred stock and warrants in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

We will describe in the applicable prospectus supplement the terms of the series of units, including:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provisions of the governing unit agreement that differ from those described below; and
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those described under “*Description of Capital Stock*,” “*Description of Debt Securities*” and “*Description of Warrants*” will apply to each unit and to any common stock, preferred stock, debt security or warrant included in each unit, respectively.

### Unit Agent

The name and address of the unit agent, if any, for any units we offer will be set forth in the applicable prospectus supplement.

### Issuance in Series

We may issue units in such amounts and in numerous distinct series as we determine.

### Enforceability of Rights by Holders of Units

Each unit agent will act solely as our agent under the applicable unit agreement and will not assume any obligation or relationship of agency or trust with any holder of any unit. A single bank or trust company may act as unit agent for more than one series of units. A unit agent will have no duty or responsibility in case of any default by us under the applicable unit agreement or unit, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand



upon us. Any holder of a unit may, without the consent of the related unit agent or the holder of any other unit, enforce by appropriate legal action its rights as holder under any security included in the unit.

We, the unit agents and any of their agents may treat the registered holder of any unit certificate as an absolute owner of the units evidenced by that certificate for any purpose and as the person entitled to exercise the rights attaching to the units so requested, despite any notice to the contrary. See “*Legal Ownership of Securities.*”

## LEGAL OWNERSHIP OF SECURITIES

We can issue securities in registered form or in the form of one or more global securities. We describe global securities in greater detail below. We refer to those persons who have securities registered in their own names on the books that we or any applicable trustee or depositary or warrant agent maintain for this purpose as the “holders” of those securities. These persons are the legal holders of the securities. We refer to those persons who, indirectly through others, own beneficial interests in securities that are not registered in their own names, as “indirect holders” of those securities. As we discuss below, indirect holders are not legal holders, and investors in securities issued in book-entry form or in street name will be indirect holders.

### Book-Entry Holders

We may issue securities in book-entry form only, as we will specify in the applicable prospectus supplement. This means securities may be represented by one or more global securities registered in the name of a financial institution that holds them as depositary on behalf of other financial institutions that participate in the depositary’s book-entry system. These participating institutions, which are referred to as participants, in turn, hold beneficial interests in the securities on behalf of themselves or their customers.

Only the person in whose name a security is registered is recognized as the holder of that security. Global securities will be registered in the name of the depositary or its participants. Consequently, for global securities, we will recognize only the depositary as the holder of the securities, and we will make all payments on the securities to the depositary. The depositary passes along the payments it receives to its participants, which in turn pass the payments along to their customers who are the beneficial owners. The depositary and its participants do so under agreements they have made with one another or with their customers; they are not obligated to do so under the terms of the securities.

As a result, investors in a global security will not own securities directly. Instead, they will own beneficial interests in a global security, through a bank, broker or other financial institution that participates in the depositary’s book-entry system or holds an interest through a participant. As long as the securities are issued in global form, investors will be indirect holders, and not legal holders, of the securities.

### Street Name Holders

We may terminate a global security or issue securities that are not issued in global form. In these cases, investors may choose to hold their securities in their own names or in “street name.” Securities held by an investor in street name would be registered in the name of a bank, broker or other financial institution that the investor chooses, and the investor would hold only a beneficial interest in those securities through an account he or she maintains at that institution.

For securities held in street name, we or any applicable trustee or depositary will recognize only the intermediary banks, brokers and other financial institutions in whose names the securities are registered as the holders of those securities, and we or any such trustee or depositary will make all payments on those securities to them. These institutions pass along the payments they receive to their customers who are the beneficial owners, but only because they agree to do so in their customer agreements or because they are legally required to do so. Investors who hold securities in street name will be indirect holders, not legal holders, of those securities.

### Legal Holders

Our obligations, as well as the obligations of any applicable trustee or third party employed by us or a trustee, run only to the legal holders of the securities. We do not have obligations to investors who hold beneficial interests in global securities, in street name or by any other indirect means. This will be the case whether an investor chooses to be an indirect holder of a security or has no choice because we are issuing the securities only in global form.

For example, once we make a payment or give a notice to the holder, we have no further responsibility for the payment or notice even if that holder is required, under agreements with its participants or customers or by law, to pass it along to the indirect holders but does not do so. Similarly, we may want to obtain the approval of the holders to amend an indenture, to relieve us of the consequences of a default or of our obligation to comply with a particular provision of an indenture, or for other purposes. In such an event, we would seek approval only from the legal holders, and not the indirect holders, of the securities. Whether and how the legal holders contact the indirect holders is up to the legal holders.

