

Viking Therapeutics, Inc.
Form 424B5
February 05, 2018
Filed pursuant to Rule 424(b)(5)

Registration No. 333-212134

PROSPECTUS SUPPLEMENT
(To Prospectus dated July 26, 2016)

11,000,000 Shares

Common Stock

We are offering 11,000,000 shares of our common stock in this offering.

Our common stock is listed on the Nasdaq Capital Market under the symbol “VKTX.” On February 1, 2018, the closing price of our common stock on the Nasdaq Capital Market was \$5.31 per share.

Investing in our common stock involves a high degree of risk. See “Risk Factors” beginning on page S-8 of this prospectus supplement and under similar headings in the documents incorporated by reference into this prospectus supplement for a discussion of certain risks you should consider before investing in shares of our common stock.

	Per Share Total	
Public offering price	\$5.00	\$ 55,000,000
Underwriting discounts and commissions ⁽¹⁾	\$0.35	\$ 3,850,000
Proceeds to us before expenses	\$4.65	\$ 51,150,000

(1) We have agreed to reimburse the underwriters for certain of their expenses. See “Underwriting” for a description of the compensation to be received by the underwriters.

We have granted the underwriters a 30-day option to purchase up to 1,650,000 additional shares of common stock from us at the public offering price, less underwriting discounts and commissions, to cover over-allotments, if any.

We are an “emerging growth company” as defined by the Jumpstart Our Business Startups Act of 2012 and, as such, we have elected to comply with certain reduced public company reporting requirements for this prospectus supplement, the accompanying prospectus and future filings.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement is truthful or complete. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the common stock to the investors in book-entry form through the facilities of The Depository Trust Company on or about February 6, 2018.

Sole Book-Running Manager

William Blair
Co-Managers
Maxim Group LLC Roth Capital Partners

The date of this prospectus supplement is February 2, 2018

TABLE OF CONTENTS

Prospectus Supplement	Page
<u>About this Prospectus Supplement</u>	S-1
<u>Prospectus Supplement Summary</u>	S-2
<u>Risk Factors</u>	S-8
<u>Disclosure Regarding Forward-Looking Statements</u>	S-9
<u>Market and Industry Data</u>	S-11
<u>Use of Proceeds</u>	S-12
<u>Price Range of our Common Stock</u>	S-13
<u>Dividend Policy</u>	S-14
<u>Capitalization</u>	S-15
<u>Dilution</u>	S-17
<u>Directors, Executive Officers and Corporate Governance</u>	S-18
<u>Executive Compensation</u>	S-23
<u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	S-30
<u>Certain Relationships and Related Transactions, and Director Independence</u>	S-33
<u>Principal Accounting Fees and Services</u>	S-36
<u>Underwriting</u>	S-37
<u>Legal Matters</u>	S-41
<u>Experts</u>	S-41
<u>Information Incorporated by Reference; Where You Can Find More Information</u>	S-42

Prospectus	Page
<u>Summary</u>	1
<u>Risk Factors</u>	1
<u>Disclosure Regarding Forward-Looking Statements</u>	2
<u>Use of Proceeds</u>	4
<u>Ratio of Earnings to Fixed Charges</u>	4
<u>Description of Capital Stock</u>	5
<u>Description of Debt Securities</u>	9
<u>Description of Warrants</u>	16
<u>Description of Units</u>	19
<u>Legal Ownership of Securities</u>	20
<u>Plan of Distribution</u>	23
<u>Legal Matters</u>	25
<u>Experts</u>	25
<u>Where You Can Find More Information</u>	25
<u>Important Information Incorporated by Reference</u>	26

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying base prospectus are part of a “shelf” registration statement on Form S-3 that we filed with the U.S. Securities and Exchange Commission, or the SEC, using a “shelf” registration process. This prospectus supplement describes the specific terms of this offering. The accompanying base prospectus, including the documents incorporated by reference therein, provides general information about us, some of which, such as the section therein entitled “Plan of Distribution,” may not apply to this offering. Generally, when we refer to this prospectus, we are referring to both this prospectus supplement and the accompanying base prospectus, combined.

We urge you to carefully read this prospectus supplement, the accompanying base prospectus, the documents incorporated by reference herein and therein and the additional information under the heading “Incorporation by Reference; Where You Can Find More Information” before buying any of the securities being offered under this prospectus supplement. These documents contain information you should consider when making your investment decision.

You should rely only on the information contained or incorporated by reference in this prospectus supplement and the accompanying base prospectus. We have not, and the underwriters 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. This prospectus supplement may add, update or change information contained in the accompanying base prospectus. To the extent any information in this prospectus supplement is inconsistent with the accompanying base prospectus, you should rely on the information in this prospectus supplement. The information in this prospectus supplement will be deemed to modify or supersede the information in the accompanying base prospectus and the documents incorporated by reference therein, except for those documents incorporated by reference therein which we file with the SEC after the date of this prospectus supplement.

You should not assume that the information contained or incorporated by reference in this prospectus supplement and the accompanying base prospectus is accurate on any date subsequent to the date set forth on the front cover of this prospectus supplement and the accompanying base prospectus or on any date subsequent to the date of the document incorporated by reference, as applicable. Our business, financial condition, results of operations and prospects may have changed since those dates.

We are offering to sell, and seeking offers to buy, the securities described in this prospectus supplement only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the offering of the securities in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement must inform themselves about, and observe any restrictions relating to, the offering of the securities and the distribution of this prospectus supplement outside the United States. This prospectus supplement does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

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 into this prospectus supplement or the accompanying base 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.

In this prospectus supplement, unless otherwise indicated or required by the context, the terms “Viking,” “we,” “our,” “us” and the “Company” refer to Viking Therapeutics, Inc.

S-1

PROSPECTUS SUPPLEMENT SUMMARY

This summary contains basic information about us and this offering. This summary highlights selected information contained elsewhere in, or incorporated by reference into, this prospectus supplement. This summary is not complete and may not contain all of the information that may be important to you and that you should consider before deciding whether or not to invest in our securities. For a more complete understanding of Viking and this offering, you should carefully read this prospectus supplement, including the information incorporated by reference into this prospectus supplement, in its entirety. Investing in our securities involves risks that are described in this prospectus supplement under the heading “Risk Factors,” under the heading “Item 1A. Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2016, our Quarterly Report on Form 10-Q for the quarter ended September 30, 2017 and in our other filings with the SEC.

The Company

Overview

We are a clinical-stage biopharmaceutical company focused on the development of novel, first-in-class or best-in-class therapies for metabolic and endocrine disorders. We have exclusive worldwide rights to a portfolio of five drug candidates in clinical trials or preclinical studies, which are based on small molecules licensed from Ligand Pharmaceuticals Incorporated, or Ligand.

Our lead clinical program is VK5211, an orally available drug candidate, currently in a Phase 2 clinical trial for acute rehabilitation following non-elective hip fracture surgery. VK5211 is a non-steroidal selective androgen receptor modulator, or SARM. A SARM is designed to selectively interact with a subset of receptors that have a normal physiologic role of interacting with naturally-occurring hormones called androgens. Broad activation of androgen receptors with drugs, such as exogenous testosterone, can stimulate muscle growth and improve bone mineral density, but often results in unwanted side effects such as prostate growth, hair growth and acne. VK5211 is expected to selectively produce the therapeutic benefits of testosterone in muscle and bone tissue, potentially accelerating rehabilitation and improving patient outcomes. VK5211 is also expected to have improved safety, tolerability and patient acceptance relative to testosterone. We believe that VK5211 may also have potential benefits to patients suffering from muscle loss in other settings, such as joint replacements or muscle wasting disorders. We reported positive top-line results from this Phase 2 trial in November 2017. See “—Recent Developments—VK5211 Phase 2 Clinical Trial” below.

Our second clinical program is VK2809, an orally available, tissue and receptor-subtype selective agonist of the thyroid hormone receptor beta, or TR β , that is in a Phase 2 clinical trial for the treatment of patients with hypercholesterolemia and fatty liver disease. Selective activation of the TR β receptor in liver tissue is believed to favorably affect cholesterol and lipoprotein levels via multiple mechanisms, including increasing the expression of low-density lipoprotein receptors and increasing mitochondrial fatty acid oxidation. We are currently conducting a Phase 2 clinical trial of VK2809 in patients with hypercholesterolemia and fatty liver disease and expect to report initial results from this Phase 2 trial in the first half of 2018. In October 2017, we announced positive final results from an eight-week study of VK2809 in an in vivo model of non-alcoholic steatohepatitis (NASH). See “—Recent Developments—VK2809 In Vivo Study of NASH” below.

In February 2017, we announced that we are commencing efforts to utilize VK2809 to potentially help patients who suffer from Glycogen Storage Disease type Ia, or GSD Ia. GSD Ia is a rare, orphan genetic disease caused by a deficiency of glucose-6-phosphatase (G6PC), an enzyme responsible for the liver’s production of free glucose from glycogen and gluconeogenesis. Approximately 2,000 patients in the U.S. suffer from GSD Ia. We have conducted a proof-of-concept study utilizing VK2809 in an in vivo model of GSD Ia. Data demonstrated that treatment with

VK2809 led to statistically significant reductions in key metabolic markers of GSD Ia. VK2809's potential to rapidly reduce hepatic triglyceride levels, as demonstrated in this initial evaluation in a GSD Ia model, provides support for the continued investigation of the compound in this indication. We expect to file an Investigational New Drug Application, or IND, and then initiate a Phase 1 human proof-of-concept clinical trial to evaluate VK2809 in patients with GSD Ia in the first quarter of 2018 and to announce initial results from the trial in the second half of 2018.

S-2

We are also developing VK0214 for X-linked adrenoleukodystrophy, or X-ALD, a rare X-linked, inherited neurological disorder characterized by a breakdown in the protective barriers surrounding brain and nerve cells. The disease, for which there is no approved treatment, is caused by mutations in a peroxisomal transporter of very long chain fatty acids, or VLCFA, known as ABCD1. As a result, transporter function is impaired and patients are unable to efficiently metabolize VLCFA. The TR β receptor is known to regulate expression of an alternative VLCFA transporter, known as ABCD2. Various preclinical models have demonstrated that increased expression of ABCD2 can lead to normalization of VLCFA metabolism. Preliminary data suggest that VK0214 stimulates ABCD2 expression in an in vitro model and reduces VLCFA levels in an in vivo model of X-ALD. Pending completion of certain toxicology studies, we expect to file an IND and then initiate a proof-of-concept clinical trial in the second half of 2018.

We were incorporated under the laws of the State of Delaware on September 24, 2012. Since our incorporation, we have devoted most of our efforts towards conducting certain clinical trials and preclinical studies related to our VK5211, VK2809 and VK0214 programs, as well as efforts towards raising capital and building infrastructure. We obtained worldwide rights to our VK5211, VK2809 and VK0214 programs and certain other assets pursuant to an exclusive license agreement with Ligand. The terms of this license agreement are detailed in the Master License Agreement, which we entered into on May 21, 2014 with Ligand, as amended, or the Master License Agreement. A summary of the Master License Agreement can be found in the section entitled “Business —Agreements with Ligand —Master License Agreement” in Part I, Item 1 of our Annual Report on Form 10-K filed with the SEC on March 21, 2017.

For a complete description of our business, financial condition, results of operations and other important information, we refer you to our filings with the SEC that are incorporated by reference in this prospectus supplement, including our Annual Report on Form 10-K for the year ended December 31, 2016 and our Quarterly Report on Form 10-Q for the quarter ended September 30, 2017. For instructions on how to find copies of these documents, see the section of this prospectus supplement entitled “Information Incorporated by Reference; Where You Can Find More Information.”

Recent Developments

VK2809 In Vivo Study of NASH

In October 2017, we announced positive final results from an eight-week study of VK2809 in an in vivo model of NASH. Treatment with VK2809 resulted in: (1) statistically significant reductions in several key measures of steatosis, including liver triglyceride content and total liver lipid content, (2) fibrotic activity, including total liver fibrosis, type I collagen and hydroxyproline, relative to vehicle controls, and (3) statistically significant changes in the expression of key genes associated with NASH development and progression, relative to vehicle control, suggesting improved lipid and cholesterol metabolism, improved lipid metabolism and insulin sensitivity and reduced fibrotic activity.

VK5211 Phase 2 Clinical Trial

On November 28, 2017, we announced positive top-line results from our 12-week, Phase 2 clinical trial of VK5211 in patients who recently suffered a hip fracture. Top-line data showed that the trial achieved its primary endpoint, demonstrating statistically significant, dose dependent increases in lean body mass, less head, following treatment with VK5211 as compared to placebo. The study also achieved certain secondary endpoints, demonstrating statistically significant increases in appendicular lean body mass and total lean body mass for all doses of VK5211, compared to placebo. VK5211 demonstrated encouraging safety and tolerability in this study, with no drug-related serious adverse events (SAEs) reported.

Edgar Filing: Viking Therapeutics, Inc. - Form 424B5

The Phase 2 clinical trial was a randomized, double-blind, placebo-controlled, parallel group, international study designed to evaluate the efficacy, safety and tolerability of VK5211 in patients recovering from hip fracture surgery. A total of 108 patients were randomized to receive once-daily VK5211 doses of 0.5 mg, 1.0 mg, 2.0 mg, or placebo for 12 weeks. Top-line results include:

S-3

•All doses of VK5211 demonstrated statistically significant increases in total lean body mass, less head, the study's primary endpoint. Placebo-adjusted increases in lean body mass were 4.8% at 0.5 mg ($p < 0.005$), 7.2% at 1.0 mg ($p < 0.001$), and 9.1% at 2.0 mg ($p < 0.001$). These corresponded to placebo-adjusted increases of 1.6 kg at 0.5 mg ($p < 0.005$), 2.5 kg at 1.0 mg ($p < 0.001$), and 3.1 kg at 2.0 mg ($p < 0.001$).

•The proportion of patients experiencing at least a 5% increase in total lean body mass, less head, were 19% with placebo, 61% at 0.5 mg, 65% at 1.0 mg, and 75% at 2.0 mg ($p < 0.01$ for each). The proportion of patients demonstrating at least a 2.0 kg gain in total lean body mass, less head, were 14% with placebo, 57% at 0.5 mg, 65% at 1.0 mg, and 81% at 2.0 mg ($p < 0.01$ for each).

•All doses of VK5211 produced statistically significant increases in appendicular lean body mass, a secondary efficacy endpoint. Placebo-adjusted increases in appendicular lean body mass were 6.1% at 0.5 mg ($p < 0.01$), 9.0% at 1.0 mg ($p < 0.001$), and 10.2% at 2.0 mg ($p < 0.001$). These corresponded to placebo-adjusted increases of 0.8 kg at 0.5 mg ($p < 0.05$), 1.3 kg at 1.0 mg ($p < 0.001$), and 1.4 kg at 2.0 mg ($p < 0.001$).

•All doses of VK5211 produced statistically significant increases in total lean body mass, including head, a secondary efficacy endpoint. Increases in total lean body mass were 6.3% ($p < 0.005$), 8.2% ($p < 0.001$), and 9.9% ($p < 0.001$) from baseline, corresponding to placebo-adjusted increases of 4.7% at 0.5 mg ($p < 0.005$), 6.8% at 1.0 mg ($p < 0.001$), and 8.3% at 2.0 mg ($p < 0.001$). These corresponded to placebo-adjusted increases of 1.7 kg at 0.5 mg ($p < 0.005$), 2.6 kg at 1.0 mg ($p < 0.001$), and 3.1 kg at 2.0 mg ($p < 0.001$).

•Patients receiving VK5211 demonstrated numerical improvements in certain exploratory assessments of functional performance, including the 6-minute walk test and short physical performance battery, compared with placebo. These endpoints were not powered for significance. Further evaluation of exploratory functional endpoints is underway.

•There were no significant differences in the rates of adverse events reported among patients receiving VK5211 compared with placebo. There were no dose-related differences in reported adverse events among various VK5211 treatment groups. No drug-related SAEs were observed in patients receiving VK5211.

We expect to receive follow-up data for the Phase 2 clinical trial in the first half of 2018.

Public Offering of Common Stock

On December 11, 2017, we closed an underwritten public offering of shares of our common stock pursuant to which we sold an aggregate of 5,900,000 shares of our common stock at a public offering price of \$2.50 per share, including 769,565 shares sold pursuant to the underwriters' full exercise of their option to purchase additional shares to cover over-allotments, for gross proceeds to us of \$14.8 million.

Financial Update (Unaudited)

As of December 31, 2017, we had cash and cash equivalents and short-term investments of approximately \$20.6 million.

As of December 31, 2017, there were 35,817,104 shares of our common stock outstanding. As of December 31, 2017: (1) options to purchase 1,575,864 shares of our common stock were outstanding, (2) restricted stock units representing 46,250 shares of our common stock were outstanding, (3) warrants to purchase an aggregate of 11,202,536 shares of our common stock were outstanding, and (4) the aggregate outstanding principal amount under that certain Secured Convertible Promissory Note issued by us to Ligand on May 21, 2014, plus all accrued and previously unpaid interest thereon, was approximately \$3,876,937.

The estimated financial data presented above as of December 31, 2017 are preliminary and may change, are based on information available to management as of the date of this prospectus supplement, and are subject to completion by management of the financial statements as of and for the year ended December 31, 2017. There can be no assurance that such financial information as of December 31, 2017 will not differ from these estimates, including as a result of quarter-end closing and any such changes could be material.

The foregoing preliminary financial data has been prepared by, and is the responsibility of, our management. This data could change as a result of further review. Complete annual results will be included in our Annual Report on Form 10-K for the year ended December 31, 2017.

Corporate Information

We were incorporated under the laws of the State of Delaware on September 24, 2012. Our principal executive offices are located at 12340 El Camino Real, Suite 250, San Diego, CA 92130, and our telephone number is (858) 704-4660. Our website address is www.vikingtherapeutics.com. We do not incorporate the information on, or accessible through, our website into this prospectus supplement, and you should not consider any information on, or accessible through, our website as part of this prospectus supplement. We have included our website address in this prospectus supplement solely as an inactive textual reference.

Emerging Growth Company Status

We qualify as an “emerging growth company,” as that term is defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. For as long as we qualify as an emerging growth company, we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that do not qualify as emerging growth companies, including, without limitation, not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act of 2002, as amended, reduced disclosure obligations relating to executive compensation and exemptions from the requirements of holding advisory “say-on-pay,” “say-when-on-pay” and “golden parachute” executive compensation votes.

Under the JOBS Act, we will remain an emerging growth company until the earliest of:

- the last day of the fiscal year during which we have total annual gross revenues of \$1.07 billion or more;
- the last day of the fiscal year following the fifth anniversary of the completion of our initial public offering, or December 31, 2020;
- the date on which we have, during the previous three-year period, issued more than \$1.0 billion in non-convertible debt; and
- the date on which we are deemed to be a “large accelerated filer” under the Securities Exchange Act of 1934, or the Exchange Act (i.e., the first day of the fiscal year after we have (1) more than \$700.0 million in outstanding common equity held by our non-affiliates, measured each year on the last day of our second fiscal quarter, and (2) been public for at least 12 months).

We have elected to take advantage of certain of the reduced disclosure obligations regarding executive compensation in this prospectus supplement and may elect to take advantage of other reduced reporting requirements in future filings with the SEC. As a result, the information that we provide to our stockholders may be different than the information you receive from other public reporting companies.

