Viking Therapeutics, Inc.
Form S-1/A
March 25, 2016
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As filed with the Securities and Exchange Commission on March 25, 2016

Registration No. 333-208182

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

AMENDMENT NO. 2

TO

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

Viking Therapeutics, Inc.

(Exact name of Registrant as specified in its charter)

Delaware	**2834**	**46-1073877**
(State or other jurisdiction of	**(Primary Standard Industrial**	**(I.R.S. Employer**

incorporation or organization)	Classification Code Number)	Identification Number)

Viking Therapeutics, Inc.

12340 El Camino Real, Suite 250

San Diego, CA 92130

(858) 704-4660

(Address, including zip code, and telephone number, including area code, of Registrant s principal executive offices)

Brian Lian, Ph.D.

President and Chief Executive Officer

Viking Therapeutics, Inc.

12340 El Camino Real, Suite 250

San Diego, CA 92130

(858) 704-4660

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Jeffrey T. Hartlin, Esq.

Paul Hastings LLP

1117 S. California Avenue

Palo Alto, California 94304

(650) 320-1804

Mitchell S. Nussbaum, Esq.

Giovanni Caruso, Esq.

Loeb & Loeb LLP

345 Park Avenue

New York, New York 10154

(212) 407-4990

Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, check the following box: ¨

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	¨	Accelerated filer	¨
Non-accelerated filer	¨ (Do not check if a smaller reporting company)	Smaller reporting company	x

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	**Proposed Maximum Aggregate Offering Price(1)**	**Amount of Registration Fee(2)(3)**
Common Stock, par value $0.00001 per share		
Warrants to purchase Common Stock, par value $0.00001 per share(4)		
Common Stock, par value $0.00001 per share, issuable upon exercise of Warrants		
Total:	$16,825,000	$1,694.28

(1) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended, or the Securities Act. Includes the aggregate offering price of additional shares that the underwriters have the option to purchase to cover over-allotments.

(2) Includes $1,158.05 that was previously paid for the registration of $11,500,000 of proposed maximum aggregate offering price in connection with the initial filing of the Registration Statement on Form S-1 on November 24,

2015 and $536.23 for the registration of an additional $5,325,000 proposed maximum aggregate offering price registered hereby.

(3) Pursuant to Rule 416(a) under the Securities Act, this Registration Statement shall also cover any additional shares of the Registrant s Common Stock that become issuable by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without receipt of consideration.

(4) No separate registration fee is required pursuant to Rule 457(g) under the Securities Act.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

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The information contained in this prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion, Dated March 25, 2016

Preliminary Prospectus

$9,000,000

Common Stock

Warrants to Purchase Shares of Common Stock

We are offering shares of our common stock, $0.00001 par value per share, together with warrants to purchase of a share of our common stock, with an aggregate public offering price of approximately $9,000,000 in this offering. This prospectus also includes the shares of common stock issuable upon exercise of the warrants. A warrant to purchase one share of our common stock will be issued for every shares sold in this offering, rounded down to the nearest whole share. Each warrant will have an exercise price of % of the public offering price per share and related warrant.

Our shares of common stock are listed on the Nasdaq Capital Market under the symbol VKTX . On March 23, 2016, the last reported sale price of our common stock on the Nasdaq Capital Market was $1.71 per share. We intend to apply to have our warrants listed on the Nasdaq Capital Market under the symbol VKTXW . However, there can be no assurance that the warrants will be approved for listing.

We are an emerging growth company as that term is used in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and, as such, we have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings with the Securities and Exchange Commission.

Investing in our common stock and warrants involves risks. See Risk Factors beginning on page 12.

	Per Share	Per Warrant	Total
Public offering price	$	$	$
Underwriting discounts and commissions(1)			
Proceeds to us, before expenses			

(1) We refer you to Underwriting beginning on page 155 of this prospectus for additional information regarding total underwriter compensation.

We have granted the underwriters an option to purchase additional shares of our common stock and/or warrants to purchase an additional shares of common stock from us at a price of $ per share of common stock and $ per warrant, in each case less the underwriting discounts and commissions, within 45 days of the date of this prospectus to cover over-allotments, if any.