### **Special Considerations for Indirect Holders**

If you hold securities through a bank, broker or other financial institution, either in book-entry form because the securities are represented by one or more global securities or in street name, you should check with your own institution to find out:

- how it handles securities payments and notices;
- whether it imposes fees or charges;
- how it would handle a request for the holders' consent, if ever required;
- whether and how you can instruct it to send you securities registered in your own name so you can be a legal holder, if that is permitted in the future;
- how it would exercise rights under the securities if there were a default or other event triggering the need for holders to act to protect their interests; and
- if the securities are in book-entry form, how the depository's rules and procedures will affect these matters.

### **Global Securities**

A global security is a security that represents one or any other number of individual securities held by a depository. Generally, all securities represented by the same global securities will have the same terms.

Each security issued in book-entry form will be represented by a global security that we issue to, deposit with and register in the name of a financial institution or its nominee that we select. The financial institution that we select for this purpose is called the depository. Unless we specify otherwise in the applicable prospectus supplement, The Depository Trust Company, New York, NY, known as DTC, will be the depository for all securities issued in book-entry form.

A global security may not be transferred to or registered in the name of anyone other than the depository, its nominee or a successor depository, unless special termination situations arise. We describe those situations below under "*Special Situations When A Global Security Will Be Terminated.*" As a result of these arrangements, the depository, or its nominee, will be the sole registered owner and legal holder of all securities represented by a global security, and investors will be permitted to own only beneficial interests in a global security. Beneficial interests must be held by means of an account with a broker, bank or other financial institution that in turn has an account with the depository or with another institution that does. Thus, an investor whose security is represented by a global security will not be a legal holder of the security, but only an indirect holder of a beneficial interest in the global security.

If the prospectus supplement for a particular security indicates that the security will be issued as a global security, then the security will be represented by a global security at all times unless and until the global security is terminated. If termination occurs, we may issue the securities through another book-entry clearing system or decide that the securities may no longer be held through any book-entry clearing system.

### **Special Considerations For Global Securities**

As an indirect holder, an investor's rights relating to a global security will be governed by the account rules of the investor's financial institution and of the depository, as well as general laws relating to securities transfers. We do not recognize an indirect holder as a holder of securities and instead deal only with the depository that holds the global security.

If securities are issued only as global securities, an investor should be aware of the following:

- an investor cannot cause the securities to be registered in his or her name, and cannot obtain non-global certificates for his or her interest in the securities, except in the special situations we describe below;
- an investor will be an indirect holder and must look to his or her own bank or broker for payments on the securities and protection of his or her legal rights relating to the securities, as we describe above;
- an investor may not be able to sell interests in the securities to some insurance companies and to other institutions that are required by law to own their securities in non-book-entry form;
- an investor may not be able to pledge his or her interest in the global security in circumstances where certificates representing the securities must be delivered to the lender or other beneficiary of the pledge in order for the pledge to be effective;
- the depositary's policies, which may change from time to time, will govern payments, transfers, exchanges and other matters relating to an investor's interest in the global security. We and any applicable trustee have no responsibility for any aspect of the depositary's actions or for its records of ownership interests in the global security. We and the trustee also do not supervise the depositary in any way;
- the depositary may, and we understand that DTC will, require that those who purchase and sell interests in the global security within its book-entry system use immediately available funds, and your broker or bank may require you to do so as well; and
- financial institutions that participate in the depositary's book-entry system, and through which an investor holds its interest in the global security, may also have their own policies affecting payments, notices and other matters relating to the securities. There may be more than one financial intermediary in the chain of ownership for an investor. We do not monitor and are not responsible for the actions of any of those intermediaries

### **Special Situations When A Global Security Will Be Terminated**

In a few special situations described below, a global security will terminate and interests in it will be exchanged for physical certificates representing those interests. After that exchange, the choice of whether to hold securities directly or in street name will be up to the investor. Investors must consult their own banks or brokers to find out how to have their interests in securities transferred to their own names, so that they will be direct holders. We have described the rights of holders and street name investors above.

A global security will terminate when the following special situations occur:

- if the depositary notifies us that it is unwilling, unable or no longer qualified to continue as depositary for that global security and we do not appoint another institution to act as depositary within 90 days;
- if we notify any applicable trustee that we wish to terminate that global security; or
- if an event of default has occurred with regard to securities represented by that global security and has not been cured or waived.

The applicable prospectus supplement may also list additional situations for terminating a global security that would apply only to the particular series of securities covered by the prospectus supplement. When a global security terminates, the depositary, and neither we, nor any applicable trustee, is responsible for deciding the names of the institutions that will be the initial direct holders.

## PLAN OF DISTRIBUTION

We may sell the securities being offered hereby in one or more of the following ways from time to time:

- through agents to the public or to investors;
- to underwriters for resale to the public or to investors;
- negotiated transactions;
- block trades;
- directly to investors; or
- through a combination of any of these methods of sale.