The Offering

Common stock offered by us 11,000,000 shares

Common stock to be outstanding immediately after this offering 45,398,847 shares

Option to purchase additional shares We have granted the underwriters a 30-day option to purchase up to 1,650,000 additional shares of common stock from us at the public offering price, less underwriting discounts and commissions, to cover over-allotments, if any.

Use of proceeds We estimate the net proceeds from this offering will be approximately \$51.0 million, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We intend to use the net proceeds from this offering for continued development of our VK5211, VK2809 and VK0214 programs and for general research and development, working capital and general corporate purposes, including other potential uses of net proceeds from this offering. See "Use of Proceeds" beginning on page S-12 of this prospectus supplement for additional detail.

Trading symbol Our common stock is listed on the Nasdaq Capital Market under the symbol "VKTX."

Risk factors Investing in our securities involves a high degree of risk. See "Risk Factors" beginning on page S-8 and other information included or incorporated in this prospectus supplement for a discussion of factors you should carefully consider before investing in our securities.

The number of shares of our common stock that will be outstanding immediately after this offering is based on 28,498,847 shares of common stock outstanding as of September 30, 2017, and excludes:

- 1,589,894 shares of our common stock issuable upon the exercise of options outstanding as of September 30, 2017 with a weighted-average exercise price of \$2.67 per share;
- 6,250 shares of our common stock reserved for future issuance in connection with service-based restricted stock units outstanding as of September 30, 2017 with a weighted-average grant date fair value of \$4.73 per share;
- 675,819 shares of our common stock reserved as of September 30, 2017 for future issuance under our 2014 Equity Incentive Plan, which contains provisions that may increase its share reserve each year;
- 716,192 shares of our common stock reserved as of September 30, 2017 for future issuance under our 2014 Employee Stock Purchase Plan, which contains provisions that may increase its share reserve each year; and
- 2,479,837 shares of our common stock issuable upon the exercise of outstanding warrants as of September 30, 2017, at a weighted-average exercise price of \$1.51 per share.

Except as otherwise indicated, all information in this prospectus supplement assumes:

- that the 5,900,000 shares of our common stock issued pursuant to an underwritten public offering of our common stock that closed on December 11, 2017 are issued and outstanding; and

S-6

no exercise by the underwriters of their option to purchase additional shares to cover over-allotments, if any, and that the secured convertible promissory note previously issued by us to Ligand is not converted into any shares of our common stock.

S-7

RISK FACTORS

Our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 and our Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, which are incorporated by reference into this prospectus supplement, as well as our other filings with the SEC, include material risk factors relating to our business. Those risks and uncertainties and the risks and uncertainties described below are not the only risks and uncertainties that we face. Additional risks and uncertainties that are not presently known to us or that we currently deem immaterial or that are not specific to us, such as general economic conditions, may also materially and adversely affect our business and operations. If any of those risks and uncertainties or the risks and uncertainties described below actually occurs, our business, financial condition or results of operations could be harmed substantially. In such a case, you may lose all or part of your investment. You should carefully consider the risks and uncertainties described below and those risks and uncertainties incorporated by reference into this prospectus supplement, as well as the other information included in this prospectus supplement, before making an investment decision with respect to our common stock.

Risks Related to this Offering

Purchasers of common stock in this offering will experience immediate and substantial dilution in the book value of their investment. You may experience further dilution upon exercise of our outstanding options and warrants.

The public offering price per share of common stock in this offering is substantially higher than the net tangible book value per share of our common stock before giving effect to this offering. Accordingly, if you purchase common stock in this offering, you will incur immediate substantial dilution of approximately \$3.54 per share, representing the difference between the public offering price per share of common stock and our pro forma as adjusted net tangible book value as of September 30, 2017. In addition, if our outstanding options or warrants are exercised, you could experience further dilution. For a further description of the dilution that you will experience immediately after this offering, see the section in this prospectus supplement entitled “Dilution.”

Future sales of our common stock, or the perception that such future sales may occur, may cause our stock price to decline.

Sales of a substantial number of shares of our common stock in the public market, or the perception that these sales could occur, following this offering could cause the market price of our common stock to decline. A substantial majority of the outstanding shares of our common stock are, and the shares of common stock sold in this offering upon issuance will be, freely tradable without restriction or further registration under the Securities Act of 1933, as amended.

We have broad discretion to determine how to use the funds raised in this offering, and may use them in ways that may not enhance our operating results or the price of our common stock.

Our management will have broad discretion over the use of proceeds from this offering, and we could spend the proceeds from this offering in ways our stockholders may not agree with or that do not yield a favorable return, if at all. We intend to use the net proceeds from this offering for continued development of our VK5211, VK2809 and VK0214 programs and for general research and development, working capital and general corporate purposes, including other potential uses of net proceeds from this offering. See “Use of Proceeds” beginning on page S-12 of this prospectus supplement for additional detail. However, our use of these proceeds may differ substantially from our current plans. If we do not invest or apply the proceeds from this offering in ways that improve our operating results, we may fail to achieve expected financial results, which could cause our stock price to decline.

S-8

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the documents incorporated by reference in this prospectus supplement contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which statements involve substantial risks and uncertainties. Forward-looking statements generally relate to future events or our future financial or operating performance. In some cases, you can identify forward-looking statements because they contain words such as “may,” “will,” “should,” “expects,” “plans,” “anticipates,” “could,” “intends,” “target,” “projects,” “contemplates,” “believes,” “estimates,” “predicts,” “potential” the negative of these words or other similar terms or expressions that concern our expectations, strategy, plans or intentions. Forward-looking statements contained in this prospectus supplement and the documents incorporated by reference in this prospectus supplement include, but are not limited to, statements about:

- risks and uncertainties associated with our research and development activities, including our clinical trials and preclinical studies;
- the timing or likelihood of regulatory filings and approvals or of alternative regulatory pathways for our drug candidates;
- the potential market opportunities for commercializing our drug candidates;
- our expectations regarding the potential market size and the size of the patient populations for our drug candidates, if approved for commercial use, and our ability to serve such markets;
- estimates of our expenses, future revenue, capital requirements and our needs for additional financing;
- our ability to develop, acquire and advance our product candidates into, and successfully complete, clinical trials and preclinical studies and obtain regulatory approvals;
- the implementation of our business model and strategic plans for our business and drug candidates;
- the initiation, cost, timing, progress and results of future and current preclinical studies and clinical trials, and our research and development programs;
 - the terms of future licensing arrangements, and whether we can enter into such arrangements at all;
- timing and receipt or payments of licensing and milestone revenues, if any;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our drug candidates and our ability to operate our business without infringing the intellectual property rights of others;
- regulatory developments in the United States and foreign countries;
- the performance of our third party suppliers and manufacturers;
- our ability to maintain and establish collaborations or obtain additional funding;
 - the success of competing therapies that are currently or may become available;
- our expectations regarding the time during which we will be an emerging growth company under the JOBS Act;
- our use of proceeds from this offering;
- our ability to continue as a going concern;
- our financial performance; and
- developments and projections relating to our competitors and our industry.

We caution you that the forward-looking statements highlighted above do not encompass all of the forward-looking statements made in this prospectus supplement or in the documents incorporated by reference in this prospectus supplement.

We have based the forward-looking statements contained in this prospectus supplement and in the documents incorporated by reference in this prospectus supplement primarily on our current expectations and projections about future events and trends that we believe may affect our business, financial condition, results of operations and prospects. The outcomes of the events described in these forward-looking statements are subject to risks, uncertainties and other factors that could cause actual results and experience to differ from those projected, including, but not limited to, the risk factors described herein and the risk factors set forth in Part I - Item 1A, "Risk Factors", in our Annual Report on Form 10-K for the year ended December 31, 2016, as filed with the SEC on March 21, 2017, in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, as filed with the SEC on November 8, 2017, and elsewhere in the documents incorporated by reference into this prospectus supplement. Moreover, we operate in a very competitive and challenging environment. New risks and uncertainties emerge from time to time, and it is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained in this prospectus supplement and in the documents incorporated by reference in this prospectus supplement. We cannot assure you that the results, events and circumstances reflected in the forward-looking statements will be achieved or occur, and actual results, events or circumstances could differ materially from those described in the forward-looking statements.

The forward-looking statements contained in this prospectus supplement and in the documents incorporated by reference in this prospectus supplement relate only to events as of the date on which the statements are made. We do not undertake any obligation to release publicly any revisions to such forward-looking statements to reflect events or circumstances after the date of this prospectus supplement or to reflect the occurrence of unanticipated events. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures, other strategic transactions or investments we may make.

MARKET AND INDUSTRY DATA

This prospectus supplement and the information incorporated by reference herein contain statistical data, estimates, forecasts, projections and other information concerning our industry, our business and the markets for certain diseases, including data regarding the estimated size of those markets and the incidence and prevalence of certain medical conditions. Information that is based on statistical data, estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, medical and general publications, government data, studies and similar data prepared by market research firms and other third parties. These third parties may, in the future, alter the manner in which they conduct surveys and studies regarding the markets in which we operate our business. The market and other estimates included in this prospectus supplement and the information incorporated by reference herein, as they relate to projections, involve numerous assumptions, are subject to risks and uncertainties, and are subject to change based on various factors, including those discussed in the section of this prospectus supplement entitled “Risk Factors” and in the other information contained or incorporated by reference in this prospectus supplement.

USE OF PROCEEDS

We estimate that the net proceeds from the sale of the common stock in this offering will be approximately \$51.0 million, or approximately \$58.6 million if the underwriters exercise their option to purchase additional shares to cover over-allotments, if any, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

We intend to use the net proceeds from this offering for continued development of our VK5211, VK2809 and VK0214 programs and for general research and development, working capital and general corporate purposes.

Our expected use of the net proceeds from this offering represents our current intentions based upon our present plans and business condition. As of the date of this prospectus supplement, we cannot predict with complete certainty all of the particular uses for the net proceeds to be received upon the completion of this offering or the actual amounts that we will spend on the uses set forth above. The amount and timing of our actual expenditures will depend upon numerous factors, including the results of our research and development efforts, the timing and success of preclinical studies, our ongoing clinical trials or clinical trials we may commence in the future, the timing of regulatory submissions and the feedback from regulatory authorities. In addition, we might decide to postpone or not pursue clinical trials or preclinical activities if the net proceeds from this offering and the other sources of cash are less than expected, although we currently expect that the net proceeds from this offering will be used as set forth above. Accordingly, our management will have broad discretion in the application of the net proceeds, and investors will be relying on our judgment regarding the application of the net proceeds of this offering. Additionally, our management will have discretion to allocate the net proceeds from this offering for acquisitions of, or investments in, complementary businesses and products or repayment of our indebtedness, in-licensing opportunities and pipeline development. We have no current agreements or commitments to use these proceeds to make any such acquisitions or investments or to repay any indebtedness.

Pending use of the proceeds from this offering as described above, we intend to invest the net proceeds of this offering in money market funds, certificates of deposit and corporate debt securities.

PRICE RANGE OF OUR COMMON STOCK

Our common stock began trading on the Nasdaq Capital Market on April 29, 2015 and is listed under the symbol “VKTX.” On February 1, 2018, the closing price of our common stock on the Nasdaq Capital Market was \$5.31 per share. The following table sets forth, for our fiscal periods indicated, the high and low sale prices of our common stock as reported on the Nasdaq Capital Market.

	High	Low
Fiscal Year Ending December 31, 2018		
First Quarter (through February 1, 2018)	\$6.25	\$4.06
Fiscal Year Ended December 31, 2017		
Fourth Quarter	\$4.40	\$1.69
Third Quarter	\$1.99	\$0.88
Second Quarter	\$1.49	\$0.96
First Quarter	\$1.70	\$1.11
Fiscal Year Ended December 31, 2016		
Fourth Quarter	\$1.50	\$0.90
Third Quarter	\$1.54	\$1.22
Second Quarter	\$2.89	\$1.06
First Quarter	\$4.24	\$1.37

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock. We intend to retain future earnings, if any, to finance the operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future. Any future determination to pay dividends will be made at the discretion of our board of directors or any authorized committee thereof after considering our financial condition, results of operations, capital requirements, business prospects and other factors our board of directors or such committee deems relevant, and will be subject to the restrictions contained in our current or future financing instruments. In addition, under our Loan and Security Agreement with Ligand, as amended, we may not declare or pay dividends in respect of our common stock without Ligand's prior written consent.

S-14

CAPITALIZATION

The following table sets forth our cash and cash equivalents, debt, equity and total capitalization as of September 30, 2017:

• on an actual basis; and

• on a pro forma basis to give effect to the issuance of 5,900,000 shares of our common stock pursuant to an underwritten public offering of our common stock that closed on December 11, 2017; and

• on a pro forma as adjusted basis to give further effect to this offering and the application of the estimated net proceeds of this offering as described under “Use of Proceeds.”

The “Pro Forma as Adjusted” column assumes that the underwriters do not exercise their option to purchase additional shares to cover over-allotments, if any.

You should read the data set forth in the table below in conjunction with the section of this prospectus supplement under the caption “Use of Proceeds” as well as our “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” our financial statements and other financial information included or incorporated by reference in this prospectus supplement.

	As of September 30, 2017		
	(Unaudited)		
	Actual	Pro Forma	Pro Forma as Adjusted
Cash, cash equivalents and investments	\$9,838,782	\$23,306,282	\$74,256,282
Deferred public offering and other financing costs	275,029	275,029	275,029
Debt	5,220,619	5,220,619	5,220,619
Accrued interest	9,982	9,982	9,982
Convertible notes payable	3,180,411	3,180,411	3,180,411
Debt conversion feature liability	2,030,226	2,030,226	2,030,226
Stockholders’ equity (deficit):			
Preferred stock, \$0.00001 par value: 10,000,000 shares authorized and no shares issued and outstanding, actual, pro forma and pro forma as adjusted	—	—	—
Common stock, \$0.00001 par value: 300,000,000 shares authorized, actual, pro forma and pro forma as adjusted, and 28,498,847 shares issued and outstanding, actual; 34,398,847 shares issued and outstanding, pro forma; and 45,398,847 shares issued and outstanding, pro forma as adjusted	285	344	454
Additional paid-in capital	78,999,693	92,467,134	143,417,024
Accumulated deficit	(76,770,459)	(76,770,459)	(76,770,459)
Accumulated other comprehensive loss	(3,558)	(3,558)	(3,558)
Total stockholders’ equity	2,225,961	15,693,461	66,643,461
Total capitalization	\$7,446,580	\$20,914,080	\$71,864,080

The above table excludes:

• 4,589,894 shares of our common stock issuable upon the exercise of options outstanding as of September 30, 2017 with a weighted-average exercise price of \$2.67 per share;

•

56,250 shares of our common stock reserved for future issuance in connection with service-based restricted stock units outstanding as of September 30, 2017 with a weighted-average grant date fair value of \$4.73 per share;
675,819 shares of our common stock reserved as of September 30, 2017 for future issuance under our 2014 Equity Incentive Plan, which contains provisions that may increase its share reserve each year;

S-15

• 16,192 shares of our common stock reserved as of September 30, 2017 for future issuance under our 2014 Employee Stock Purchase Plan, which contains provisions that may increase its share reserve each year; and
• 2,479,837 shares of our common stock issuable upon the exercise of outstanding warrants as of September 30, 2017, at a weighted-average exercise price of \$1.51 per share.

S-16

DILUTION

Purchasers of common stock in this offering will experience immediate dilution to the extent of the difference between the public offering price per share of common stock and the pro forma as adjusted net tangible book value per share of common stock immediately after this offering.

Our net tangible book value as of September 30, 2017 was approximately \$2.0 million, or \$0.07 per share of common stock. Net tangible book value per share is determined by dividing the net of total tangible assets less total liabilities, by the aggregate number of shares of common stock outstanding as of September 30, 2017. Our pro forma net tangible book value as of September 30, 2017 was \$15.4 million, or \$0.45 per share, based on the total number of shares of our common stock outstanding as of September 30, 2017, after giving effect to the issuance of 5,900,000 shares of our common stock pursuant to an underwritten public offering of our common stock that closed on December 11, 2017. After giving effect to the sale by us of 11,000,000 shares of common stock at the public offering price of \$5.00 per share of common stock, and after deducting underwriting discounts and commissions and estimated offering expenses, our pro forma as adjusted net tangible book value as of September 30, 2017 would have been approximately \$66.4 million, or \$1.46 per share of common stock. This represents an immediate increase in net tangible book value of \$1.01 per share to our existing stockholders and an immediate dilution of \$3.54 per share of common stock issued to the investors purchasing securities in this offering.

The following table illustrates this per share dilution:

Public offering price per share of common stock	\$	5.00
Pro forma net tangible book value per share as of September 30, 2017	\$0.45	
Increase in pro forma net tangible book value per share attributable to this offering	\$1.01	
Pro forma as adjusted net tangible book value per share after this offering	\$	1.46
Dilution per share to investors participating in this offering	\$	3.54

If the underwriters exercise their option in full to purchase 1,650,000 additional shares of common stock in this offering at the public offering price of \$5.00 per share, the net tangible book value per share after this offering would be \$1.57 per share, the increase in the net tangible book value per share to existing stockholders would be \$1.13 per share and the dilution to investors purchasing securities in this offering would be \$3.43 per share.

The above table excludes:

- 1,589,894 shares of our common stock issuable upon the exercise of options outstanding as of September 30, 2017 with a weighted-average exercise price of \$2.67 per share;
- 56,250 shares of our common stock reserved for future issuance in connection with service-based restricted stock units outstanding as of September 30, 2017 with a weighted-average grant date fair value of \$4.73 per share;
- 675,819 shares of our common stock reserved as of September 30, 2017 for future issuance under our 2014 Equity Incentive Plan, which contains provisions that may increase its share reserve each year;
- 716,192 shares of our common stock reserved as of September 30, 2017 for future issuance under our 2014 Employee Stock Purchase Plan, which contains provisions that may increase its share reserve each year; and
- 12,479,837 shares of our common stock issuable upon the exercise of outstanding warrants as of September 30, 2017, at a weighted-average exercise price of \$1.51 per share.

To the extent that options or warrants are exercised, new options are issued under our equity incentive plans, or we issue additional shares of common stock in the future, there may be further dilution to investors participating in this offering. Moreover, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result

in further dilution to our stockholders.

S-17

Directors, Executive Officers and Corporate Governance

Information Regarding Directors

Our business and affairs are managed under the direction of our board of directors, or our Board, which currently consists of six members. The primary responsibilities of our Board are to provide oversight, strategic guidance, counseling and direction to our management.

In accordance with our amended and restated certificate of incorporation and our amended and restated bylaws, our Board is divided into three classes with staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms. Our directors are divided among the three classes as follows:

- our class III directors are Dr. Lian and Dr. Macartney and their term will expire at the annual meeting of stockholders to be held in 2018; and
- our class I directors are Mr. Foehr and Mr. Rowland and their term will expire at the annual meeting of stockholders to be held in 2019; and
- our class II directors are Mr. Singleton and Mr. Webster and their term will expire at the annual meeting of stockholders to be held in 2020.