The underwriters expect to deliver the shares and warrants against payment on or about , 2016.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

Sole Book-Running Manager

Maxim Group LLC

Lead Manager

FBR

The date of this prospectus is , 2016

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You should rely only on the information contained in this prospectus. No dealer, salesperson or other person is authorized to give information that is not contained in this prospectus. This prospectus is not an offer to sell nor is it seeking an offer to buy these securities in any jurisdiction where the offer or sale is not permitted. The information contained in this prospectus is correct only as of the date of this prospectus, regardless of the time of the delivery of this prospectus or any sale of these securities.

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PROSPECTUS SUMMARY

This summary highlights selected information that is presented in greater detail elsewhere 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 and warrants 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 and warrants, you should read this entire prospectus carefully, including the sections of this prospectus entitled Risk Factors, Management s Discussion and Analysis of Financial Condition and Results of Operations and our financial statements and the related notes included elsewhere in this prospectus. Unless the context otherwise requires, the terms Viking, we, us and our in this prospectus refer to Viking Therapeutics, Inc., and this offering refers to the offering contemplated in this prospectus.

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 TRß, for lipid disorders. Our lead TRß program is VK2809, a liver-selective, orally available prodrug of a potent small molecule TRß agonist. TRß 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 the first half of 2016. Our second TRß 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.

VK5211 for Hip Fracture

VK5211 is an orally available small molecule drug candidate in development for maintenance or improvement of lean body mass, or LBM, BMD and function in patients recovering from non-elective hip fracture surgery. VK5211 is a potent, tissue-selective, non-steroidal SARM. VK5211 belongs to a family of novel SARM compounds based on its effects on tissue-specific gene expression and other functional, cell-based technologies. We expect VK5211 to produce the therapeutic benefits of testosterone with improved safety, tolerability and patient acceptance due to a tissue-selective mechanism of action and an oral route of administration. Tissue selectivity is particularly important in treating patients recovering from non-elective hip fracture surgery, as these patients experience abnormally elevated

losses of muscle tissue and BMD. This results in a loss of muscle

strength, an increased risk of additional fractures and increased mortality. We believe the selective stimulation of androgen receptors in muscle and bone provides an attractive therapeutic approach for patients recovering from hip fractures. In Phase 1 clinical trials, subjects treated with VK5211 experienced increases in LBM following 21 days of treatment. We observed positive dose-dependent trends in functional exercise and strength measures consistent with anabolic activity. In addition, no drug-related serious adverse events were reported. In an established animal model of osteoporosis, treatment with VK5211 resulted in significant increases in BMD and bone strength. In October 2015, we commenced enrollment for a Phase 2 proof-of-concept clinical trial in patients recovering from non-elective hip fracture surgery, and we expect to enroll a total of 120 patients and complete enrollment in this clinical trial in the second half of 2016. Pending positive data from this clinical trial, we plan to advance VK5211 in further clinical trials. We also plan to discuss with the U.S. Food and Drug Administration, or the FDA, potential clinical development of VK5211 in other settings, such as cancer cachexia.

VK5211 has been evaluated in three Phase 1 clinical trials. Based on these clinical and additional preclinical data, we believe VK5211 has the following important characteristics that may suggest therapeutic benefits in patients recovering from hip fracture surgery:

Improvement in lean body mass: Preliminary Phase 1 data suggest VK5211 rapidly stimulates the formation of lean body mass, an important property for the hip fracture recovery setting, where patients can lose up to 6% of lean body mass in the two months following injury.

Improvement in bone growth and density: VK5211 has demonstrated encouraging efficacy in a standard animal model of osteoporosis, demonstrating improved bone mineral content, density and strength. This may benefit patients following hip surgery, where loss of bone mineral density can exceed 12 times the background rate for patients with osteoporosis.

Encouraging tolerability: VK5211 has been well-tolerated at and above doses that we are currently administering in our Phase 2 clinical trial.