As set forth in more detail below, the securities may be distributed from time to time in one or more transactions:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

We will set forth in a prospectus supplement the terms of that particular offering of securities, including:

- the name or names of any agents or underwriters;
- the purchase price of the securities being offered and the proceeds we will receive from the sale;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;
- any initial public offering price;
- any discounts or concessions allowed or re-allowed or paid to dealers; and
- any securities exchanges or markets on which such securities may be listed.

Only underwriters named in an applicable prospectus supplement are underwriters of the securities offered by that prospectus supplement.

If underwriters are used in an offering, we will execute an underwriting agreement with such underwriters and will specify the name of each underwriter and the terms of the transaction (including any underwriting discounts and other terms constituting compensation of the underwriters and any dealers) in a prospectus supplement. The securities may be offered to the public either through underwriting syndicates represented by managing underwriters or directly by one or more investment banking firms or others, as designated. If an underwriting syndicate is used, the managing underwriter(s) will be specified on the cover of the prospectus supplement. If underwriters are used in the sale, the offered securities will be acquired by the underwriters for their own accounts and may be resold from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Any public offering price and any discounts or concessions allowed or re-allowed or paid to dealers may be changed from time to time. Unless otherwise

set forth in the prospectus supplement, the obligations of the underwriters to purchase the offered securities will be subject to conditions precedent and the underwriters will be obligated to purchase all of the offered securities if any are purchased.

We may grant to the underwriters options to purchase additional securities to cover over-allotments, if any, at the public offering price, with additional underwriting commissions or discounts, as may be set forth in a related prospectus supplement. The terms of any over-allotment option will be set forth in the prospectus supplement for those securities.

If we use a dealer in the sale of the securities being offered pursuant to this prospectus or any prospectus supplement, we will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale. The names of the dealers and the terms of the transaction will be specified in a prospectus supplement.

We may sell the securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, any agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

In connection with the sale of the securities, underwriters, dealers or agents may receive compensation from us or from purchasers of the common stock for whom they act as agents in the form of discounts, concessions or commissions. Underwriters may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters or commissions from the purchasers for whom they may act as agents. Underwriters, dealers and agents that participate in the distribution of the securities, and any institutional investors or others that purchase common stock directly and then resell the securities, may be deemed to be underwriters, and any discounts or commissions received by them from us and any profit on the resale of the common stock by them may be deemed to be underwriting discounts and commissions under the Securities Act.

We may provide agents and underwriters with indemnification against particular civil liabilities, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to such liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

We may engage in at the market offerings into an existing trading market in accordance with Rule 415(a)(4) under the Securities Act. In addition, we may enter into derivative transactions with third parties (including the writing of options), or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with such a transaction, the third parties may, pursuant to this prospectus and the applicable prospectus supplement, sell securities covered by this prospectus and the applicable prospectus supplement. If so, the third party may use securities borrowed from us or others to settle such sales and may use securities received from us to close out any related short positions. We may also loan or pledge securities covered by this prospectus and the applicable prospectus supplement to third parties, who may sell the loaned securities or, in an event of default in the case of a pledge, sell the pledged securities pursuant to this prospectus and the applicable prospectus supplement. The third party in such sale transactions will be an underwriter and will be identified in the applicable prospectus supplement or in a post-effective amendment.

To facilitate an offering of a series of securities, persons participating in the offering may engage in transactions that stabilize, maintain, or otherwise affect the market price of the securities. This may include over-allotments or short sales of the securities, which involves the sale by persons participating in the offering of more securities than have been sold to them by us. In those circumstances, such persons would cover such over-allotments or short positions by purchasing in the open market or by exercising the over-allotment option granted to those persons. In addition, those persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to underwriters or dealers participating in any such offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. Such transactions, if commenced, may be discontinued at any time. We make no representation or prediction as to the direction or magnitude of any effect that the transactions described above, if implemented, may have on the price of our securities.

Unless otherwise specified in the applicable prospectus supplement, each class or series of securities will be a new issue with no established trading market, other than our common stock, which is listed on The Nasdaq Capital Market. We may elect to list any other class or series of securities on any exchange or market, but we are not obligated to do so. It is possible that one or more underwriters may make a market in a class or series of securities, but the underwriters will not be obligated to do so and may discontinue any market making at any time without notice. We cannot give any assurance as to the liquidity of the trading market for any of the securities.

In order to comply with the securities laws of some U.S. states or territories, if applicable, the securities offered pursuant to this prospectus will be sold in those states only through registered or licensed brokers or dealers. In addition, in some states securities may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and complied with.