At each annual meeting of stockholders, the successors to the directors whose term will then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. In addition, the authorized number of directors may be changed only by resolution of our Board. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. This classification of our Board may have the effect of delaying or preventing a change of our management or a change in control.

The names of our current directors, their ages as of February 2, 2018, director class and biographies are listed below. There are no family relationships between or among any of our directors.

Name	Age	Director Class	Position(s)
Lawson Macartney, DVM, Ph.D.	60	Class III	Chairperson of the Board of Directors
Brian Lian, Ph.D. ⁽¹⁾	52	Class III	President and Chief Executive Officer, Director
Matthew W. Foehr	45	Class I	Director
Charles A. Rowland, Jr.	59	Class I	Director
J. Matthew Singleton	65	Class II	Director
Stephen W. Webster	56	Class II	Director

(1)Please see “Information Regarding Executive Officers” below for Dr. Lian’s biography.

Lawson Macartney, DVM, Ph.D., has served as the Chairperson of the Board since May 2015 and as a member of our Board since May 2014. Dr. Macartney serves on the Board of Dechra PLC, an international animal health pharmaceutical company based in the UK, and on the Supervisory Board of the Netherlands Translational Research Centre, a preclinical biopharmaceutical company based in The Netherlands. He served as President, Chief Executive Officer and a member of the board of directors of Ambrx Inc., a biopharmaceutical company, from February 2013 to June 2015. Prior to Ambrx, Dr. Macartney served at Shire AG, a specialty biopharmaceutical company, as Senior Vice President of the Emerging Business Unit from 2011 to 2013, where he was responsible for discovery initiatives through Phase 3 development of Shire’s Specialty Pharmaceutical portfolio. Prior to joining Shire AG, he served at GSK, a pharmaceutical company, from 1999 to 2011, serving as Senior Vice President of Global Product Strategy and

Edgar Filing: Viking Therapeutics, Inc. - Form 424B5

Project/Portfolio Management from 2007 to 2011, as Senior Vice President, Cardiovascular and Metabolic Medicine Development Center from 2004 to 2007, and as Vice President, Global Head of Cardiovascular, Metabolic and Urology Therapeutic Areas from 1999 to 2004. Prior to joining GSK, Dr. Macartney was employed at Astra Pharmaceuticals from 1998 to 1999 in leadership roles in operations, marketing and sales, and served as Executive Director, Commercial Operations at AstraMerck, Inc., a pharmaceutical company, from 1996 to 1998. Dr. Macartney received his Ph.D. from Glasgow University in Scotland in 1982, where he was a Royal Society Research Fellow, and his B.V.M.S. (equivalent to a D.V.M.) in 1979 from Glasgow University Veterinary School. He is also trained in

S-18

diagnostic pathology and is a Fellow of the Royal College of Pathologists. We believe that Dr. Macartney's extensive experience in leadership positions at numerous pharmaceutical companies qualifies him to serve on our Board.

Matthew W. Foehr has served as a member of our Board since May 2014. Since February 2015, Mr. Foehr has served as President and Chief Operating Officer of Ligand, and previously served as Executive Vice President and Chief Operating Officer of Ligand from April 2011 to February 2015. He has served on the board of directors of Ritter Pharmaceuticals, Inc. (NASDAQ: RTTR) since February 2015 and currently serves on its audit committee and is Chair of its compensation committee. Mr. Foehr has over 20 years of experience in the pharmaceutical industry, having managed global operations and research and development programs. From March 2010 to April 2011, he was Vice President and Head of Consumer Dermatology R&D, as well as Acting Chief Scientific Officer of Dermatology, in the Stiefel division of GSK. Following GSK's \$3.6 billion acquisition of Stiefel Laboratories, Inc., a pharmaceutical company, in 2009, Mr. Foehr led the R&D integration of Stiefel into GSK. At Stiefel Laboratories, Inc., Mr. Foehr served as Senior Vice President of Global R&D Operations, Senior Vice President of Product Development & Support, and Vice President of Global Supply Chain Technical Services from January 2007 to March 2010. Prior to Stiefel, Mr. Foehr held various executive roles at Connetics Corporation, a pharmaceutical company, including Senior Vice President of Technical Operations and Vice President of Manufacturing. Early in his career, Mr. Foehr managed manufacturing activities and worked in process sciences at both LXR Biotechnology Inc. and Berlex Biosciences. Mr. Foehr is the author of multiple scientific publications and is named on numerous U.S. patents. He received his BS in Biology from Santa Clara University. We believe that Mr. Foehr's past service in executive management roles for companies in the pharmaceutical industry and related experience provide him with the qualifications and skills to serve as a member of our Board. Pursuant to the management rights letter between us and Ligand, a greater than 5% holder of our outstanding shares of common stock, dated May 21, 2014, Ligand has the right to nominate one individual for election to our Board, and Mr. Foehr is the current member of our Board nominated by Ligand.

Charles A. Rowland, Jr., MBA, has served as a member of our Board since July 2017. He has served as a member of the board of directors of Blueprint Medicines Corporation since March 2015. From April 2016 to February 2017, Mr. Rowland served as president and chief executive officer of Aurinia Pharmaceuticals Inc., and as a member of the board of directors of Aurinia from July 2014 to February 2017. Mr. Rowland previously served as vice president and chief financial officer of ViroPharma Incorporated, an international biopharmaceutical company, from October 2008 until it was acquired by Shire plc in January 2014. Prior to joining ViroPharma, from 2006 to 2008, Mr. Rowland served as executive vice president and chief financial officer, as well as the interim co-chief executive officer, for Endo Pharmaceuticals Inc., a specialty pharmaceutical company with a primary focus in pain management. Mr. Rowland previously held positions of increasing responsibility at Biovail Pharmaceuticals, Inc., Breakaway Technologies, Inc., Pharmacia Corporation, Novartis AG and Bristol-Myers Squibb Co., each a biopharmaceutical company. Mr. Rowland joined the board of directors of Idenix Pharmaceuticals, Inc., a biopharmaceutical company, in June 2013 and served as a member of its audit committee until Idenix was acquired by Merck & Co., Inc. in August 2014. Mr. Rowland served as a member of the board of directors and chairman of the audit committee of Vitae Pharmaceuticals, Inc. from September 2014 until it was acquired by Allergan in September 2016. Since January 2015, he has served as a member of the supervisory board and chairman of the audit committee of Nabriva Therapeutics, AG, a biotechnology company based in Vienna, Austria. Mr. Rowland served as a member of the board of directors and chairman of the audit committee of BIND Therapeutics, Inc. from May 2014 to July 2016. Mr. Rowland received a B.S. in Accounting from Saint Joseph's University and an M.B.A. with a finance concentration from Rutgers University. We believe that Mr. Rowland's financial and business expertise in the life sciences industry provide him with the qualifications and skills to serve as a member of our Board.

J. Matthew Singleton has served as a member of our Board since May 2014. In October 2011, Mr. Singleton retired from his position as Executive Vice President and Chief Financial Officer of CitationAir (formerly CitationShares LLC), a privately held jet services company wholly-owned by Textron Inc., a public industrial conglomerate. He had served in this position since 2000. Mr. Singleton has extensive financial, accounting and transactional experience,

including through his role as Managing Director, Executive Vice President and Chief Administrative Officer of CIBC World Markets, an investment banking company, for 20 years, from 1974 to 1994, at Arthur Andersen & Co., a public accounting firm, including as Partner-in-Charge of the Metro New York Audit and Business Advisory Practice, and as a Practice Fellow at the Financial Accounting Standards Board, a private organization responsible for establishing financial accounting reporting standards. From 2003 until 2014, Mr. Singleton served as a director of Cubist Pharmaceuticals Inc., and as Audit Committee Chair beginning in 2004. Mr. Singleton previously served as an independent director of Salomon Reinvestment Company Inc., a privately held investment services company. Mr. Singleton received an AB in Economics from Princeton University and his MBA from New York University with a focus in Accounting. We believe that Mr. Singleton's financial, accounting and

S-19

business expertise provide him with the qualifications and skills to serve as a member of our Board, and are of particular importance as we continue to finance our operations.

Stephen W. Webster has served as a member of our Board since May 2014. Mr. Webster has served as the Chief Financial Officer of Spark Therapeutics, Inc., a biotechnology company, since July 2014. He was previously SVP and Chief Financial Officer of Optimer Pharmaceuticals, Inc., a biotechnology company, from 2012 to 2013, until its acquisition by Cubist Pharmaceuticals, Inc. Prior to joining Optimer, Mr. Webster served as SVP and Chief Financial Officer of Adolor Corporation, a biopharmaceutical company, from June 2008 until its acquisition by Cubist Pharmaceuticals, Inc. in December 2011. From 2007 until joining Adolor Corporation in 2008, Mr. Webster served as Managing Director, Investment Banking Division, Health Care Group for Broadpoint Capital Inc. (formerly First Albany Capital). Mr. Webster previously served as co-founder, President and Chief Executive Officer for Neuronix, Inc., a biopharmaceutical company, from 2000 to 2006. From 1987 to 2000, Mr. Webster served in positions of increased responsibility, including as Director, Investment Banking Division, Health Care Group for PaineWebber Incorporated. He has served as a Director of Nabriva Therapeutics plc (Nasdaq: NBRV) since August 2016 and previously served as a Director of HearUSA, formerly a public company, from 2008-2012. Mr. Webster holds an AB in Economics cum laude from Dartmouth College and an MBA in Finance from The Wharton School of the University of Pennsylvania. We believe that Mr. Webster's extensive experience in the biopharmaceutical industry, and in particular his prior service as chief financial officer and in other executive management roles, provide him with the qualifications and skills to serve as a member of our Board.

Information Regarding Executive Officers

Our executive officers are elected by, and serve at the discretion of, our Board. Our executive officers, their ages as of February 2, 2018, respective positions and biographies are listed below:

Name	Age	Position(s)
Brian Lian, Ph.D.	52	President and Chief Executive Officer, Director
Michael Morneau	52	Chief Financial Officer

Brian Lian, Ph.D., has served as our President and Chief Executive Officer and as a Director since our inception in September 2012. Dr. Lian has over 15 years of experience in the biotechnology and financial services industries. Prior to joining Viking, he was a Managing Director and Senior Research Analyst at SunTrust Robinson Humphrey, an investment bank, from 2012 to 2013. At SunTrust Robinson Humphrey, he was responsible for coverage of small and mid-cap biotechnology companies with an emphasis on companies in the diabetes, oncology, infectious disease and neurology spaces. Prior to SunTrust Robinson Humphrey, he was Managing Director and Senior Research Analyst at Global Hunter Securities, an investment bank, from 2011 to 2012. Prior to Global Hunter Securities, he was Senior Healthcare Analyst at The Agave Group, LLC, a registered investment advisor, from 2008 to 2011. Prior to The Agave Group, he was an Executive Director and Senior Biotechnology Analyst at CIBC World Markets, an investment bank, from 2006 to 2008. Prior to CIBC, he was a research scientist in small molecule drug discovery at Amgen, a biotechnology company. Prior to Amgen, he was a research scientist at Microcide Pharmaceuticals, a biotechnology company. Dr. Lian holds an MBA in accounting and finance from Indiana University, an MS and Ph.D. in organic chemistry from The University of Michigan, and a BA in chemistry from Whitman College. We believe that Dr. Lian's experience in the biotechnology industry, as well as his extensive investment banking and other experience in the financial services industry, provide him with the qualifications and skills to serve as a member of our Board and bring relevant strategic and operational guidance to our Board.

Michael Morneau has served as our Chief Financial Officer since May 2014. Mr. Morneau has over 25 years of accounting and financial experience at public and private companies in the biotechnology and accounting industries. Prior to Viking, from 2009 to 2014, he was VP of Finance and Chief Accounting Officer at Trius Therapeutics, Inc., a subsidiary of Cubist Pharmaceuticals, Inc., a pharmaceutical company, following Cubist's

acquisition of Trius in September 2013. Prior to Trius, from 2008 to 2009, he was Director of Lilly Research Labs Finance at Eli Lilly and Company, a pharmaceutical company. Prior to Eli Lilly, from 2006 to 2008, he was Director of Finance and Accounting at SGX Pharmaceuticals, Inc., a biotechnology company, which was acquired by Eli Lilly. Prior to SGX, from 2004 to 2006, he was Controller at Momenta Pharmaceuticals, Inc., a biotechnology company. Mr. Morneau earned his MBA and MA in accounting from New Hampshire College, and a BA in mathematics from the University of New Hampshire.

There are no family relationships between or among any of our executive officers or directors.

S-20

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our directors and executive officers, and persons who beneficially own more than ten percent of a registered class of our equity securities, to file with the SEC initial reports of ownership and reports of changes in ownership of common stock and our other equity securities. Officers, directors and greater than ten percent stockholders are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file.

To our knowledge, based solely on a review of the copies of such reports furnished to us and written representations that no other reports were required, during the fiscal year ended December 31, 2017, our officers, directors and greater than ten percent beneficial owners complied with all Section 16(a) filing requirements applicable to them.

Security Holder Nominations

We have not made any material changes to the procedures by which our stockholders may recommend nominees to our Board since we last disclosed the procedures by which stockholders may nominate director candidates under the caption “Security Holder Nominations” in our proxy statement for our 2017 annual meeting of stockholders filed with the SEC on April 7, 2017.

Code of Conduct and Ethics

Our Board has adopted a Code of Conduct and Ethics that applies to all of our employees, officers and directors, including our Chief Executive Officer, Chief Financial Officer and other executive and senior officers. We have posted the Code of Conduct and Ethics on our website at <http://ir.vikingtherapeutics.com/governance-highlights> under “Governance Documents”. The Code of Conduct and Ethics can only be amended by the approval of the Audit Committee and any waiver to the Code of Conduct and Ethics for an executive officer or director may only be granted by our Audit Committee and must be timely disclosed as required by applicable law. We expect that any amendments to the Code of Conduct and Ethics, or any waivers of its requirements, will be disclosed on our website.

Audit Committee

We have a separately-designated standing Audit Committee established in accordance with Section 3(a)(58)(A) of the Exchange Act. Our Audit Committee is comprised of Dr. Macartney and Messrs. Singleton, Rowland and Webster, with Mr. Singleton serving as Chairperson of the committee. Each member of the Audit Committee must be independent as defined under the applicable rules and listings standards of The Nasdaq Stock Market LLC, or the Nasdaq Rules, and SEC rules and financially literate under the Nasdaq Rules. Our Board has determined that each member of the Audit Committee is “independent” and “financially literate” under the Nasdaq Rules and the SEC rules and that Mr. Singleton is an “audit committee financial expert” under the rules of the SEC. The responsibilities of the Audit Committee are included in a written charter. The Audit Committee acts on behalf of our Board in fulfilling our Board’s oversight responsibilities with respect to our corporate accounting and financial reporting processes, the systems of internal control over financial reporting and audits of financial statements, and also assists our Board in its oversight of the quality and integrity of our financial statements and reports and the qualifications, independence and performance of our independent registered public accounting firm. For this purpose, the Audit Committee performs several functions. The Audit Committee’s responsibilities include:

- appointing, determining the compensation of, retaining, overseeing and evaluating our independent registered public accounting firm and any other registered public accounting firm engaged for the purpose of performing other review or attest services for us;
- determining the engagement of our independent registered public accounting firm;

prior to commencement of the audit engagement, reviewing and discussing with the independent registered public accounting firm a written disclosure by the prospective independent registered public accounting firm of all relationships between us, or persons in financial oversight roles, and such independent registered public accounting firm or their affiliates;

determining and approving engagements of the independent registered public accounting firm, prior to commencement of the engagement, and the scope of and plans for the audit;

S-21

- monitoring the rotation of partners of the independent registered public accounting firm on our audit engagement;
- reviewing with management and the independent registered public accounting firm any fraud that includes management or employees who have a significant role in our internal control over financial reporting and any significant changes in internal controls;
- establishing and overseeing procedures for the receipt, retention and treatment of complaints regarding accounting, internal accounting controls or other auditing matters and the confidential and anonymous submission by employees of concerns regarding questionable accounting or auditing matters;
- reviewing management's efforts to monitor compliance with our policies designed to ensure compliance with laws and rules; and
- reviewing and discussing with management and the independent registered public accounting firm the results of the annual audit and the independent registered public accounting firm's assessment of the quality and acceptability of our accounting principles and practices and all other matters required to be communicated to the Audit Committee by the independent registered public accounting firm under generally accepted accounting standards, the results of the independent registered public accounting firm's review of our quarterly financial information prior to public disclosure and our disclosures in our periodic reports filed with the SEC.

The Audit Committee reviews, discusses and assesses its own performance and composition at least annually. The Audit Committee also periodically reviews and assesses the adequacy of its charter, including its role and responsibilities as outlined in its charter, and recommends any proposed changes to our Board for its consideration and approval.

Typically, the Audit Committee meets at least quarterly and with greater frequency if necessary. Our Board has adopted a written charter of the Audit Committee that is available to stockholders on our internet website at <http://ir.vikingtherapeutics.com/governance-highlights> under "Committee Charters".

EXECUTIVE COMPENSATION

Our named executive officers for the year ended December 31, 2017, which consist of our principal executive officer and our only other executive officer during the year ended December 31, 2017, are:

• Brian Lian, Ph.D., our Chief Executive Officer; and
 • Michael Morneau, our Chief Financial Officer.

Summary Compensation Table

The following table sets forth certain information with respect to the compensation paid to our named executive officers for the fiscal years ended December 31, 2017 and 2016:

Name and Principal Position	Year	Non-Equity					Total
		Salary	Incentive Plan Compensation	Stock Awards	Option Awards ⁽¹⁾	All Other Compensation	
Brian Lian, Ph.D. Chief Executive Officer	2017	\$440,000	\$110,000	(2)	—	254,733	\$804,733
	2016	400,000	100,000		—	256,946	756,946
Michael Morneau Chief Financial Officer	2017	300,000	52,500	(2)	—	100,360	452,860
	2016	285,000	63,000		—	85,332	433,330

(1) These amounts represent the aggregate grant date fair value of option awards granted to each named executive officer, computed in accordance with authoritative accounting guidance. These amounts do not represent the actual amounts paid to or realized by the named executive officer. The value as of the grant date for stock options is recognized over the number of days of service required for the stock option to vest in full. As stock-based compensation expense recognized is based on options ultimately expected to vest, the fair value of each employee option grant during the year ended December 31, 2017 was estimated on the date of grant using the Black-Scholes option pricing model with the following weighted average assumptions: expected volatility: 85.8%; expected term (in years): 6.09; risk-free interest rate: 1.97%; and expected dividend yield: 0%.

(2) Relate to amounts earned by our named executive officers pursuant to our bonus program described below under “—2017 Bonuses”.