Novel mechanism of action: Based on the anabolic characteristics imparted by selective activation of the androgen receptor, we believe VK5211 may stimulate bone and muscle growth, without demonstrating adverse bone remodeling properties that are a potential concern for osteoporosis drugs such as bisphosphonates. We expect VK5211 s novel mechanism of action to provide critical bone and muscle growth promoting advantages.

Once-daily, oral convenience: Clinical data suggest that VK5211 has the potential to provide therapeutic benefits via once-daily oral dosing. This may represent an important advantage among elderly patients, relative to injectable protein or bisphosphonate therapies.

Hip fractures occur in over 300,000 persons in the U.S. annually. Most hip fractures occur in the elderly, often resulting from minimal trauma, such as a fall from standing height. Unfortunately, elderly individuals are at higher risk of substantial morbidity and mortality due to these fractures as a result of higher rates of frailty and undernourishment. Furthermore, the rate of hip fracture is known to increase with age, doubling every five to six years after age 60. Fractures of the hip can lead to devastating consequences. Disability frequently results from persistent

pain and limited physical mobility. Hip fractures are associated with substantial morbidity and mortality, with approximately 15%-20% of patients dying within one year of fracture. There are currently no approved therapies in the U.S. for restoration or preservation of LBM, BMD or physical function in patients who have suffered a hip fracture. Pharmacological interventions, including with steroids, have demonstrated limited clinical benefit or expose patients to the risk of undesirable side-effects, such as virilization in women and prostate growth in men. We believe the potential size of the worldwide hip fracture treatment market for a SARM exceeds $1.0 billion annually.

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Thyroid Beta Agonists for Lipid Disorders and Adrenoleukodystrophy

Our second program is focused on the development of orally available small molecule thyroid hormone receptor beta, or TRß, agonists. Our two lead molecules are VK2809 and VK0214. We believe selective TRß agonists have the potential to treat a variety of lipid disorders. Thyroid hormone receptors are found in several tissues throughout the body. The TRß isoform is the major receptor subtype expressed in the liver and the TRa isoform is the major subtype expressed in the heart. Selective activation of the TRß receptor in liver tissue is believed to favorably affect cholesterol and lipoprotein levels via multiple mechanisms, including increasing the expression of low-density lipoprotein, or LDL, receptors and increasing mitochondrial fatty acid oxidation. These characteristics in turn lead to reductions of low-density lipoprotein cholesterol, or LDL-C, plasma and liver triglycerides. We are developing VK2809 for the potential treatment of hypercholesterolemia and fatty liver disease. We are developing VK0214 for the potential treatment of X-ALD.

Hypercholesterolemia and NASH

We believe our selective TRß agonists are capable of achieving this unique lipid lowering profile without eliciting unwanted effects on the heart and thyroid hormone axis. In a Phase 1 multiple ascending dose clinical trial, patients with mild hypercholesterolemia who were treated with VK2809 at doses of 5 mg and above experienced significant placebo-adjusted LDL-C reductions from baseline, ranging from approximately 15% -41%. In addition, placebo-adjusted triglyceride levels were reduced by more than 30% at doses of 2.5 mg and above. There were no serious adverse events observed in this trial, and no differences in heart rate, heart rhythm or blood pressure were observed between VK2809 and placebo-treated patients. In addition, VK2809 has demonstrated significant reductions in liver fat content in multiple animal models of fatty liver disease, suggesting potential efficacy in the setting of NASH. We plan to commence a Phase 2 clinical trial of VK2809 in approximately 100 patients with hypercholesterolemia and fatty liver disease in the first half of 2016 and to complete this clinical trial in the fourth quarter of 2016 or the first quarter of 2017.

In the U.S., the number of patients with dyslipidemia was estimated to be greater than 100 million in 2013. In the U.S., 33.5% of adults, or 71.0 million people, have high LDL-C. NASH is a growing epidemic in the U.S., and is quickly becoming a leading cause of cirrhosis and liver failure. It is estimated that NASH affects 2% to 5% of Americans, or 6.0 to 15.0 million people. As a result, we believe the global market opportunity for VK2809 in hypercholesterolemia or NASH exceeds $1.0 billion.