Any underwriter may engage in overallotment, stabilizing transactions, short covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Overallotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchases of the securities in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of these activities at any time.

Any underwriters who are qualified market makers on The Nasdaq Capital Market may engage in passive market making transactions in the securities on The Nasdaq Capital Market in accordance with Rule 103 of Regulation M, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the securities. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security. If all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded.

## **LEGAL MATTERS**

The validity of the issuance of the securities offered hereby will be passed upon for us by Sheppard, Mullin, Richter & Hampton LLP, New York, NY. Additional legal matters may be passed upon for us or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement.

## **EXPERTS**

The financial statements of the Company as of December 31, 2018 and 2017 and for each of the two years in the period ended December 31, 2018 incorporated by reference in this Prospectus have been so incorporated in reliance on the report of BDO USA LLP, an independent registered public accounting firm (the report on the consolidated financial statements contains an explanatory paragraph regarding the Company's ability to continue as a going concern) incorporated herein by reference, given upon their authority as experts in accounting and auditing.

## **WHERE YOU CAN FIND MORE INFORMATION**

This prospectus constitutes a part of a registration statement on Form S-3 filed under the Securities Act. As permitted by the SEC's rules, this prospectus and any prospectus supplement, which form a part of the registration statement, do not contain all the information that is included in the registration statement. You will find additional information about us in the registration statement. Any statements made in this prospectus or any prospectus supplement concerning legal documents are not necessarily complete and you should read the documents that are filed as exhibits to the registration statement or otherwise filed with the SEC for a more complete understanding of the document or matter.

You may read and copy the registration statement, as well as our reports, proxy statements, and other information, at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the Public Reference Room. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The SEC's

Internet site can be found at <http://www.sec.gov>. You can also obtain copies of materials we file with the SEC from our website found at [www.trovageneoncology.com](http://www.trovageneoncology.com). Information on our website does not constitute a part of, nor is it incorporated in any way, into this prospectus and should not be relied upon in connection with making an investment decision.

#### INCORPORATION OF DOCUMENTS BY REFERENCE

We have filed a registration statement on Form S-3 with the U.S. Securities and Exchange Commission (the "SEC") under the Securities Act of 1933, as amended. This prospectus is part of the registration statement, however the registration statement includes and incorporates by reference additional information and exhibits. The SEC permits us to "incorporate by reference" the information contained in documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents rather than by including them in this prospectus. Information that is incorporated by reference is considered to be part of this prospectus and you should read it with the same care that you read this prospectus. Information that we file later with the SEC will automatically update and supersede the information that is either contained, or incorporated by reference, in this prospectus, and will be considered to be a part of this prospectus from the date those documents are filed. We have filed with the SEC, and hereby incorporate by reference in this prospectus:

1. [Our Annual Report on Form 10-K for the year ended December 31, 2018, filed with the SEC on March 6, 2019;](#)
2. [Our Quarterly Report on Form 10-Q filed with the SEC on May 7, 2019;](#)
3. Our Current Reports on Form 8-K filed on [January 15, 2019](#); [January 23, 2019](#); [January 29, 2019](#); [January 31, 2019](#); [February 12, 2019](#); [February 14, 2019](#); [February 20, 2019](#); [February 28, 2019](#); [March 4, 2019](#); [March 12, 2019](#); [March 13, 2019](#); [April 1, 2019](#); [April 2, 2019](#); [April 5, 2019](#); [April 23, 2019](#); [May 13, 2019](#); [May 23, 2019](#); [May 31, 2019](#); and [June 6, 2019](#); and
4. [The description of our common stock contained in the registration statement on Form 8-A filed with the SEC on May 23, 2012.](#)

We also incorporate by reference all documents (other than Current Reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) that are subsequently filed by us with the U.S. Securities and Exchange Commission pursuant to Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act prior to the termination of the offering of the securities made by this prospectus (including documents filed after the date of the initial Registration Statement of which this prospectus is a part and prior to the effectiveness of the Registration Statement). These documents include periodic reports, such as Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, as well as proxy statements.

Any statement contained in this prospectus or in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded to the extent that a statement contained in this prospectus or any subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement.

You may request, and we will provide you with, a copy of these filings, at no cost, by calling us at (858) 952-7570 or by writing to us at the following address:

Trovagene, Inc.  
11055 Flintkote Avenue  
San Diego, CA 92121  
Telephone: (858) 952-7570



**800,000 Shares of Common Stock**

**Series I Warrants to Purchase 131,967 Shares of Common Stock**

**and**

**Shares of Common Stock underlying the Series I Pre-Funded Warrants**

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PROSPECTUS SUPPLEMENT

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March 30, 2020

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