Narrative Disclosure to Summary Compensation Table

Employment Agreements

Employment Agreement - President and Chief Executive Officer

We entered into an employment agreement with Brian Lian, Ph.D., as our President and Chief Executive Officer (the “Lian Employment Agreement”), which became effective on June 2, 2014. The Lian Employment Agreement is subject to automatic renewals for additional one-year periods following June 2, 2015, unless either party gives the other written notice of its or his election to not renew (a “Lian Non-Renewal Notice”). Pursuant to the Lian Employment Agreement, we agreed to nominate Dr. Lian, and to continue to nominate him, to serve as a member of our Board, and Dr. Lian agreed to continue to serve as a member of our Board for as long as he is elected by our stockholders, until his employment with us is terminated. During fiscal year 2016, Dr. Lian’s annual base salary was \$400,000, which was increased to \$440,000 on January 1, 2017, subject to annual review by our Board or Compensation Committee

and, if appropriate, increase (but not decrease except in certain limited circumstances). Additionally, the Lian Employment Agreement provides that Dr. Lian will be eligible to receive a target annual bonus in an amount equal to 50% of his base salary in effect on June 30th of each calendar year for 2016 and after, which bonus will be based on our financial performance and Dr. Lian's individual performance, in each case as determined by our Board or Compensation Committee.

Under the Lian Employment Agreement, on May 4, 2015, Dr. Lian was granted (1) a stock option to purchase 87,500 shares of our common stock, whereby 25% of the shares subject to the option were vested upon grant and 25% of the shares subject to the option will vest on each one-year anniversary of the date of grant for the following three years, so long as Dr. Lian continues to provide service to us on each applicable vesting date; (2) an award of 87,500 shares of common stock, whereby one-third of the shares subject to the award will vest on each one year anniversary of the date of grant for the following three years, so long as Dr. Lian continues to provide service to us on each applicable vesting date, subject to withholding of shares to cover tax withholding obligations arising upon the

S-23

vesting of shares subject to the award; and (3) an additional award of 16,346 shares of common stock, which were fully vested upon grant (collectively, the “Lian Awards”). The Lian Awards were issued under and subject to the terms and conditions of the 2014 Equity Incentive Plan.

Dr. Lian’s employment with us is at-will, meaning either we or Dr. Lian may terminate the employment relationship at any time, with or without cause. However, Dr. Lian must provide at least 60 days’ written notice of resignation. If we terminate Dr. Lian’s employment, then, so long as Dr. Lian complies with certain obligations, including execution and delivery of a general release within a specified period of time, we will pay Dr. Lian: (1) his base salary as of the termination date for six months following the termination date, if such termination is pursuant to a Lian Non-Renewal Notice, disability or death, or for 12 months in the case of termination other than by Lian Non-Renewal Notice, for cause, disability or death; (2) six monthly payments if such termination is pursuant to a Lian Non-Renewal Notice, disability or death, or 12 monthly payments in the case of termination other than by Lian Non-Renewal Notice, for cause, disability or death, in each case equal to 1/12 of the amount equal to Dr. Lian’s target annual bonus percentage as of the termination date multiplied by Dr. Lian’s base salary as of such date; and (3) subject to Dr. Lian’s timely election of COBRA, the amount equal to the COBRA premiums for the lesser of (a) six months if such termination is pursuant to a Lian Non-Renewal Notice, disability or death, or 12 months in the case of termination other than by Lian Non-Renewal Notice, for cause, disability or death, or (b) until Dr. Lian becomes eligible to enroll in another employer-sponsored group health plan. Additionally, if Dr. Lian’s employment is terminated by us (i) pursuant to a Lian Non-Renewal Notice, disability or death, the outstanding equity awards subject to the Lian Awards that would have vested within six months following the termination date will vest and become fully exercisable as of such termination date, and Dr. Lian will have six months from the termination date to exercise vested options under the Lian Awards (unless they terminate sooner pursuant to their terms), and (ii) other than by Lian Non-Renewal Notice, for cause, disability or death, the outstanding equity awards subject to the Lian Awards that would have vested within 12 months following the termination date will vest and become fully exercisable as of the termination date, and Dr. Lian will have 12 months from the termination date to exercise vested options under the Lian Awards (unless they terminate sooner pursuant to their terms). In each case, all other equity awards subject to the Lian Awards will terminate without compensation therefore on the termination date. Furthermore, if Dr. Lian resigns for good reason, he will be entitled to receive the same payments and accelerated vesting as if he had been terminated other than by Lian Non-Renewal Notice, for cause, disability or death, as set forth above.

In the event of a change in control of our company, 100% of the unvested outstanding equity awards granted under the Lian Awards will vest and become fully exercisable immediately prior to the change in control. Additionally, if any vested equity awards held by Dr. Lian are not assumed or substituted for in accordance with certain conditions, we will pay cash to Dr. Lian on the change in control in exchange for the satisfaction and cancellation of the outstanding equity awards. If Dr. Lian’s employment is terminated within 24 months following a change in control, subject to certain conditions, he will be entitled to receive the same payments and accelerated vesting as if he had been terminated other than by Lian Non-Renewal Notice, for cause, disability or death, as set forth above; however, he will be entitled to such payments for a period of 18 months and the vesting of the Lian Awards will be accelerated by 18 months.

Employment Agreement - Chief Financial Officer

We entered into an employment agreement with Michael Morneau, as our Chief Financial Officer (the “Morneau Employment Agreement”), which became effective on May 21, 2014. The Morneau Employment Agreement is subject to automatic renewals for additional one-year periods following May 21, 2015, unless either party gives the other written notice of its or his election to not renew (a “Morneau Non-Renewal Notice”). Pursuant to the terms of the Morneau Employment Agreement, Mr. Morneau’s base salary was initially \$189,000 per year. Effective October 1, 2014, Mr. Morneau agreed to an amended base salary of \$135,000. During fiscal year 2016, Mr. Morneau’s annual base salary was \$285,000, which was increased to \$300,000 on January 1, 2017, subject to annual review by our

Board or Compensation Committee and, if appropriate, increase (but not decrease except in certain limited circumstances). Additionally, the Morneau Employment Agreement provides that Mr. Morneau will be eligible to receive a target annual bonus in an amount equal to 35% of his base salary in effect on June 30th of each calendar year for 2016 and after, which bonus will be based on our financial performance and Mr. Morneau's individual performance, in each case as determined by our Board or Compensation Committee.

Under the Morneau Employment Agreement, on May 4, 2015, Mr. Morneau was granted (1) a stock option to purchase 25,500 shares of our common stock, whereby 25% of the shares subject to the option were vested upon grant and 25% of the shares subject to the option will vest on each one-year anniversary of the date of grant for the following three years, so long as Mr. Morneau continues to provide service to us on each applicable vesting date; (2) an award

S-24

of 67,000 shares of common stock, whereby one-third of the shares subject to the award will vest on each one-year anniversary of the date of grant for the following three years, so long as Mr. Morneau continues to provide service to us on each applicable vesting date, subject to withholding of shares to cover tax withholding obligations arising upon the vesting of shares subject to the award; and (3) an additional award of 10,404 shares of common stock, which were fully vested upon grant (collectively, the "Morneau Awards"). The Morneau Awards were issued under and subject to the terms and conditions of the 2014 Equity Incentive Plan.

Mr. Morneau's employment with us is at-will, meaning either we or Mr. Morneau may terminate the employment relationship at any time, with or without cause. However, Mr. Morneau must provide at least 60 days' written notice of resignation. If we terminate Mr. Morneau's employment, then, so long as Mr. Morneau complies with certain obligations, including execution and delivery of a general release within a specified period of time, we will pay Mr. Morneau: (1) his base salary as of the termination date for three months following the termination date, if such termination is pursuant to a Morneau Non-Renewal Notice, disability or death, or for six months in the case of termination other than by Morneau Non-Renewal Notice, for cause, disability or death; (2) three monthly payments if such termination is pursuant to a Morneau Non-Renewal Notice, disability or death, or six monthly payments in the case of termination other than by Morneau Non-Renewal Notice, for cause, disability or death, in each case equal to 1/12 of the amount equal to Mr. Morneau's target annual bonus percentage as of the termination date multiplied by Mr. Morneau's base salary as of such date; and (3) subject to Mr. Morneau's timely election of COBRA, the amount equal to the COBRA premiums for the lesser of (a) three months if such termination is pursuant to a Morneau Non-Renewal Notice, disability or death, or six months in the case of termination other than by Morneau Non-Renewal Notice, for cause, disability or death, or (b) until Mr. Morneau becomes eligible to enroll in another employer-sponsored group health plan. Additionally, if Mr. Morneau's employment is terminated by us (i) pursuant to a Morneau Non-Renewal Notice, disability or death, the outstanding equity awards subject to the Morneau Awards that would have vested within three months following the termination date will vest and become fully exercisable as of such termination date, and Mr. Morneau will have three months from the termination date to exercise vested options under the Morneau Awards (unless they terminate sooner pursuant to their terms), and (ii) other than by Morneau Non-Renewal Notice, for cause, disability or death, the outstanding equity awards subject to the Morneau Awards that would have vested within six months following the termination date will vest and become fully exercisable as of the termination date, and Mr. Morneau will have six months from the termination date to exercise vested options under the Morneau Awards (unless they terminate sooner pursuant to their terms). In each case, all other equity awards subject to the Morneau Awards will terminate without compensation therefore on the termination date. Furthermore, if Mr. Morneau resigns for good reason, he will be entitled to receive the same payments and accelerated vesting as if he had been terminated other than by Morneau Non-Renewal Notice, for cause, disability or death, as set forth above.

In the event of a change in control of our company, 100% of the unvested outstanding equity awards granted under the Morneau Awards will vest and become fully exercisable immediately prior to the change in control. Additionally, if any vested equity awards held by Mr. Morneau are not assumed or substituted for in accordance with certain conditions, we will pay cash to Mr. Morneau on the change in control in exchange for the satisfaction and cancellation of the outstanding equity awards. If Mr. Morneau's employment is terminated within 24 months following a change in control, subject to certain conditions, he will be entitled to receive the same payments and accelerated vesting as if he had been terminated other than by Morneau Non-Renewal Notice, for cause, disability or death, as set forth above; however, he will be entitled to such payments for a period of 12 months and the vesting of the Morneau Awards will be accelerated by 12 months.

2017 Bonuses

In March 2017, the Compensation Committee adopted corporate performance objectives for the 2017 bonus program for our named executive officers based on milestones that primarily included the topline data readouts for VK5211

and VK2809 Phase 2 clinical trials, completion of a proof-of-concept study in GSD1, the completion of a financing, signing partnerships for one or two of the Company's programs, expansion of infrastructure and human capital, an increase in our institutional stockholder base and completing a second financing.

The Compensation Committee determined that, on a whole, not all of the corporate goals were met during 2017. Accordingly, on January 19, 2018, the Compensation Committee approved the following bonuses for our named executive officers:

- a bonus of \$110,000 for Dr. Lian, and
- a bonus of \$52,500 for Mr. Morneau.

S-25

The bonus amount awarded to Dr. Lian for 2017 was equal to 25% of his base compensation (representing 50% of his target bonus for 2017 of 50% of his base compensation). The bonus amount awarded to Mr. Morneau for 2017 was equal to 17.5% of his base compensation (representing 50% of his target bonus for 2017 of 35% of his base compensation).

Potential Payments Upon Termination or Change in Control

Our executive officers will be entitled to receive certain payments and benefits upon termination of their employment or a change in control of our company, as described under the section entitled “-Employment Agreements” above.

Perquisites, Health, Welfare and Retirement Plans and Benefits

Health and Welfare Benefits

Our named executive officers are eligible to participate in all of our employee benefit plans, including our medical, dental, vision, group life and disability insurance plans, in each case on the same basis as other employees.

Perquisites and Personal Benefits

We do not currently provide perquisites or personal benefits to our named executive officers.

Pension Benefits and Non-Qualified Deferred Compensation

Commencing as of November 30, 2015, we maintain a 401(k) defined contribution plan in which all of our employees age 21 and older and who work, on average, at least 20 hours per week, are entitled to participate. Employees contribute their own funds, as salary deductions, on a pre-tax basis. Contributions will be permitted to be made up to plan limits, subject to government limitations. We do not currently intend to provide full or partial matching contributions under the 401(k) plan.

Outstanding Equity Awards at December 31, 2017

The following table presents the outstanding option and stock awards held by each of our named executive officers as of December 31, 2017.

Name	Grant Date	Options Awards			Stock Awards			Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Rights That Have Not Vested (\$)
		Number of Securities Underlying Unexercised Options (#)	Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (\$)	Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$)	
Brian Lian, Ph.D.	1/5/2017 ⁽¹⁾	—	250,000	\$ 1.23	1/5/2027	—	—	—
	1/5/2017	34,931	—	\$ 1.23	1/5/2027	—	—	—
	3/14/2016	54,336	—	\$ 1.88	3/14/2026	—	—	—
	3/4/2016 ⁽¹⁾	31,250	93,750	\$ 2.15	3/4/2026	—	—	—
	5/4/2015 ⁽²⁾	65,625	21,875	\$ 9.49	5/4/2025	—	—	—
	5/4/2015	—	—	—	—	—	29,166 ⁽³⁾	\$276,785
	2/20/2014	—	—	—	—	183,095 ⁽⁵⁾	\$30,778 ⁽⁶⁾	—
Michael Morneau	1/5/2017 ⁽¹⁾	—	95,000	\$ 1.23	1/5/2027	—	—	—
	1/5/2017	17,605	—	\$ 1.23	1/5/2027	—	—	—
	3/14/2016	19,934	—	\$ 1.88	3/14/2026	—	—	—
	3/4/2016 ⁽¹⁾	10,000	30,000	\$ 2.15	3/4/2016	—	—	—
	5/4/2015 ⁽²⁾	19,125	6,375	\$ 9.49	5/4/2025	—	—	—
	5/4/2015	—	—	—	—	—	22,333 ⁽³⁾	\$211,940

(1) The shares subject to each stock option vest over a four-year period, with 25% of the shares subject to the option vesting on each anniversary of the grant date, with partial or full vesting under certain circumstances, including upon a change in control of our company or various events specified in the named executive officer's employment agreement, if applicable. The option awards remain exercisable until they expire ten years from the date of grant subject to earlier expiration following termination of employment.

(2) The shares subject to each stock option vest over a three-year period, with 25% of the shares subject to the option vested on the grant date and 25% of the shares subject to the option vesting on each anniversary of the grant date, with partial or full vesting under certain circumstances, including upon a change in control of our company or various events specified in the named executive officer's employment agreement, if applicable. The option awards remain exercisable until they expire ten years from the date of grant subject to earlier expiration following termination of employment.

(3)

The shares subject to each restricted stock award vest over a three-year period, with one-third of the shares subject to the restricted stock award vesting on each anniversary of the grant date, with partial or full vesting under certain circumstances, including upon a change in control of our company or various events specified in the named executive officer's employment agreement, if applicable.

- (4) These amounts represent the aggregate grant date fair value of restricted stock awards granted to each named executive officer. These amounts do not represent the actual amounts paid to or realized by the named executive officer. The value as of the grant date for the restricted stock awards is calculated based on the number of shares granted and the grant date market price and is recognized once the requisite service period for the restricted stock is satisfied. The grant date fair value per share was \$9.49 at May 4, 2015.
- (5) These shares are subject to a repurchase option and vest upon the achievement of a milestone set forth in the Common Stock Purchase Agreement, as amended, pursuant to which these shares were issued.
- (6) The amount represents the aggregate grant date fair value of a stock award granted to the named executive officer, computed in accordance with authoritative accounting guidance. This amount does not represent the actual amount paid to or realized by the named executive officer. The Company utilized a Monte Carlo simulation method to determine the fair value of the performance-based shares as of the issuance date. The Monte Carlo simulation method takes into consideration the expected timing of the performance milestones, probability of achieving the milestones and estimated per share common stock prices at expected vesting dates.

Non-Employee Director Compensation

Our Board has adopted a compensation policy for our non-employee directors that consists of annual retainer fees and long-term equity awards. Under this policy, each non-employee director will receive an annual retainer of \$33,170 for serving on our Board. The Chairperson of our Board will receive an additional annual retainer of \$32,800, the chairperson of the Audit Committee will receive an additional annual retainer of \$16,650, the chairperson of the Compensation Committee will receive an additional annual retainer of \$11,350 and the chairperson of the Nominating and Corporate Governance Committee will receive an additional annual retainer of \$9,280. Each other member of the Audit Committee will receive an additional annual retainer of \$8,900, each other member of the Compensation Committee will receive an additional annual retainer of \$6,750 and each other member of the Nominating and Corporate Governance Committee will receive an additional annual retainer of \$4,900. All cash retainers will be earned on a quarterly basis based on a calendar quarter, and, if applicable, will be prorated for the portion of the calendar quarter during which such non-employee director actually serves on our Board or a committee thereof, and will be paid in arrears no later than the 30th day following the end of each calendar quarter.

In addition to cash fees, each non-employee director will be granted on the first business day of each calendar year a stock option to purchase 16,000 shares of our common stock. If a non-employee director joins our Board other than at an annual meeting of our stockholders, such non-employee director will be granted on the date such individual first becomes appointed or elected as a non-employee director (1) a stock option to purchase 32,000 shares of our common stock and (2) a stock option to purchase 16,000 shares of our common stock, reduced pro rata for each day prior to the date of grant that has elapsed since January 1st of the year in which the individual first becomes a non-employee director. Annual equity awards and equity awards granted to new non-employee directors will vest in full on the one-year anniversary of the applicable date of grant, subject to the director's continuous service through such date.

Each initial equity award and each annual equity award will have a maximum term of ten years and will be made in the form of nonstatutory stock options. For any non-employee director serving at the time of a change in control of our company (as defined in our 2014 Equity Incentive Plan), all then-outstanding and unvested compensatory equity awards granted under the non-employee director compensation policy would become fully vested and exercisable, if applicable, immediately prior to the change in control.

The following table sets forth summary information concerning compensation paid or accrued to the members of our Board for services rendered to us for the fiscal year ended December 31, 2017.

Name ⁽¹⁾	Fees		Total
	Earned or Paid in Cash	Option Awards ⁽²⁾⁽³⁾	
Lawson Macartney, DVM, Ph.D. ⁽⁴⁾	\$84,150	\$13,278	\$97,428
Matthew W. Foehr ⁽⁴⁾	\$33,170	\$13,278	\$46,448
Charles A. Rowland, Jr. ⁽⁵⁾	\$20,126	\$29,616	\$49,742
J. Matthew Singleton ⁽⁴⁾	\$56,570	\$13,278	\$69,848
Stephen W. Webster ⁽⁴⁾	\$58,320	\$13,278	\$71,598

(1) Brian Lian, Ph.D., our President and Chief Executive Officer and a named executive officer, is not included in this table as he is an employee of ours and therefore receives no compensation for his service as a director. Dr. Lian's compensation is included in the section entitled "—Summary Compensation Table" above.

(2) On January 3, 2017, each of our then-current non-employee directors received an unvested option to purchase 16,000 shares of our common stock, which became fully vested on January 3, 2018.

- (3) These amounts represent the aggregate grant date fair value of option awards granted to each listed director in 2017, computed in accordance with authoritative accounting guidance. These amounts do not represent the actual amounts paid to or realized by the directors during 2017. The value as of the grant date for stock options is recognized over the number of days of service required for the stock option to vest in full. As stock-based compensation expense recognized is based on options ultimately expected to vest, the fair value of each employee option grant during the year ended December 31, 2017 was estimated on the date of grant using the Black-Scholes option pricing model with the following weighted average assumptions: expected volatility: 84.03%; expected term (in years): 5.5; risk-free interest rate 1.97%; and expected dividend yield: 0%.
- (4) Total options to purchase shares of our common stock held by this director as of December 31, 2017 was 52,786.
- (5) Mr. Rowland was appointed to our Board effective July 1, 2017. In connection with his appointment to our Board, on July 1, 2017, he was granted an option to purchase 40,000 shares of our common stock, which will

S-28

vest in full on July 1, 2018. As of December 31, 2017, Mr. Rowland held options to purchase an aggregate of 40,000 shares of our common stock.