Based on the available clinical and preclinical data, we believe VK2809 has the following important characteristics that may benefit patients with metabolic or lipid disorders:

Broader efficacy: Preliminary Phase 1 data suggest VK2809 could reduce plasma LDL-C, triglyceride and atherogenic protein levels by greater amounts than existing oral therapies. Such broad and potent lipid lowering-activity may be particularly desirable for poorly-controlled patients with hypercholesterolemia or mixed dyslipidemia, or among patients with risk factors such as chronic kidney disease.

Encouraging safety profile: VK2809 has demonstrated encouraging safety to date in over 110 subjects. No drug related serious adverse events were observed. In addition, no cardiovascular abnormalities were reported, in-line with the expected high tissue and receptor selectivity for VK2809.

Encouraging tolerability: VK2809 has been well-tolerated at and above doses that we plan to administer in future clinical trials.

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Novel mechanism of action: Based on its selective thyroid receptor targeting mechanism of action, we believe VK2809 has the potential to lower plasma and liver lipid levels in a manner complementary to existing agents such as statins. In particular, we expect the unique liver-targeting properties of VK2809 will impart a robust lipid lowering effect within hepatic tissue, with potential therapeutic applications in fatty liver diseases such as NASH.

Combinability: VK2809 s novel mechanism of action is expected to allow combinability with many existing therapies, leading to enhanced efficacy and potentially delaying transition to subsequent therapies.

Once-daily convenience: Clinical data suggest that VK2809 has the potential to lower plasma lipid levels in hypercholesterolemia patients as a once-daily oral therapy.

X-ALD

We are also developing TRß agonists for the treatment and potential prophylaxis of 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 is caused by mutations in a transporter of very long chain fatty acids, or VLCFA, known as the adenosine triphosphate binding cassette transporter D1, or ABCD1. As a result of the mutations, transporter function is impaired and patients are unable to efficiently metabolize VLCFA. TRß 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 our molecules stimulate ABCD2 expression levels. We are conducting *in vivo* studies of VK0214 and expect to report preliminary data in 2016.

X-ALD is a rare, often fatal condition believed to occur with an incidence of approximately one in 17,000 births. X-ALD is caused by mutations in the gene encoding for ABCD1, which is located on the X chromosome. Men have one X chromosome, while women have two copies. Because of this, an inherited mutation in the ABCD1 gene is more likely to manifest in males relative to females. The ABCD1 protein plays a critical role in the transport of VLCFA into a cellular organelle called the peroxisome, where VLCFA metabolism and disposal occur. Without functional ABCD1, VLCFA accumulate in cells, including neural cells, where they can lead to membrane disruption and damage to the myelin sheath, a protective and insulating membrane that surrounds nerve cells in the brain. This damage can result in decreased motor coordination and function, visual and hearing disturbances, the loss of cognitive function, dementia, seizures, adrenal dysfunction and other complications, including death. There are currently no approved therapies for X-ALD and pharmacologic interventions have demonstrated limited clinical benefit. As a result, we believe the worldwide X-ALD market exceeds $1.0 billion.

Additional Programs

We have a pipeline with three additional programs targeting metabolic diseases and anemia. Our most advanced pipeline program is VK0612, a first-in-class, orally available Phase 2b-ready drug candidate for type 2 diabetes. Preliminary clinical data suggest VK0612 has the potential to provide substantial glucose-lowering effects, with an attractive safety and convenience profile compared with existing type 2 diabetes therapies. Our preclinical programs are focused on identifying orally available erythropoietin receptor, or EPOR, agonists, for the potential treatment of anemia, and on the development of tissue-selective inhibitors of diacylglycerol acyltransferase-1, or DGAT-1, for the potential treatment of obesity and dyslipidemia.

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Our Product Pipeline

The following table highlights our product pipeline:

Key: SARM, selective androgen receptor modulator; TRß, thyroid receptor beta; NASH, nonalcoholic steatohepatitis.