Compensation Committee Interlocks and Insider Participation; Compensation Committee Report

We are a smaller reporting company, as defined by Rule 12b-2 of the Securities Exchange Act of 1934, as amended, and are not required to provide the information required under this item.

S-29

Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Securities Authorized for Issuance Under Equity Compensation Plans

The following table sets forth additional information as of December 31, 2017 with respect to the shares of common stock that may be issued upon the exercise of options and other rights under our existing equity compensation plans and arrangements in effect as of December 31, 2017. The information includes the number of shares covered by, and the weighted average exercise price of, outstanding options and the number of shares remaining available for future grant, excluding the shares to be issued upon exercise of outstanding options.

Equity Compensation Plan Information

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining
			available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders ⁽¹⁾	1,622,114	\$ 2.60	1,363,086 ⁽²⁾
Equity compensation plans not approved by security holders ⁽³⁾	—	—	—
Total	1,622,114	\$ 2.60	1,363,086

(1) Comprised of the 2014 Equity Incentive Plan, or the 2014 EIP, and the 2014 Employee Stock Purchase Plan, or the 2014 ESPP.

(2) Comprised solely of 669,698 shares subject to awards available for future issuance under the 2014 EIP and 693,388 shares of common stock that may be issued under the 2014 ESPP, in each case as of December 31, 2017. Pursuant to the terms of the 2014 EIP, the share reserve of the 2014 EIP will automatically increase on January 1st, through fiscal 2024, by 3.5% of the total number of shares of our common stock outstanding on December 31st of the preceding calendar year. Pursuant to the terms of the 2014 ESPP, the share reserve of the 2014 ESPP will automatically increase on January 1st, through fiscal 2024, by 1% of the total number of shares of our common stock outstanding on December 31st of the preceding calendar year.

(3) As of December 31, 2017, we did not have any equity compensation plans that were not approved by our stockholders.

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth information as of December 31, 2017, with respect to the beneficial ownership of shares of our common stock by:

- each of our directors;
- each of our named executive officers;
- all of our current directors and executive officers as a group; and
- each person or group known to us to be the beneficial owner of more than five percent of our common stock.

This table is based upon information supplied by officers, directors and principal stockholders and a review of Schedules 13D and 13G, if any, filed with the SEC. Other than as set forth below, we are not aware of any other beneficial owner of more than five percent of our common stock as of December 31, 2017. Except as indicated by the footnotes below, we believe, based on the information furnished to us, that the persons and entities named in the

S-30

table below have sole voting and investment power with respect to all shares of common stock that they beneficially own, subject to applicable community property laws.

Applicable percentage ownership is based on 35,817,104 shares of common stock outstanding as of December 31, 2017, adjusted as required by rules promulgated by the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities. In addition, the rules include shares of common stock issuable pursuant to the exercise of stock options that are either immediately exercisable or exercisable on or before March 1, 2018, which is 60 days after December 31, 2017. These shares are deemed to be outstanding and beneficially owned by the person holding such options for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person.

Unless otherwise noted below, the address of each beneficial owner listed in the table is c/o Viking Therapeutics, Inc., 12340 El Camino Real, Suite 250, San Diego, CA 92130.

Name of Beneficial Owner	Beneficial Ownership	
	Number of Shares	Percent of Class ⁽¹⁾
Named Executive Officers and Directors:		
Brian Lian, Ph.D. ⁽²⁾	1,701,740	4.7%
Michael Morneau ⁽³⁾	177,065	*
Matthew W. Foehr ⁽⁴⁾	112,036	*
Lawson Macartney, DVM, Ph.D. ⁽⁵⁾	52,786	*
Charles A. Rowland, Jr.	—	—
Matthew Singleton ⁽⁵⁾	52,786	*
Stephen W. Webster ⁽⁵⁾	52,786	*
All current executive officers and directors as a group (7 persons) ⁽⁶⁾	2,149,199	5.9%
Greater than 5% Stockholders:		
Ligand Pharmaceuticals Incorporated ⁽⁷⁾	7,820,964	20.9%
G. Nicholas Farwell ⁽⁸⁾	2,490,008	7.0%
Sphera Funds Management Ltd. ⁽⁹⁾	2,145,300	6.0%

*Less than one percent.

- (1) For each person and group included in this table, percentage ownership is calculated by dividing the number of shares beneficially owned by such person or group by the sum of shares of common stock outstanding as of December 31, 2017, plus the number of shares of common stock that such person or group had the right to acquire within 60 days after December 31, 2017.
- (2) Consists of: (a) 1,453,098 shares of common stock owned directly, of which 1,240,836 are vested or will vest within 60 days of December 31, 2017, and (b) 248,642 shares of common stock issuable upon exercise of options exercisable within 60 days of December 31, 2017.
- (3) Consists of: (a) 86,651 shares of common stock owned directly, of which 64,317 are vested or will vest within 60 days of December 31, 2017, and (b) 90,414 shares of common stock issuable upon exercise of options exercisable within 60 days of December 31, 2017.

- (4) Consists of: (a) 39,250 shares of common stock owned directly, (b) 52,786 shares of common stock issuable upon exercise of options exercisable within 60 days of December 31, 2017, and (c) 20,000 shares of common stock issuable upon exercise of warrants exercisable within 60 days of December 31, 2017.
- (5) Consists solely of shares of common stock issuable upon exercise of options exercisable within 60 days of December 31, 2017.
- (6) Consists of: (a) 1,578,999 shares of common stock owned directly by all of our current executive officers and directors, of which 1,344,403 are vested or will vest within 60 days of December 31, 2017, (b) 550,200 shares of common stock issuable upon exercise of options exercisable within 60 days of December 31, 2017, and (c) 20,000 shares of common stock issuable upon exercise of warrants exercisable within 60 days of December 31, 2017.

- (7) Ligand Pharmaceuticals Incorporated's address is 3911 Sorrento Valley Blvd, #110, San Diego, CA 92121. Consists of: (a) 5,418,490 shares of common stock owned directly by Ligand Pharmaceuticals Incorporated, or Ligand, (b) 882,474 shares of common stock owned by Metabasis Therapeutics, Inc., a wholly-owned subsidiary of Ligand, and (c) 1,520,000 shares of common stock issuable upon exercise of warrants held by Ligand that are exercisable within 60 days of December 31, 2017. Beneficial ownership is based solely on information contained in the Schedule 13D/A filed with the Securities and Exchange Commission on April 15, 2016 by Ligand.
- (8) The number of shares consists of: (1) 950,000 shares of Common Stock held by a family trust of which the Mr. Farwell is one of the trustees and over which Mr. Farwell shares voting and dispositive power, (2) 500,000 shares of Common Stock held directly by Mr. Farwell, (3) 1,040,008 shares of Common Stock held in the Selling Stockholder's IRA, (4) 123,750 shares of Common Stock issuable upon exercise of the Warrant held by a family trust of which Mr. Farwell is one of the trustees and over which the Selling Stockholder shares voting and dispositive power, (5) 75,000 shares of Common Stock issuable upon exercise of the Warrant held directly by Mr. Farwell, (6) 273,750 shares of Common Stock issuable upon exercise of the Warrant held in the Selling Stockholder's IRA, (7) 540,000 shares of Common Stock issuable upon exercise of an additional warrant to purchase shares of Common Stock held by a family trust of which the Selling Stockholder is one of the trustees and over which the Selling Stockholder shares voting and dispositive power, (8) 185,000 shares of Common Stock issuable upon exercise of an additional warrant to purchase shares of Common Stock held directly by Mr. Farwell, and (9) 573,750 shares of Common Stock issuable upon exercise of an additional warrant to purchase shares of Common Stock held in the Selling Stockholder's IRA, except in the cases of items (4) through (9) to the extent any such exercise is restricted by the Warrant Blocker. The business address of Mr. Farwell is 1240 Arbor Road, Menlo Park, CA 94025.
- (9) Consists of 2,081,370 shares of Common Stock held directly by Sphera Global Healthcare Master Fund, which has delegated its investment management authority to Sphera Global Healthcare Management Ltd. (the "Management Company"), and 63,930 shares of Common Stock held directly by HFR HE Sphera Global Healthcare Master Trust, which has delegated its investment management authority to the Management Company. The Management Company is managed, controlled, and operated by its general partner, Sphera Global Healthcare GP Ltd., which is controlled jointly by Sphera Funds Management Ltd. and Moshe Arkin. Beneficial ownership is based solely on information contained in the Schedule 13G filed with the Securities and Exchange Commission on December 18, 2017 by Mr. Arkin, Sphera Funds Management Ltd., Sphera Global Healthcare GP Ltd. and Sphera Global Healthcare Management LP. The business address of Mr. Arkin is 6 Hachoshlim St., Herzelia, Israel and the business address of Sphera Funds Management Ltd., Sphera Global Healthcare GP Ltd. and Sphera Global Healthcare Management LP is 21 Ha'arba'ah Street, Tel Aviv 64739, Israel.

Certain Relationships and Related Transactions, and Director Independence

Policies and Procedures for Related Party Transactions

Our Board has adopted a written related person transaction policy to set forth the policies and procedures for the review and approval or ratification of related person transactions. This policy covers, with certain exceptions set forth in Item 404 of Regulation S-K under the Securities Act of 1933, as amended, or the Securities Act, any transaction, arrangement, or relationship, or any series of similar transactions, arrangements, or relationships in which we were or are to be a participant, the amount involved exceeds \$120,000, and a related person had or will have a direct or indirect material interest, including, without limitation, purchases of goods or services by or from the related person or entities in which the related person has a material interest, indebtedness, guarantees of indebtedness, and employment by us of a related person. A related person is any individual who is, or who has been since the beginning of our last fiscal year, one of our directors or executive officers, or a nominee to become one of our directors, or any person known to be the beneficial owner of more than 5% of any class of our voting securities, or any immediate family member of any of the foregoing persons. Additionally, any firm, corporation or other entity by which any of the foregoing persons is employed or in which such person is a general partner or principal, or in a similar position, or in which such person has a 10% or greater beneficial ownership interest, will also be deemed to be a related person. Transactions involving compensation for services provided to us as an employee, consultant or director are not considered related-person transactions under this policy. As provided by our audit committee charter, our Audit Committee is responsible for reviewing and approving in advance any related party transaction.

Transactions with Related Persons

In addition to the director and executive officer compensation arrangements discussed in the section of this prospectus supplement entitled “Executive Compensation”, the following is a summary of material provisions of transactions since January 1, 2017 that we have been a party to and in which the amount involved exceeded or will exceed the lesser of \$120,000 or one percent of the average of our total assets at year end for the last two completed fiscal years, and in which any of our directors, executive officers, beneficial owners of more than 5% of our capital stock, or their immediate family members, have had or will have a direct or indirect material interest.

Agreements with Ligand

On May 21, 2014, we entered into the Master License Agreement with Ligand, a greater than 5% holder of our outstanding common stock, pursuant to which Ligand granted us worldwide rights under (1) patents related to SARM Compounds, TR β Compounds, FBPsase Compounds, EPOR Compounds and DGAT-1 Compounds; (2) related know-how controlled by Ligand; and (3) physical quantities of SARM, TR β , FBPsase, EPOR and DGAT-1 Compounds. In connection with the Master License Agreement, we also entered into a Loan and Security Agreement with Ligand, dated May 21, 2014, as amended on April 8, 2015 and January 22, 2016, and issued to Ligand a Secured Convertible Promissory Note, or the Ligand Note, pursuant to which Ligand loaned us an initial principal amount of \$2,500,000. From May 21, 2014 to January 21, 2016, the principal amount outstanding under the loans accrued interest at a fixed per annum rate equal to the lesser of 5.0% and the maximum interest rate permitted by law. Effective as of January 22, 2016, the principal amount outstanding under the loans accrues interest at a fixed per annum rate equal to the lesser of 2.5% and the maximum interest rate permitted by law. In the event we default under the loans, the loans will accrue interest at a fixed per annum rate equal to the lesser of 8% and the maximum interest rate permitted by law. Pursuant to the terms of the Loan and Security Agreement and the Ligand Note, the loans will become due and payable upon the written demand of Ligand at any time after the earlier to occur of an event of default under the Loan and Security Agreement or the Ligand Note, or May 21, 2017, unless the loans are repaid in cash or converted into equity prior to such time. On April 13, 2016, we completed an underwritten public offering of our common stock and warrants to purchase shares of our common stock, or the April 2016 Offering. Under the terms

of the Loan and Security Agreement; upon the consummation of the April 2016 Offering, we were required to repay \$1,500,000 of the Ligand Note obligation to Ligand. Accordingly, we repaid \$1,500,000 of the Ligand Note with \$300,000 paid in cash and \$1,200,000 paid in the form of 960,000 shares of our common stock and a warrant to purchase up to 960,000 shares of our common stock, or the Ligand Warrant. The Ligand Warrant has an exercise price of \$1.50 per share of common stock, was immediately exercisable upon issuance and will expire on April 13, 2021. In connection with the Master License Agreement, we also entered into a Registration Rights Agreement with Ligand, pursuant to which we granted certain registration rights to Ligand with respect to the securities issued by us to Ligand under the Master License Agreement and the securities issued or issuable by us to Ligand pursuant to the Ligand Note. On February 14, 2017, we filed a Registration Statement on Form S-3 under the Securities Act covering the resale of the full amount of the securities issued or issuable by us to Ligand under the Master License Agreement and the Ligand Note.

S-33

Limitation of Liability and Indemnification of Officers and Directors

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that limit the liability of our directors for monetary damages to the fullest extent permitted by Delaware law. Consequently, our directors are not personally liable to us or our stockholders for monetary damages for any breach of fiduciary duties as directors, except liability for the following:

- any breach of their duty of loyalty to our company or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the General Corporation Law of the State of Delaware, or the DGCL; and
- any transaction from which they derived an improper personal benefit.

Any amendment to, or repeal of, these provisions will not eliminate or reduce the effect of these provisions in respect of any act, omission or claim that occurred or arose prior to that amendment or repeal. If the DGCL is amended to provide for further limitations on the personal liability of directors of corporations, then the personal liability of our directors will be further limited to the greatest extent permitted by the DGCL.

Our amended and restated certificate of incorporation provides that we will, under certain circumstances, indemnify our directors, officers, employees or agents, subject to any provisions contained in our amended and restated bylaws. Our amended and restated bylaws provide that we will indemnify, to the fullest extent permitted by law, any person who is or was or is made a party or is threatened to be made a party to, or is otherwise involved in, any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she, or a person for whom he or she is the legal representative, is or was one of our directors or officers, or is or was serving at our request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against all expense, liability and loss (including, among other things, attorney's fees and amounts paid in settlement) reasonably incurred or suffered by such director, officer, employee or agent in connection therewith, subject to certain conditions. Our amended and restated bylaws also provide us with the power to, to the extent authorized by our Board, grant rights to indemnification and to advancement of expenses to any of our employees or agents to the fullest extent indemnification may be granted to our directors and officers. In addition, our amended and restated bylaws also provide that we must advance expenses incurred by or on behalf of a director or officer in advance of the final disposition of any action or proceeding, subject to certain exceptions.

Further, we have indemnification agreements with each of our directors and executive officers that may be broader than the specific indemnification provisions contained in the DGCL. These indemnification agreements require us, among other things, to indemnify our directors and executive officers against liabilities that may arise by reason of their status or service. These indemnification agreements also require us to advance all expenses incurred by the directors and executive officers in investigating or defending any such action, suit or proceeding, subject to certain exceptions. We believe that these agreements are necessary to attract and retain qualified individuals to serve as directors and executive officers.

The limitation of liability and indemnification provisions that are included in our amended and restated certificate of incorporation, amended and restated bylaws and in indemnification agreements that we entered into with our directors and executive officers may discourage stockholders from bringing a lawsuit against our directors and executive officers for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against our directors and executive officers even though an action, if successful, might benefit us and other stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and executive officers as required by these indemnification provisions. At present, we are not aware of any pending litigation or proceeding involving any person who is or was one of our directors, officers, employees or other agents or is or was serving at our request as a director, officer, employee or agent of another

corporation, partnership, joint venture, trust or other enterprise, for which indemnification is sought, and we are not aware of any threatened litigation that may result in claims for indemnification.

Our amended and restated bylaws provide that we may purchase and maintain insurance, at our expense, to protect us and any person who is or was a director, officer, employee or agent of us or is or was serving at our request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any expense, liability or loss, whether or not we would have the power to indemnify such person against such

S-34

expense, liability or loss under the DGCL. We maintain insurance under which, subject to the limitations of the insurance policies, coverage is provided to our directors and executive officers against loss arising from claims made by reason of breach of fiduciary duty or other wrongful acts as a director or executive officer, including claims relating to public securities matters, and to us with respect to payments that may be made by us to these directors and executive officers pursuant to our indemnification obligations or otherwise as a matter of law.

Certain of our non-employee directors may, through their relationships with their employers, be insured or indemnified against certain liabilities incurred in their capacity as members of our Board.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling our company pursuant to the foregoing provisions, we have been informed that, in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Director Independence

Under the rules and listings standards of the Nasdaq Rules, a majority of the members of our Board must satisfy the Nasdaq criteria for "independence." No director qualifies as independent under the Nasdaq Rules unless our Board affirmatively determines that the director does not have a relationship with us that would impair independence (directly or as a partner, stockholder or officer of an organization that has a relationship with us). Our Board has determined that Dr. Macartney and Messrs. Singleton, Rowland and Webster are independent directors as defined under the Nasdaq Rules. Dr. Lian is not independent under the Nasdaq Rules as a result of his position as our President and Chief Executive Officer. Mr. Foehr is not independent under the Nasdaq Rules in light of the Master License Agreement, as amended from time to time, and related agreements between us and Ligand, and Mr. Foehr's position as an executive officer of Ligand.

Principal Accounting Fees and Services

Principal Accountant Fees and Services

The following table represents aggregate fees billed to us for the fiscal years ended December 31, 2017 and December 31, 2016 by Marcum LLP, our independent registered public accounting firm for such periods. All fees described below were approved by the Audit Committee.

	Fiscal Year Ended	
	December 31,	
	2017	2016
Audit Fees (1)	\$159,160	\$155,921
Audit-Related Fees (2)	74,572	157,230
Tax Fees	—	—
All Other Fees (3)	3,145	—
Total Fees	\$236,877	\$313,151

(1) Audit fees consist of fees billed for services rendered for the audit of our annual financial statements, including review of the interim financial statements included in quarterly reports.

(2) Audit-related fees consist of fees for assurance and related services that are traditionally performed by our independent registered public accounting firm and include fees reasonably related to the performance of the audit or review of our interim financial statements and due diligence services and not reported under the caption “Audit Fees” and includes review of our registration statement for our initial and subsequent public offerings, and related services that are normally provided in connection with statutory and regulatory filings or engagements.

(3) All Other Fees consist of fees related to a Marcum conference that Viking attended and presented at.