Our Strategy

We intend to become a leading biopharmaceutical company focused on the development of novel, first-in-class or best-in-class therapies for metabolic and endocrine disorders. The key elements of our strategy include:

Advance the development of VK5211 for hip fracture and other muscle wasting disorders. We have commenced enrollment for a Phase 2 proof-of-concept clinical trial in patients recovering from non-elective hip fracture surgery, and we expect to enroll a total of 120 patients and complete enrollment in this clinical trial in the second half of 2016 and complete the trial in the first quarter of 2017. Pending positive data from this clinical trial, we plan to advance VK5211 in further clinical trials.

Advance the development of VK2809 for hypercholesterolemia and fatty liver disease. We plan to commence a Phase 2 clinical trial in approximately 100 patients with hypercholesterolemia and fatty liver disease in the first half of 2016. We expect to complete this clinical trial in the fourth quarter of 2016 or the first quarter of 2017.

Advance the development of VK0214 for X-ALD. We are evaluating VK0214 in an animal model of X-ALD and expect to complete the study in 2016.

Advance the development of VK0612 for type 2 diabetes. Pending receipt of sufficient funding, we intend to commence clinical development of VK0612 to evaluate once-daily doses of VK0612 in patients with poorly-controlled type 2 diabetes.

Advance the development of our preclinical programs. We currently have two additional preclinical programs in development. Pending receipt of sufficient funding, we also plan to further advance our EPOR agonist and DGAT-1 inhibitor programs.

Evaluate strategic partnership and collaboration opportunities. We plan to selectively evaluate partnership and collaboration opportunities throughout the duration of our development programs. In addition, we may opportunistically pursue in-licensing opportunities.

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Risks Related to Our Business

Our business is subject to numerous risks and uncertainties, including those highlighted in the section of this prospectus entitled Risk Factors, which you should read carefully before making a decision to invest in our common stock and warrants. Some of these risks include:

- We are a clinical-stage company, have a very limited operating history and are expected to incur significant operating losses during the early stage of our corporate development;
- We are substantially dependent on technologies we license from Ligand, and if we lose the right to license such technologies or the Master License Agreement with Ligand is terminated for any reason, our ability to develop existing and new drug candidates would be harmed;
- We are dependent on the success of our current drug candidates and we cannot be certain that any of them will receive regulatory approval or be commercialized;
- If development of our drug candidates does not produce favorable results, we and our collaborators, if any, may be unable to commercialize these products;
- Our efforts to discover drug candidates beyond our current drug candidates may not succeed, and any drug candidates we recommend for clinical development may not actually begin clinical trials;
- We may need to raise additional capital after completion of this offering, which may be unavailable to us and, even if we raise capital, it may cause dilution or place significant restrictions on our ability to operate;
- We rely completely on third parties to manufacture our preclinical and clinical drug supplies, and our business, financial condition and results of operations could be harmed if those third parties fail to provide us with sufficient quantities of drug product, or fail to do so at acceptable quality levels or prices;
- The commercial success of our drug candidates depends upon their market acceptance among physicians, patients, healthcare payors and the medical community;
- We may not be successful in obtaining or maintaining necessary rights to our drug candidates through acquisitions and in-licenses;
- If we fail to comply with our obligations in the agreements under which we license intellectual property and other rights from third parties or otherwise experience disruptions to our business relationships with

our licensors, we could lose license rights that are important to our business; and

If we fail to retain current members of our senior management and scientific personnel, or to attract and keep additional key personnel, we may be unable to successfully develop or commercialize our drug candidates.

Agreements with Ligand

On May 21, 2014, we entered into a Master License Agreement with Ligand, as amended, or the Master License Agreement, pursuant to which, among other things, Ligand granted us an exclusive worldwide license to VK5211, VK2809, VK0214 and VK0612, as well as two preclinical programs. Under the terms of the Master

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License Agreement, we issued to Ligand, at the closing of our initial public offering, 3,655,964 shares of our common stock having an estimated aggregate value of $29.2 million, and agreed to pay to Ligand certain development and commercial milestone payments of up to $1.54 billion, as well as single-digit royalties on future worldwide net product sales.