Audit Committee’s Pre-Approval Policies and Procedures

The Audit Committee has adopted a policy for the pre-approval of audit and non-audit services rendered by our independent registered public accounting firm, Marcum LLP. The policy generally pre-approves specified services in the defined categories of audit services, audit-related services and tax services up to specified amounts. Pre-approval may also be given as part of the Audit Committee’s approval of the scope of the engagement of the independent registered public accounting firm or on an individual case-by-case basis before the independent registered public accounting firm is engaged to provide each service. The pre-approval of services may be delegated to one or more of the Audit Committee’s members, but the decision must be reported to the full Audit Committee at its next scheduled meeting. By the adoption of this policy, the Audit Committee has delegated the authority to pre-approve services to the Chairperson of the Audit Committee, subject to certain limitations.

The Audit Committee has determined that the rendering of the services other than audit services by Marcum LLP is compatible with maintaining the independent registered public accounting firm’s independence.

UNDERWRITING

William Blair & Company, L.L.C. is acting as representative of each of the underwriters named below and as sole book-running manager for this offering. Subject to the terms and conditions set forth in the underwriting agreement among us and the underwriters, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the number of shares of common stock set forth opposite its name below.

	Number of
Underwriter	Shares
William Blair & Company, L.L.C.	7,700,000
Maxim Group LLC	1,650,000
Roth Capital Partners, LLC	1,650,000
Total	11,000,000

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of the shares are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act of 1933, as amended, or the Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officers' certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

We have engaged H.C.Wainwright & Co., LLC, or HCW, an independent financial adviser and a member of FINRA, to provide certain financial consulting services in connection with this offering. The underwriters have agreed to reimburse us in an amount of \$112,500 for such financial consulting services provided by HCW in connection with this offering.

Commissions and Discounts

The representative has advised us that the underwriters propose initially to offer the shares to the public at the public offering price set forth on the cover page of this prospectus supplement and to dealers at that price less a concession not in excess of \$0.21 per share. After the initial offering of the shares, the public offering price, concession or any other term of the offering may be changed by the representative.

The following table shows the public offering price, underwriting discounts and commissions and proceeds before expenses to us. The information assumes either no exercise or full exercise by the underwriters of their option to purchase additional shares of our common stock.

Total

Edgar Filing: Viking Therapeutics, Inc. - Form 424B5

	Per Share	Without Option	With Option
Public offering price	\$5.00	\$ 55,000,000	\$63,250,000
Underwriting discounts and commissions	\$0.35	\$ 3,850,000	\$4,427,500
Proceeds, before expenses, to us	\$4.65	\$ 51,150,000	\$58,822,500

We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately \$135,000. We also have agreed to reimburse the underwriters for up to \$65,000 for their counsel fees. In accordance with FINRA Rule 5110, this reimbursed fee is deemed underwriting compensation for this offering.

S-37

Option to Purchase Additional Shares

We have granted an option to the underwriters, exercisable for 30 days after the date of this prospectus supplement, to purchase up to 1,650,000 additional shares at the public offering price less the underwriting discounts and commissions. If the underwriters exercise this option, each underwriter will be obligated, subject to conditions contained in the underwriting agreement, to purchase a number of additional shares proportionate to that underwriter's initial amount reflected in the above table.

No Sales of Similar Securities

We and our executive officers and directors have agreed not to sell or transfer any shares of common stock or securities convertible into or exchangeable or exercisable for shares of common stock, for 90 days after the date of this prospectus supplement without first obtaining the written consent of William Blair & Company, L.L.C., on behalf of the underwriters. Specifically, we and these other persons have agreed, with certain exceptions, not to (i) offer, sell, contract to sell, announce the intention to sell, pledge, grant any option to purchase or otherwise dispose of any of our securities or any securities convertible into or exercisable or exchangeable for, or any rights to purchase or otherwise acquire our securities, (ii) request or demand that we file a registration statement related to the shares of common stock or (iii) publicly announce any of the foregoing.

This lock-up provision applies to shares of common stock and to securities convertible into or exchangeable or exercisable for shares of common stock.

Nasdaq Capital Market Listing

Our common stock is listed on the Nasdaq Capital Market under the symbol "VKTX."

Price Stabilization, Short Positions and Penalty Bids

Until the distribution of the shares is completed, SEC rules may limit underwriters and selling group members from bidding for and purchasing our common stock. However, the representative may engage in transactions that stabilize the price of our common stock, such as bids or purchases to peg, fix or maintain that price.

In connection with this offering, the underwriters may purchase and sell our common stock in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. "Covered" short sales are sales made in an amount not greater than the underwriters' option described above. The underwriters may close out any covered short position by either exercising their option or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option granted to them. "Naked" short sales are sales in excess of such option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of shares of common stock made by the underwriters in the open market prior to the closing of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representative has repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Similar to other purchase transactions, the underwriters' purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. The underwriters may conduct these transactions on the Nasdaq Capital Market, in the over-the-counter market or otherwise.

S-38

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, neither we nor any of the underwriters make any representation that the representative will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

The underwriters may also engage in passive market making transactions in our common stock on the Nasdaq Capital Market in accordance with Rule 103 of Regulation M during a period before the commencement of offers or sales of shares of our common stock in this offering and extending through the completion of distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker's bid, that bid must then be lowered when specified purchase limits are exceeded.

Electronic Distribution

In connection with this offering, certain of the underwriters or securities dealers may distribute prospectuses by electronic means, such as e-mail.

Other Relationships

The underwriters and certain of their affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. Some of the underwriters and certain of their affiliates may in the future engage in investment banking and other commercial dealings in the ordinary course of business with us and our affiliates, for which they may in the future receive customary fees, commissions and expenses.

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates are currently providing investment banking advice to us and may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long or short positions in such securities and instruments.

Selling Restrictions

Notice to Prospective Investors in the European Economic Area

In relation to each Member State of the European Economic Area (each, a "Relevant Member State"), no offer of shares may be made to the public in that Relevant Member State other than:

- A. to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- B. to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the representative;
or
- C. in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of shares shall require the Company or the representative to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive.

Each person in a Relevant Member State who initially acquires any shares or to whom any offer is made will be deemed to have represented, acknowledged and agreed that it is a “qualified investor” within the meaning of the law in that Relevant Member State implementing Article 2(1)(e) of the Prospectus Directive. In the case of any shares being offered to a financial intermediary as that term is used in Article 3(2) of the Prospectus Directive, each such

S-39

financial intermediary will be deemed to have represented, acknowledged and agreed that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of any shares to the public other than their offer or resale in a Relevant Member State to qualified investors, as so defined or in circumstances in which the prior consent of the representative has been obtained to each such proposed offer or resale.

We, the representative and each of our affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgements and agreements.

This prospectus has been prepared on the basis that any offer of shares in any Relevant Member State will be made pursuant to an exemption under the Prospectus Directive from the requirement to publish a prospectus for offers of shares. Accordingly, any person making or intending to make an offer in that Relevant Member State of shares which are the subject of the offering contemplated in this prospectus may only do so in circumstances in which no obligation arises for the Company or any of the underwriters to publish a prospectus pursuant to Article 3 of the Prospectus Directive in relation to such offer. Neither the Company nor the underwriters have authorized, nor do they authorize, the making of any offer of shares in circumstances in which an obligation arises for the Company or the underwriters to publish a prospectus for such offer.

For the purpose of the above provisions, the expression “an offer to the public” in relation to any shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares to be offered so as to enable an investor to decide to purchase or subscribe the shares, as the same may be varied in the Relevant Member State by any measure implementing the Prospectus Directive in the Relevant Member State, and the expression “Prospectus Directive” means Directive 2003/71/EC (including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member States) and includes any relevant implementing measure in the Relevant Member State, and the expression “2010 PD Amending Directive” means Directive 2010/73/EU.

LEGAL MATTERS

The validity of the securities offered by this prospectus supplement will be passed upon for us by Paul Hastings LLP, Palo Alto, California. Certain legal matters will be passed upon for the underwriters by Goodwin Procter LLP, New York, New York.

EXPERTS

Marcum LLP, independent registered public accounting firm, has audited our financial statements included in our annual report on Form 10-K for the year ended December 31, 2016, which is incorporated by reference into this prospectus supplement and elsewhere in the registration statement of which this prospectus supplement is a part. Our financial statements are incorporated by reference in reliance on Marcum LLP's report (which includes an explanatory paragraph as to Viking Therapeutics, Inc.'s ability to continue as a going concern), given on their authority as experts in accounting and auditing.

INFORMATION INCORPORATED BY REFERENCE; WHERE YOU CAN FIND MORE INFORMATION

The SEC allows us to incorporate by reference the information and reports we file with it, which means that we can disclose important information to you by referring you to these documents. The information incorporated by reference is an important part of this prospectus supplement. We are incorporating by reference the documents listed below, which we have already filed with the SEC:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, filed with the SEC on March 21, 2017;
- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, filed with the SEC on May 10, 2017;
- our Quarterly Report on Form 10-Q for the quarter ended June 30, 2017, filed with the SEC on August 9, 2017;
- our Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, filed with the SEC on November 8, 2017;
- our Definitive Proxy Statement on Schedule 14A filed with the SEC on April 7, 2017;
- our Current Reports on Form 8-K filed with the SEC on February 14, 2017, May 24, 2017, June 14, 2017, June 19, 2017, July 6, 2017, September 29, 2017, December 7, 2017, December 11, 2017 and January 23, 2018; and
- the description of our common stock set forth in our Registration Statement on Form 8-A (File No. 001-37355), filed with the SEC on April 23, 2015.

All documents we file pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act on or after the date of this prospectus supplement and before the later of (1) the completion of the offering of the securities described in this prospectus supplement and (2) if applicable, the date any underwriter stops offering securities pursuant to this prospectus supplement will also be incorporated by reference in this prospectus supplement from the date of filing of such documents. Upon request, we will provide to each person, including any beneficial owner, to whom a prospectus supplement is delivered a copy of any or all of the information that has been incorporated by reference in this prospectus supplement but not delivered with this prospectus supplement.

Notwithstanding the preceding, unless specifically stated to the contrary, none of the information that we disclose under 2.02 or 7.01 or, if related to Items 2.02 or 7.01, Item 9.01 of any Current Report on Form 8-K that we may, from time to time, furnish to the SEC will be incorporated by reference into, or otherwise included in, this prospectus supplement. The information contained in each of the documents incorporated by reference speaks only as of the date of such document. Any statement contained in a document incorporated by reference or deemed to be incorporated by reference herein, or contained in this prospectus supplement, shall be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained herein or in any subsequently filed document or report that also is incorporated by reference or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement.

We file annual, quarterly and other reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at <http://www.sec.gov>. You may also read and copy any document we file at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act can also be accessed free of charge through the Internet. These filings will be available as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

We have filed with the SEC a registration statement under the Securities Act relating to the offering of these securities. The registration statement, including the attached exhibits, contains additional relevant information about us and the securities. This prospectus supplement does not contain all of the information set forth in the registration

statement. You can obtain a copy of the registration statement, at prescribed rates, from the SEC at the address listed

S-42

above. The registration statement and the documents referred to above are also available on our corporate website at www.vikingtherapeutics.com. Unless specifically listed above, the information contained on the SEC website or our website is not incorporated by reference into this prospectus supplement and you should not consider that information a part of this prospectus supplement. You may obtain a copy of any of these documents at no cost, by writing or telephoning us at the following address:

Viking Therapeutics, Inc.

12340 El Camino Real, Suite 250

San Diego, California 92130

Telephone: (858) 704-4660

This prospectus supplement may contain information that updates, modifies or is contrary to information in one or more of the documents incorporated by reference in this prospectus supplement. You should rely only on the information incorporated by reference or provided in this prospectus supplement. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus supplement is accurate as of any date other than the date of this prospectus supplement or the date of the documents incorporated by reference in this prospectus supplement.

PROSPECTUS

Viking Therapeutics, Inc.

\$150,000,000

Common Stock

Preferred Stock

Debt Securities

Warrants

Units

We may offer and sell, from time to time in one or more offerings, up to \$150,000,000 in the aggregate of any combination of the securities identified above from time to time in one or more offerings, either individually or in combination with other securities. We may also offer common stock or preferred stock upon conversion of debt securities, common stock upon conversion of preferred stock, or common stock, preferred stock or debt securities upon the exercise of warrants.

Each time we offer and sell securities, we will provide a supplement to this prospectus that contains specific information about the offering and the amounts, prices and terms of the securities. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement and any related free writing prospectuses may also add, update or change information contained in this prospectus with respect to that offering. You should carefully read this prospectus and the applicable prospectus supplement and any related free writing prospectus, as well as any documents incorporated by reference, before you invest in any of our securities.

We may offer and sell the securities described in this prospectus and any prospectus supplement to or through one or more underwriters, dealers and agents, or directly to purchasers, or through a combination of these methods. If any underwriters, dealers or agents are involved in the sale of any of the securities, their names and any applicable purchase price, fee, commission or discount arrangement between or among them will be set forth, or will be calculable from the information set forth, in the applicable prospectus supplement. See the sections of this prospectus entitled "About this Prospectus" and "Plan of Distribution" for more information. No securities may be sold without delivery of this prospectus and the applicable prospectus supplement describing the method and terms of the offering of such securities.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" on page 1 of this prospectus, the applicable prospectus supplement and in any applicable free writing prospectuses, and under similar headings in the documents that are incorporated by

reference into this prospectus.

Our common stock and warrants are currently listed on the Nasdaq Capital Market under the symbol “VKTX” and “VKTXW”, respectively. On June 16, 2016, the last reported sales price for our common stock was \$1.32 per share and the last reported sales price for our warrants was \$0.38. 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 applicable prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is July 26, 2016.

TABLE OF CONTENTS

	Page
<u>Summary</u>	1
<u>Risk Factors</u>	1
<u>Disclosure Regarding Forward-Looking Statements</u>	2
<u>Use of Proceeds</u>	4
<u>Ratio of Earnings to Fixed Charges</u>	4
<u>Description of Capital Stock</u>	5
<u>Description of Debt Securities</u>	9
<u>Description of Warrants</u>	16
<u>Description of Units</u>	19
<u>Legal Ownership of Securities</u>	20
<u>Plan of Distribution</u>	23
<u>Legal Matters</u>	25
<u>Experts</u>	25
<u>Where You Can Find More Information</u>	25
<u>Important Information Incorporated by Reference</u>	26

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, utilizing a “shelf” registration process. Under this shelf registration process, we may offer and sell shares of our common stock and preferred stock, various series of debt securities, warrants to purchase any of such securities and/or units consisting of any combination of such securities, either individually or in combination with 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 offer securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement and any related free writing prospectus we have authorized for use in connection with a specific offering may also add, update or change any of the information contained in this prospectus or in the documents that we have incorporated by reference into this prospectus. We urge you to read carefully this prospectus, the applicable prospectus supplement and any free writing prospectuses we have authorized for use in connection with a specific offering, together with the information incorporated herein by reference as described under the section entitled “Important Information Incorporated by Reference”, before buying any of the securities being offered.

This prospectus may not be used to consummate a sale of securities unless it is accompanied by a prospectus supplement.

You should rely only on the information contained in, or incorporated by reference into, this prospectus, the applicable prospectus supplement and any free writing prospectuses, along with the information contained in any free writing prospectuses we have authorized for use in connection with a specific offering. We have not authorized anyone to provide you with different or additional information. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so.

The information appearing in this prospectus, the applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, the applicable prospectus supplement or any related free writing prospectus, or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading “Where You Can Find More Information”.

SUMMARY

This summary highlights selected information that is presented in greater detail elsewhere in this prospectus or incorporated by reference in this prospectus. Because it is only a summary, it does not contain all of the information you should consider before investing in our common stock, preferred stock, debt securities, warrants or units, and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information included elsewhere in this prospectus. Before you decide whether to purchase shares of our common stock or preferred stock, or our debt securities, warrants or units, you should read this entire prospectus, the applicable prospectus supplement and any related free-writing prospectus carefully, including the risks of investing in our securities discussed under the heading “Risk Factors” contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus. You should also carefully read the information incorporated by reference into this prospectus, including our financial statements, and the exhibits to the registration statement of which this prospectus is a part. Unless the context otherwise requires, the terms “Viking,” “the Company,” “we,” “us” and “our” in this prospectus refer to Viking Therapeutics, Inc.

The Company

We are a clinical-stage biopharmaceutical company focused on the development of novel, first-in-class or best-in-class therapies for metabolic and endocrine disorders. We have exclusive worldwide rights to a portfolio of five drug candidates in clinical trials or preclinical studies, which are based on small molecules licensed from Ligand Pharmaceuticals Incorporated, or Ligand. Our lead clinical program is VK5211, a first-in-class, orally available drug candidate currently in a Phase 2 clinical trial for acute rehabilitation following non-elective hip fracture surgery. Hip fracture is a common injury among persons aged 60 and older. VK5211 is a non-steroidal selective androgen receptor modulator, or SARM. A SARM is designed to selectively interact with a subset of receptors that have a normal physiologic role of interacting with naturally-occurring hormones called androgens. Broad activation of androgen receptors with drugs, such as exogenous testosterone, can stimulate muscle growth and improve bone mineral density, or BMD, but often results in unwanted side effects such as prostate growth, hair growth and acne. VK5211 has been shown to selectively produce the therapeutic benefits of testosterone in muscle and bone tissue, potentially accelerating rehabilitation and improving outcomes among hip fracture patients. We commenced a Phase 2 clinical trial of VK5211 in October 2015 and expect to complete enrollment in the trial in the second half of 2016 and complete the trial in the first quarter of 2017. We are also focused on the development of first-in-class, selective, small molecule agonists of the thyroid hormone receptor beta, or TR β , for lipid disorders. Our lead TR β program is VK2809, a liver-selective, orally available prodrug of a potent small molecule TR β agonist. TR β is known to regulate expression of genes important for lipid metabolism, which we believe suggests potential therapeutic benefits for patients suffering from hypercholesterolemia, dyslipidemia and diseases resulting from accumulation of fat in liver tissue, such as non-alcoholic steatohepatitis, or NASH. We plan to initiate a Phase 2 clinical trial of VK2809 in patients with hypercholesterolemia and elevated liver fat content in mid-2016. Our second TR β agonist is VK0214, which we are evaluating in the orphan disease known as X-linked adrenoleukodystrophy, or X-ALD. Preclinical studies of VK0214 in in vitro models of X-ALD showed positive effects on genes relevant to X-ALD. We are evaluating VK0214 in an in vivo model of X-ALD and expect to report preliminary data in 2016. Pending completion of this work, we expect to initiate clinical trials of VK0214 in X-ALD patients.

For a complete description of our business, financial condition, results of operations and other important information, we refer you to our filings with the Securities and Exchange Commission, or the SEC, that are incorporated by reference in this prospectus, including our Annual Report on Form 10-K for the year ended December 31, 2015 and our Quarterly Report on Form 10-Q for the quarter ended March 31, 2016. For instructions on how to find copies of these documents, see “Where You Can Find More Information”.

We were incorporated under the laws of the State of Delaware on September 24, 2012. Our principal executive offices are located at 12340 El Camino Real, Suite 250, San Diego, CA 92130, and our telephone number is (858) 704-4660. Our website address is www.vikingtherapeutics.com. We have included our website address in this prospectus solely as an inactive textual reference. We do not incorporate the information on, or accessible through, our website into this prospectus, and you should not consider any information on, or accessible through, our website as part of this prospectus.

RISK FACTORS

Investing in any securities offered pursuant to this prospectus, the applicable prospectus supplement and any related free writing prospectus involves a high degree of risk. Before making an investment decision, you should carefully consider the risks described under “Risk Factors” in the applicable prospectus supplement, any related free writing prospectus and in our most recent Annual Report on Form 10-K, or any updates in our Quarterly Reports on Form 10-Q, together with all of the other information appearing in or incorporated by reference into this prospectus, the applicable prospectus supplement and any related free writing prospectus, before deciding whether to purchase any of the securities being offered. Our business, financial condition or results of operations could be materially adversely affected by any of these risks. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities.

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference in this prospectus contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, which statements involve substantial risks and uncertainties. Forward-looking statements generally relate to future events or our future financial or operating performance. In some cases, you can identify forward-looking statements because they contain words such as “may,” “will,” “should,” “expects,” “plans,” “anticipates,” “could,” “intends,” “target,” “projects,” “contemplates,” “believes,” “estimates,” “predicts,” “potential” the negative of these words or other similar terms or expressions that concern our expectations, strategy, plans or intentions. Forward-looking statements contained in this prospectus and the documents incorporated by reference in this prospectus include, but are not limited to, statements about:

- risks and uncertainties associated with our research and development activities, including our clinical trials and preclinical studies;
- the timing or likelihood of regulatory filings and approvals or of alternative regulatory pathways for our drug candidates;
- the potential market opportunities for commercializing our drug candidates;
- our expectations regarding the potential market size and the size of the patient populations for our drug candidates, if approved for commercial use, and our ability to serve such markets;
- estimates of our expenses, future revenue, capital requirements and our needs for additional financing;
- our ability to develop, acquire and advance drug candidates into, and successfully complete, clinical trials and preclinical studies;
- the implementation of our business model and strategic plans for our business and drug candidates;
- the initiation, cost, timing, progress and results of future preclinical studies and clinical trials, and our research and development programs;
 - the terms of future licensing arrangements, and whether we can enter into such arrangements at all;
- timing and receipt or payments of licensing and milestone revenues, if any;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our drug candidates and our ability to operate our business without infringing the intellectual property rights of others;
- regulatory developments in the United States and foreign countries;
- the performance of our third party suppliers and manufacturers;
- our ability to maintain and establish collaborations or obtain additional funding;
 - the success of competing therapies that are currently or may become available;
- our expectations regarding the time during which we will be an emerging growth company under the JOBS Act;
- our use of proceeds from the sale of securities under this prospectus;
- our ability to continue as a going concern;
- our financial performance; and
- developments and projections relating to our competitors and our industry.

We caution you that the forward-looking statements highlighted above do not encompass all of the forward-looking statements made in this prospectus or in the documents incorporated by reference in this prospectus.

We have based the forward-looking statements contained in this prospectus, the applicable prospectus supplement and any related free writing prospectus and in the documents incorporated by reference in this prospectus primarily on our current expectations and projections about future events and trends that we believe may affect our business, financial condition, results of operations and prospects. The outcomes of the events described in these forward-looking

statements are subject to risks, uncertainties and other factors that could cause actual results and experience to differ from those projected, including, but not limited to, the risk factors set forth in Part I - Item 1A, "Risk Factors", in our Annual Report on Form 10-K for the year ended December 31, 2015, as filed with the SEC on March 8, 2016, in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2016, as filed with the SEC on May 10, 2016, and elsewhere in the documents incorporated by reference into this prospectus. Moreover, we operate in a very competitive and challenging environment. New risks and uncertainties emerge from time to time, and it is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained in this prospectus, the applicable prospectus supplement and any related free writing prospectus and in the documents incorporated by reference in this prospectus. We cannot assure you that the results, events and circumstances reflected in the forward-looking statements will be achieved or occur, and actual results, events or circumstances could differ materially from those described in the forward-looking statements.

The forward-looking statements contained in this prospectus, the applicable prospectus supplement and any related free writing prospectus and in the documents incorporated by reference in this prospectus relate only to events as of the date on which the statements are made. We do not undertake any obligation to release publicly any revisions to such forward-looking statements to reflect events or circumstances after the date of this prospectus or to reflect the occurrence of unanticipated events. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-

looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures, other strategic transactions or investments we may make.

3

USE OF PROCEEDS

Except as described in the applicable prospectus supplement or in any free writing prospectuses we have authorized for use in connection with a specific offering, we currently intend to use the net proceeds from the sale of securities under this prospectus, if any, for working capital and general corporate purposes, which may include, without limitation, supporting asset growth and engaging in acquisitions or other business combinations. We also may use a portion of the proceeds to repay debt.

The amounts and timing of our use of the net proceeds from the sale of securities under this prospectus will depend on a number of factors, such as the timing and progress of our research and development efforts, the timing and progress of any partnering and commercialization efforts, technological advances and the competitive environment for our products. As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds to us from the sale of securities under this prospectus. Accordingly, our management will have broad discretion in the timing and application of these proceeds. Pending application of the net proceeds as described above, we intend to temporarily invest the proceeds in short-term, interest-bearing instruments.

RATIO OF EARNINGS TO FIXED CHARGES

The following table sets forth the historical ratios of earnings to fixed charges for Viking Therapeutics, Inc. for the periods indicated.

	Year Ended December 31,				Three Months Ended March 31,
	2012	2013	2014	2015	2016
Ratio of earnings to fixed charges	*	*	*	*	*

(*) We were incorporated under the laws of the State of Delaware on September 24, 2012. We did not record earnings for any of the years ended December 31, 2012, 2013, 2014 or 2015 or the three months ended March 31, 2016. Accordingly, our earnings were insufficient to cover fixed charges for such periods and we are unable to disclose a ratio of earnings to fixed charges for such periods. The dollar amount of the deficiency in earnings available for fixed charges for the years ended December 31, 2012, 2013, 2014 and 2015 and the three months ended March 31, 2016 was \$111,027, \$146,247, \$21,884,183, \$23,403,988 and \$3,586,988, respectively.

DESCRIPTION OF CAPITAL STOCK

General

The following description summarizes the most important terms of our capital stock. Because it is only a summary of the provisions of our amended and restated certificate of incorporation and amended and restated bylaws, it does not contain all of the information that may be important to you. For a complete description of the matters set forth in this “Description of Capital Stock,” you should refer to our amended and restated certificate of incorporation, amended and restated bylaws and the Registration Rights Agreement, dated May 21, 2014, as amended, between us and Ligand, or the Registration Rights Agreement, each of which are included as exhibits to the registration statement of which this prospectus is a part, and to the applicable provisions of Delaware law. Our authorized capital stock consists of 300,000,000 shares of common stock, \$0.00001 par value per share, and 10,000,000 shares of undesignated preferred stock, \$0.00001 par value per share.

As of May 31, 2016, there were 19,273,215 shares of our common stock outstanding, held by approximately 15 stockholders of record, not including beneficial holders whose shares are held in names other than their own. Our board of directors is authorized, without stockholder approval except as required by the rules and listings standards of The Nasdaq Stock Market LLC, to issue additional shares of our capital stock.

Common Stock

Dividend Rights

Subject to preferences that may apply to any shares of preferred stock outstanding at the time, the holders of our common stock are entitled to receive dividends out of funds legally available if our board of directors, in its discretion, determines to issue dividends and then only at the times and in the amounts that our board of directors may determine.

Voting Rights

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders. Our amended and restated certificate of incorporation does not provide for cumulative voting for the election of directors, and it establishes a classified board of directors that is divided into three classes with staggered three-year terms. Only the directors in one class will be subject to election at each annual meeting of our stockholders, with the directors in the other classes continuing for the remainder of their respective three-year terms.

No Preemptive or Similar Rights

Our common stock is not entitled to preemptive rights, and is not subject to conversion, redemption or sinking fund provisions.

Right to Receive Liquidation Distributions

If we become subject to a liquidation, dissolution or winding-up, the assets legally available for distribution to our stockholders would be distributable ratably among the holders of our common stock and any participating preferred stock outstanding at that time, subject to prior satisfaction of all outstanding debt and liabilities and the preferential rights of and the payment of liquidation preferences, if any, on any outstanding shares of preferred stock.

Fully Paid and Non-Assessable

All of the outstanding shares of our common stock are, and the shares of our common stock to be issued pursuant to this prospectus or which may be issued upon conversion of or exchange for preferred stock or debt securities that

provide for conversion or exchange, or upon exercise of warrants or units to be issued pursuant to this prospectus, will be, fully paid and non-assessable.

Preferred Stock

Our board of directors is authorized, subject to limitations prescribed by Delaware law, to issue up to 10,000,000 shares of our preferred stock in one or more series, to establish from time to time the number of shares to be included in each series, and to fix the designation, powers, preferences, and rights of the shares of each series and any of its qualifications, limitations or restrictions, in each case without further vote or action by our stockholders. Our board of directors can also increase or decrease the number of shares of any series of preferred stock, but not below the number of shares of that series then outstanding, without any further vote or action by our stockholders. Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in control of our company and might adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock.

Equity Awards

As of May 31, 2016, options to purchase 846,212 shares of our common stock with a weighted-average exercise price of \$4.94 per share were outstanding, restricted stock awards representing an aggregate of 559,745 shares of our common stock were unvested and outstanding, and restricted stock units representing 63,125 shares of our common stock were outstanding.

Outstanding Warrants

As of May 31, 2016, warrants to purchase an aggregate of 9,667,500 shares of our common stock with a weighted-average exercise price of \$1.57 per share were outstanding.

Ligand Convertible Note

As of May 31, 2016, the aggregate outstanding principal amount under the Secured Convertible Promissory Note, or the Ligand Note, that we previously issued to Ligand Pharmaceuticals Incorporated, or Ligand, plus all accrued and previously unpaid interest thereon, was approximately \$1,961,520. We may repay any portion of the outstanding principal amount of the loans under the Ligand Note, plus accrued and previously unpaid interest thereon, by delivering a notice to Ligand, or the Additional Repayment Notice, specifying the amount that we wish to repay, or the Additional Payment Amount. Ligand will have five days to elect to receive the Additional Payment Amount in cash, our equity securities or a combination of cash and our equity securities. If Ligand does not make an election within such five-day period, the form of the Additional Payment Amount will be at our sole election and discretion, subject to the number of equity securities being reduced to the extent that the issuance of such equity securities would increase Ligand's beneficial ownership of our common stock to greater than 49.9%. To the extent that any portion of an Additional Payment Amount will be paid in the form of our equity securities, we will issue to Ligand, with respect to the portion of the Additional Payment Amount that will be paid in our equity securities, (1) in the event we deliver the Additional Repayment Notice before October 10, 2016, such number of shares of common stock and a warrant to purchase an equivalent number of shares of common stock with an exercise price of \$1.50 per share, calculated by dividing the Additional Payment Amount by \$1.25 (subject to adjustment for stock dividends, splits, combinations or similar transactions), and (2) in the event we deliver the Additional Repayment Notice on or after October 10, 2016, such number of shares of our common stock equal to the greater of (i) such number of shares of common stock equal to the quotient obtained by dividing the Additional Payment Amount by the volume weighted-average closing price of our common stock for the 30 days prior to the date we deliver the Additional Repayment Notice, and (ii) such number of shares of common stock equal to the quotient obtained by dividing the Additional Payment Amount by \$8.00 (subject to adjustment for stock dividends, splits, combinations or similar transactions). Each \$1.00 of any Additional Repayment Amount will reduce the amount of accrued and unpaid interest and then unpaid principal amount under the Ligand Note by \$0.50. Additionally, pursuant to the Loan and Security Agreement between us and Ligand, dated May 21, 2014, as amended, or the Loan and Security Agreement, Ligand has agreed that it will not, until January 23, 2017, sell or otherwise transfer or dispose of any shares of our common stock, including shares issuable upon conversion of the Ligand Note.

Registration Rights

On May 21, 2014, we entered into the Registration Rights Agreement with Ligand, pursuant to which we agreed, among other things, that we will file with the Securities and Exchange Commission, by no later than January 23, 2017, a Registration Statement on Form S-1 under the Securities Act that covers the resale of (1) the securities issued by us to Ligand pursuant to the Master License Agreement we previously entered into with Ligand and the securities issuable by us to Ligand pursuant to the Ligand Note, or, collectively, the Viking Securities, (2) the shares of our common stock issued or issuable upon conversion of the Viking Securities, if applicable, and (3) the shares of our common stock issued as a dividend or other distribution with respect to, in exchange for or in replacement of the Viking Securities.

We issued to the representative of the underwriters for our initial public offering as additional compensation a warrant, or the Representative's Warrant, to purchase an aggregate of 82,500 shares of our common stock. Pursuant to the terms of the Representative's Warrant, the holders of 51% of the shares issuable upon exercise of the Representative's Warrant, or the Registrable Warrant Shares, have the right to demand, on one occasion, the registration by us of the Registrable Warrant Shares. Additionally, we have agreed under the terms of the Representative's Warrant to provide the holder of the Registrable Warrant Shares with certain piggyback registration rights.

Anti-Takeover Provisions

Certain provisions of Delaware law, along with certain provisions of our amended and restated certificate of incorporation and our amended and restated bylaws, may have the effect of delaying, deferring or discouraging another person from acquiring control of our company. These provisions are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed, in part, to encourage persons seeking to acquire control of our company to first negotiate with our board of directors. However, these provisions could have the effect of delaying, discouraging or preventing attempts to acquire us, which could deprive our stockholders of opportunities to sell their shares of common stock at prices higher than prevailing market prices.

Delaware Law

We are subject to the provisions of Section 203 of the General Corporation Law of the State of Delaware, or the DGCL, regulating corporate takeovers. In general, those provisions prohibit a public Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years following the date that the stockholder became an interested stockholder, unless:

- the transaction is approved by the board of directors before the date the interested stockholder attained that status;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced; or
- on or after the date of the transaction, the transaction is approved by the board of directors and authorized at a meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 of the DGCL defines a business combination to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 of the DGCL defines an interested stockholder as any entity or person beneficially owning, or who within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by any such entity or person.

A Delaware corporation may opt out of this provision by express provision in its original certificate of incorporation or by amendment to its certificate of incorporation or bylaws approved by its stockholders. However, we have not opted out of, and do not currently intend to opt out of, this provision. The statute could prohibit or delay mergers or other takeover or change in control attempts and, accordingly, may discourage attempts to acquire our company.

Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Our amended and restated certificate of incorporation and our amended and restated bylaws include a number of provisions that could deter hostile takeovers or delay or prevent changes relating to the control of our board of directors or management team, including the following:

- **Board of Directors Vacancies.** Our amended and restated certificate of incorporation and amended and restated bylaws authorize only our board of directors to fill vacant directorships, including newly created seats. In addition, the number of directors constituting our board of directors can be set only by a resolution adopted by a majority vote of our entire board of directors. These provisions would prevent a stockholder from increasing the size of our board of directors and then gaining control of our board of directors by filling the resulting vacancies with its own nominees. This makes it more difficult to change the composition of our board of directors and promotes continuity of management.
- **Classified Board.** Our amended and restated certificate of incorporation and amended and restated bylaws provide that our board of directors is classified into three classes of directors. A third party may be discouraged from making a tender offer or otherwise attempting to obtain control of our company as it is more difficult and time consuming for stockholders to replace a majority of the directors on a classified board of directors.

- **Stockholder Action; Special Meeting of Stockholders.** Our amended and restated certificate of incorporation provides that our stockholders may not take action by written consent, but may only take action at annual or special meetings of our stockholders. As a result, a holder controlling a majority of our capital stock would not be able to amend our amended and restated bylaws or remove directors without holding a meeting of our stockholders called in accordance with our amended and restated bylaws. Our amended and restated bylaws further provide that special meetings of our stockholders may be called only by a majority of our board of directors, the Chairperson of our board of directors, our Chief Executive Officer or our President, thus prohibiting a stockholder (in the capacity as a stockholder) from calling a special meeting. These provisions might delay the ability of our stockholders to force consideration of a proposal or for stockholders controlling a majority of our capital stock to take any action, including the removal of directors.
- **Advance Notice Requirements for Stockholder Proposals and Director Nominations.** Our amended and restated bylaws provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders or to nominate candidates for election as directors at our annual meeting of stockholders. Our amended and restated bylaws also specify certain requirements regarding the form and content of a stockholder's notice. These provisions might preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders if the proper procedures are not followed. We expect that these provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.
- **No Cumulative Voting.** The DGCL provides that stockholders may cumulate votes in the election of directors if the corporation's certificate of incorporation allows for such mechanism. Our amended and restated certificate of incorporation does not provide for cumulative voting.
- **Directors Removed Only for Cause.** Our amended and restated certificate of incorporation provides that stockholders may remove directors only for cause.
- **Exclusive Jurisdiction for Certain Actions.** Our amended and restated bylaws require, to the fullest extent permitted by law, that derivative actions brought in our name, actions against our directors, officers and employees for breach of fiduciary duty and other similar actions be brought only in the Court of Chancery in the State of Delaware, unless we otherwise consent. Although we believe this provision benefits us by providing increased consistency in the application of Delaware law in the types of lawsuits to which it applies, the provision may have the effect of discouraging lawsuits against our directors and officers.
- **Amendment of Charter Provisions.** Any amendment of the above provisions in our amended and restated certificate of incorporation, with the exception of the ability of our board of directors to issue shares of preferred stock and designate any rights, preferences and privileges thereto, would require approval by the affirmative vote of the holders of at least 66 2/3% of our then outstanding common stock.
- **Issuance of Undesignated Preferred Stock.** Our board of directors has the authority, without further action by the stockholders, to issue up to 10,000,000 shares of undesignated preferred stock with rights and preferences, including voting rights, designated from time to time by our board of directors. The existence of authorized but unissued shares of preferred stock would enable our board of directors to render more difficult or to discourage an attempt to obtain control of our company by means of a merger, tender offer, proxy contest or other means.

Transfer Agent and Registrar

Edgar Filing: Viking Therapeutics, Inc. - Form 424B5

The transfer agent and registrar for our common stock and the warrants we issued in May 2016 is American Stock Transfer & Trust Company, LLC. The transfer agent and registrar's address is One Embarcadero Center, Suite 515, San Francisco, CA 94111.

Listing

Our common stock is listed on the Nasdaq Capital Market under the symbol "VKTX". Our warrants issued in April 2016 are listed on the Nasdaq Capital Market under the symbol "VKTXW".

8

DESCRIPTION OF DEBT SECURITIES

We may issue debt securities from time to time, 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 debt securities that 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. The terms of any debt securities offered under a prospectus supplement may differ from the terms described below. Unless the context requires otherwise, whenever we refer to the indenture, we also are referring to any supplemental indentures that specify the terms of a particular series of debt securities.

We will issue the debt securities under the indenture that we will enter into with the trustee named in the indenture. The indenture will be qualified under the Trust Indenture Act of 1939, as amended, or the Trust Indenture Act. We have filed the form of indenture as an exhibit 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 following summary of material provisions of the debt securities and the indenture is subject to, and qualified in its entirety by reference to, all of the provisions of the indenture applicable to a particular series of debt securities. We urge you to read the applicable prospectus supplements and any related free writing prospectuses we authorize for use in connection with a specific offering of debt securities, as well as the complete indenture that contains the terms of the debt securities.

General Matters

The indenture does not limit the amount of debt securities that we may issue. It provides that we may issue debt securities up to the principal amount that we may authorize and in any currency or currency unit that we may designate. Except for the limitations on consolidation, merger and sale of all or substantially all of our assets contained in the indenture, the terms of the indenture do not contain any covenants or other provisions designed to give holders of any debt securities protection against changes in our operations or financial condition or transactions involving us.

We may issue the debt securities issued under the indenture as “discount securities”, which means they may be sold at a discount below their stated principal amount. These debt securities, as well as other debt securities that are not issued at a discount, may be issued with “original issue discount”, or OID, for U.S. federal income tax purposes because of interest payment and other characteristics or terms of the debt securities. Material U.S. federal income tax considerations applicable to debt securities issued with OID will be described in more detail in the applicable prospectus supplement.

We will describe in the applicable prospectus supplement the terms of the series of debt securities being offered, including:

- the title of the series of debt securities;
- any limit upon the aggregate principal amount that may be issued;
 - the maturity date or dates;
- the form of the debt securities of the series;
- the applicability of any guarantees;
- whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
- whether the debt securities rank as senior debt, senior subordinated debt, subordinated debt or any combination thereof, and the terms of any subordination;

if the price (expressed as a percentage of the aggregate principal amount thereof) at which the debt securities will be issued is a price other than the principal amount thereof, the portion of the principal amount thereof payable upon declaration of acceleration of the maturity thereof, or if applicable, the portion of the principal amount of such debt securities that is convertible into another security or the method by which any such portion shall be determined;

the interest rate or rates, 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

9

method for determining such dates;

our right, if any, to defer payment of interest and the maximum length of any such deferral period;

if applicable, the date or dates after which, or the period or periods during which, and the price or prices 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;

the date or dates, if any, on which, and the price or prices at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions 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;

the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof;

any and all terms, if applicable, relating to any auction or remarketing of the debt securities of that series and any security for our obligations with respect to such debt securities and any other terms which may be advisable in connection with the marketing of debt securities of that series;

whether the debt securities of the series shall be issued in whole or in part in the form of a global security or securities; the terms and conditions, if any, upon which such global security or securities may be exchanged in whole or in part for other individual securities, and the depositary for such global security or securities;

if applicable, the provisions relating to conversion or exchange of any debt securities of the series and the terms and conditions upon which such debt securities will be so convertible or exchangeable, including the conversion or exchange price, as applicable, or how it will be calculated and may be adjusted, any mandatory or optional (at our option or at the holders' option) conversion or exchange features, the applicable conversion or exchange period and the manner of settlement for any conversion or exchange;

- if other than the full principal amount thereof, the portion of the principal amount of debt securities of the series which shall be payable upon declaration of acceleration of the maturity thereof;

additions to or changes in the covenants applicable to the particular debt securities being issued, including, among others, the consolidation, merger or sale covenant;

additions to or changes in the events of default with respect to the securities and any change in the right of the trustee or the holders to declare the principal, premium, if any, and interest, if any, with respect to such securities to be due and payable;

additions to or changes in or deletions of the provisions relating to covenant defeasance and legal defeasance;

additions to or changes in the provisions relating to satisfaction and discharge of the indenture;

additions to or changes in the provisions relating to the modification of the indenture both with and without the consent of the holders of the debt securities issued under the indenture;

the currency of payment of the debt securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars;

whether interest will be payable in cash or additional debt securities at our or the holders' option and the terms and conditions upon which the election may be made;

the terms and conditions, if any, upon which we will pay amounts in addition to the stated interest, premium, if any, and principal amounts of the debt securities of the series to any holder that is not a "United States person" for federal tax purposes;

any restrictions on transfer, sale or assignment of the debt securities of the series; and

any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, any other additions

or changes in the provisions of the indenture, 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 on which a series of debt securities may be convertible into or exchangeable for our common stock or our other securities. We will include provisions as to settlement upon conversion or exchange and 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 or our other securities 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 indenture will not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of our assets as an entirety or substantially as an entirety. However, any successor to or acquirer of such assets (other than a subsidiary of ours) must assume all of our obligations under the indenture or the debt securities, as appropriate.

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 indenture with respect to any series of debt securities that we may issue:

• if we fail to pay any installment of interest on any series of debt securities, as and when the same shall become due and payable, and such default continues for a period of 90 days; provided, however, that a valid extension of an interest payment period by us in accordance with the terms of any indenture supplemental thereto shall not constitute a default in the payment of interest for this purpose;

• if we fail to pay the principal of, or premium, if any, on any series of debt securities as and when the same shall become due and payable whether at maturity, upon redemption, by declaration or otherwise, or in any payment required by any sinking or analogous fund established with respect to such series; provided, however, that a valid extension of the maturity of such debt securities in accordance with the terms of any indenture supplemental thereto shall not constitute a default in the payment of principal or premium, if any;

• if we fail to observe or perform any other covenant or agreement contained in the debt securities or the indenture, other than a covenant specifically relating to another series of debt securities, and our failure continues for a period of 90 days after we receive written notice of such failure, requiring the same to be remedied and stating that such is a notice of default thereunder, from the trustee or holders of at least 25% of the aggregate principal amount of the outstanding debt securities of the applicable series; and

• if specified events of bankruptcy, insolvency or reorganization occur.

If an event of default with respect to debt securities of any series occurs and is continuing, other than certain specified events of bankruptcy, insolvency or reorganization, the trustee or the holders of at least 25% of the 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, of such series of debt securities immediately due and payable. If certain specified events of bankruptcy, insolvency or reorganization occur with respect to us, the principal amount 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 of the 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 indenture, 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. The holders of a majority of the 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.

A holder of the debt securities of any series will have the right to institute a proceeding under the indenture 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% of the aggregate principal amount of the outstanding debt securities of that series have made a written request;
- such holders have offered to the trustee indemnity satisfactory to it against the costs, expenses and liabilities to be incurred by the trustee in compliance with the request; and
- the trustee does not institute the proceeding, and does not receive from the holders of a majority of the 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 of, or the premium, if any, or interest on, the debt securities.

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

Modification of Indenture; Waiver

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, we and the trustee may change an indenture without the consent of any holders with respect to specific matters, including, but not limited to, the following:

- to cure any ambiguity, defect or inconsistency in the indenture or in the debt securities of any series;
- to comply with the provisions described above under “—Consolidation, Merger or Sale”;
- to provide for uncertificated debt securities in addition to or in place of certificated debt securities;
- to add to our covenants, restrictions, conditions or provisions such new covenants, restrictions, conditions or provisions for the benefit of the holders of all or any series of debt securities, 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 upon us in the indenture;
 - 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 make any change that does not adversely affect the interests of any holder of debt securities of any series in any material respect;
- to provide for the issuance of, and to establish the form and terms and conditions of, the debt securities of any series as provided above under “—General Matters”, 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 under any indenture by a successor trustee; or
- to comply with any requirements of the SEC in connection with the qualification of any indenture under the Trust

Indenture Act.

In addition, under the indenture, 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 of the aggregate principal amount of the outstanding debt securities of each series that is affected. However, unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, we and the trustee may make the following changes only with the consent of each holder of any outstanding debt securities affected:

- extending the fixed maturity of any debt securities of any series;
- reducing the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption of any series of 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

The indenture provides that we can elect to be discharged from our obligations with respect to one or more series of debt securities, except for specified obligations, including, but not limited to, the following obligations to:

- provide for payment;
- register the transfer or exchange of debt securities of the series;
- replace stolen, lost or mutilated debt securities of the series;
- pay principal of and premium and interest on any 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 must deposit with the trustee money or government obligations sufficient to pay all the principal of, and any premium, if any, 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 provide otherwise in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. The indenture provides 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, New York, New York, known as DTC, or another depository named by us and identified in the applicable prospectus supplement with respect to that series. To the extent the debt securities of a series are issued in global form and as book-entry, a description of terms relating to any book-entry securities will be set forth in the applicable prospectus supplement.

At the option of the holder, subject to the terms of the indenture 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 indenture 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 impose 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 date 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 date of the mailing; or
- register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except for 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. 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. Subject to this provision, the trustee is under no obligation to exercise any of the powers given to it by the indenture 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.

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.

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 indenture and the debt securities, and any claim, controversy or dispute arising under or related to the indenture or 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.

Ligand Loan and Security Agreement and Ligand Note

Pursuant to the Loan and Security Agreement, among other things, Ligand agreed to provide us with loans in the aggregate amount of up to \$2.5 million. In accordance with the Loan and Security Agreement, Ligand initially loaned \$1.0 million to us on May 27, 2014, and additional amounts of \$250,000 to us each month from June 2014 through and including November 2014 for a total of \$2.5 million. From May 21, 2014 to January 21, 2016, the principal amount outstanding under the loans accrued interest at a fixed per annum rate equal to the lesser of 5.0% or the maximum interest rate permitted by law. Effective as of January 22, 2016, the principal amount outstanding under the loans accrues interest at a fixed per annum rate equal to the lesser of 2.5% or the maximum interest rate permitted by law. In the event we default under the loans, the loans will accrue interest at a fixed per annum rate equal to the lesser of

8% or the maximum interest rate permitted by law. The loans are evidenced by the Ligand Note. Pursuant to the terms of the Loan and Security Agreement and the Ligand Note, the loans will become due and payable upon the written demand of Ligand at any time after the earlier to occur of an event of default under the Loan and Security Agreement or the Ligand Note, or May 21, 2017, unless the loans are repaid in cash or converted into equity prior to such time. In addition, under the Loan and Security Agreement, we may not declare or pay dividends in respect of our common stock without Ligand's prior written consent.

As of May 31, 2016, the aggregate outstanding principal amount under the Ligand Note, plus all accrued and previously unpaid interest thereon, was approximately \$1,961,520. We may repay any portion of the outstanding principal amount of the loans under the Ligand Note, plus accrued and previously unpaid interest thereon, by delivering an Additional Repayment Notice to Ligand, specifying the Additional Payment Amount. Ligand will have five days to elect to receive the Additional Payment Amount in cash, our equity securities or a combination of cash and our equity securities. If Ligand does not make an election within such five-day period, the form of the Additional Payment Amount will be at our sole election and discretion, subject to the number of equity securities being reduced to the extent that the issuance of such equity securities would increase Ligand's beneficial ownership of our common stock to greater than 49.9%. To the extent that any portion of an Additional Payment Amount will be paid in the form of our equity securities, we will issue to Ligand, with respect to the portion of the Additional Payment Amount that will be paid in our equity securities, (1) in the event we deliver the Additional Repayment Notice before October 10, 2016, such number of shares of common stock and a warrant to purchase an equivalent number of shares of common stock with an exercise price of \$1.50 per share, calculated by dividing the Additional Payment Amount by \$1.25 (subject to adjustment for stock dividends, splits, combinations or similar transactions), and (2) in the event we deliver the Additional Repayment Notice on or after October 10, 2016, such number of shares of our common stock equal to the greater of (i) such number of shares of common stock equal to the quotient obtained by dividing the Additional Payment Amount by the volume weighted-average closing price of our common stock for the 30 days prior to the date we deliver the Additional Repayment Notice, and (ii) such number of shares of common stock equal to the quotient obtained by dividing the Additional Payment Amount by \$8.00 (subject to adjustment for stock dividends, splits, combinations or similar transactions). Each \$1.00 of any Additional Repayment Amount will reduce the amount of accrued and unpaid interest and then unpaid principal amount under the Ligand Note by \$0.50. Additionally, pursuant to the Loan and Security Agreement, Ligand has agreed that it will not, until January 23, 2017, sell or otherwise transfer or dispose of any shares of our common stock, including shares issuable upon conversion of the Ligand Note.

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in the applicable prospectus supplements and free writing prospectuses we have authorized for use in connection with a specific offering, 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 issued 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 we authorize for use in connection with the specific offering. The terms of any warrants offered under a prospectus supplement may differ from the terms described below.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant agreement, if any, including a form of warrant certificate, that describes the terms of the particular series of warrants we are offering. 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 the particular series of warrants that we may offer under this prospectus. We urge you to read the applicable prospectus supplements related to the particular series of warrants that we may offer under this prospectus, as well as any related free writing prospectuses we have authorized for use in connection with a specific offering, and the complete warrant agreements and warrant certificates that contain the terms of the warrants.

General Matters

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

- the title of such securities;
- the offering price or prices and aggregate number of warrants offered;
- the currency or currencies 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;
- if applicable, the minimum or maximum amount of such warrants which may be exercised at any one time;
- 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 which, 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, and the currency in 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;
- the terms of any rights to force the exercise of 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;
- a discussion of any material or special 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.

Unless we otherwise specify in the applicable prospectus supplement, 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 the warrant agent in connection with the exercise of the warrant.

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.

Governing Law

Unless we provide otherwise in the applicable prospectus supplement, the warrants and warrant agreements, and any claim, controversy or dispute arising under or related to the warrants or warrant agreements, will be governed by and construed in accordance with the laws of the State of New York.

Enforceability of Rights by Holders of Warrants

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.

Outstanding Warrants

17

As of May 31, 2016, warrants to purchase 9,667,500 shares of our common stock with a weighted-average exercise price of \$1.57 per share were outstanding. All of the outstanding warrants are currently exercisable, and all outstanding warrants contain provisions for the adjustment of the exercise price in the event of stock dividends, stock splits, reorganizations, reclassifications or mergers. In addition, all of the outstanding warrants contain a “cashless exercise” feature that allows the holders thereof to exercise the warrants without a cash payment to us under certain circumstances.

DESCRIPTION OF UNITS

We may issue units consisting of any combination of the other types of securities offered under this prospectus 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.

The following description, together with the additional information included in the applicable prospectus supplement, summarizes the general features of the units that we may offer under this prospectus. You should read any prospectus supplement and any free writing prospectus we authorize for use in connection with a specific offering of units, 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 we will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from another report that we file with the SEC, the form of each unit agreement relating to units offered under this prospectus.

If we offer any units, certain terms of that series of units will be described in the applicable prospectus supplement, including, without limitation, the following, as applicable:

- the title of the series of units;
- identification and description of the separate constituent securities comprising the units;
- the price or prices at which the units will be issued;
- the date, if any, on and after which the constituent securities comprising the units will be separately transferable;
- a discussion of certain U.S. federal income tax considerations applicable to the units; and
- any other terms of the units and their constituent 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 depository 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 depository on behalf of other financial institutions that participate in the depository’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 depository or its participants. Consequently, for global securities, we will recognize only the depository as the holder of the securities, and we will make all payments on the securities to the depository. The depository 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 depository 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 depository’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 in certain situations, as described under “—Special Situations When a Global Security Will Be Terminated”, 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 depository 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 depository 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 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 legal holder, we have no further responsibility for the payment or notice even if that legal holder is required, under agreements with its participants or customers or by law, to pass the payment or notice 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

20

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 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, New York, 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 described 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 described 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

21

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, nor will we or any applicable trustee 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 the same; 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. The rights of holders and street name investors are described 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 from time to time pursuant to underwritten public offerings, direct sales to the public, “at the market” offerings, negotiated transactions, block trades or a combination of these methods. We may sell the securities to or through underwriters or dealers, through agents, or directly to one or more purchasers. We may distribute securities 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.

A prospectus supplement or supplements (and any related free writing prospectus that we may have authorized for use in connection with a specific offering) will describe the terms of the offering of the securities, including, to the extent applicable:

- the name or names of the underwriters, if any;
- the purchase price of the securities or other consideration therefor, and the proceeds, if any, 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 public offering price;
- any discounts or concessions allowed or re-allowed or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

Only underwriters named in the prospectus supplement will be underwriters of the securities offered by the prospectus supplement.

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement, other than securities covered by any over-allotment option. Any public offering price and any discounts or concessions allowed or re-allowed or paid to dealers may change from time to time. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, the nature of any such relationship.

We may sell 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, our agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by certain types of 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.

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

All securities we may offer, other than common stock, will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

Any underwriter may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Over-allotment 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 price. Syndicate-covering or other short-covering transactions involve purchases of the securities, either through exercise of the over-allotment option or 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 stabilizing or 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 the activities at any time.

Any underwriters that are qualified market makers on the Nasdaq Capital Market may engage in passive market making transactions in the common stock on the Nasdaq Capital Market in accordance with Regulation M under the Exchange Act, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the common stock. 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. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

In compliance with guidelines of the Financial Industry Regulatory Authority, or FINRA, the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and the applicable prospectus supplement.

LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, the validity of the securities offered by this prospectus, and any supplement thereto, will be passed upon for us by Paul Hastings LLP, Palo Alto, California.

EXPERTS

Marcum LLP, independent registered public accounting firm, has audited our financial statements included in our annual report on Form 10-K for the year ended December 31, 2015, which is incorporated by reference into this prospectus and elsewhere in the registration statement of which this prospectus is a part. Our financial statements are incorporated by reference in reliance on Marcum LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and file annual, quarterly and current reports, proxy statements and other information with the SEC. We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities being offered under this prospectus. This prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities being offered under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. 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, including Viking Therapeutics, Inc. The SEC's Internet site can be found at <http://www.sec.gov>.

IMPORTANT INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to “incorporate by reference” information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The documents incorporated by reference into this prospectus contain important information that you should read about us.

The following documents are incorporated by reference into this prospectus:

- (a) The Registrant’s Annual Report on Form 10-K for the fiscal year ended December 31, 2015, filed with the SEC on March 8, 2016;
- (b) The Registrant’s Definitive Proxy Statement on Schedule 14A filed with the SEC on April 12, 2016;
- (c) The Registrant’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2016, filed with the SEC on May 10, 2016;
- (d) The Registrant’s Current Reports on Form 8-K filed with the SEC on (i) January 25, 2016, (ii) March 15, 2016, (iii) April 8, 2016, (iv) April 13, 2016, (v) April 14, 2016, (vi) May 2, 2016 and (vii) May 27, 2016; and
- (e) The description of the Registrant’s common stock set forth in the Registrant’s Registration Statement on Form 8-A (File No. 001-37355), filed with the SEC on April 23, 2015, including any amendments or reports filed for the purpose of updating such description.

We also incorporate by reference any future filings (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 unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including those made after the date of the initial filing of the registration statement of which this prospectus is a part and prior to effectiveness of such registration statement, until we file a post-effective amendment that indicates the termination of the offering of the securities made by this prospectus and will become a part of this prospectus from the respective dates that such documents are filed with the SEC. Any statement contained herein or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes hereof or of the related prospectus supplement to the extent that a statement contained herein or in any other subsequently filed document which is also incorporated or deemed to be incorporated herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

Documents incorporated by reference are available from us, without charge. You may obtain documents incorporated by reference in this prospectus by requesting them in writing or by telephone at the following address:

Viking Therapeutics, Inc.

Attn: Secretary

12340 El Camino Real, Suite 250

San Diego, CA 92130

Telephone Number: (858) 704-4660

11,000,000 Shares

Common Stock

Prospectus Supplement

Sole Book-Running Manager

William Blair

Co-Managers
Maxim Group LLC Roth Capital Partners

February 2, 2018