In connection with entering into the Master License Agreement, we also entered into a Loan and Security Agreement with Ligand, dated May 21, 2014, as amended, or the Loan and Security Agreement, pursuant to which, among other things, Ligand agreed to provide us with loans in the aggregate amount of up to $2.5 million. The loans are and will be evidenced by a Secured Convertible Promissory Note, or the Ligand Note. Upon the consummation of this offering, we will be obligated to repay $1,500,000 to Ligand under the Ligand Note, with at least $300,000 of such payment to be paid in cash and the balance to be paid in shares of our common stock. Assuming that we will repay $1,200,000 in shares of our common stock, based on an assumed public offering price per share of common stock and related warrants of $1.71, which is the last reported sale price of our common stock on the Nasdaq Capital Market on March 23, 2016, we will issue an aggregate of 701,754 shares of our common stock to Ligand upon the consummation of this offering. 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 of our securities, including shares issuable upon conversion of the Ligand Note.

Further details regarding the Master License Agreement, the Loan and Security Agreement, the Note and certain other agreements we entered into with Ligand in connection with the Master License Agreement are discussed in the section of this prospectus entitled Business Agreements with Ligand .

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, and you should not consider any information on, or accessible through, our website as part of this prospectus. We have included our website address in this prospectus 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 $1.0 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

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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 and may elect to take advantage of other reduced reporting requirements in future filings with the Securities and Exchange Commission, or 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 JOBS Act also provides that an emerging growth company can utilize the extended transition period provided in Section 7(a)(2)(B) of the Securities Act of 1933, as amended, or the Securities Act, for complying with new or revised accounting standards. However, we are choosing to opt out of such extended transition period and, as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for companies that are not emerging growth companies. Section 107 of the JOBS Act provides that our decision to opt out of the extended transition period for complying with new or revised accounting standards is irrevocable.

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THE OFFERING

Securities being offered by us	Approximately $9,000,000 of shares of common stock and warrants to purchase shares of common stock
Description of warrants	A warrant to purchase one share of our common stock will be issued for every shares sold in this offering, rounded down to the nearest whole share. Each warrant will be immediately exercisable and have an exercise price of % of the public offering price per share of common stock and related warrants, or $ per share based on an assumed public offering price per share of common stock and related warrants of $1.71, the last reported sale price of our common stock on the Nasdaq Capital Market on March 23, 2016.
Common stock to be outstanding after this offering	15,648,652 shares (shares if the warrants offered in this offering are exercised in full)
Overallotment option	Up to approximately $1,350,000 of additional shares of common stock and/or warrants at a price of $ per share of common stock and $ per warrant, in each case less the underwriting discounts and commissions
Use of proceeds	We estimate that the net proceeds from this offering will be approximately $8.0 million, or approximately $9.2 million if the underwriters exercise their option to purchase up to approximately $1,350,000 of additional shares of our common stock and/or warrants in this offering in full, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We intend to use the net proceeds from this offering to fund clinical trials for VK5211, VK2809 and VK0214 and the research and development of our other clinical and preclinical drug candidates and for other working capital and general corporate purposes. In addition, we will use $0.3 million of the net proceeds from this offering toward the repayment of a portion of the balance outstanding under the Ligand Note. See the section of this prospectus entitled Use of Proceeds on page 54 for a

	more complete description of the intended use of the net proceeds from this offering.
Risk Factors	You should read the section of this prospectus entitled Risk Factors beginning on page 12 for a discussion of factors to consider carefully before

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	deciding to invest in shares of our common stock and warrants.
Dividend policy	Currently, we do not anticipate paying cash dividends.
Nasdaq Capital Market symbol for common stock	VKTX
Proposed Nasdaq Capital Market symbol for warrants	We intend to apply to have our warrants listed on the Nasdaq Capital Market under the symbol VKTXW . However, there can be no assurance that the warrants will be approved for listing.

The number of shares of common stock that will be outstanding after this offering is based on 9,683,741 shares of common stock outstanding as of December 31, 2015 and (1) assumes (a) the issuance and sale of approximately $9.0 million of shares of common stock and related warrants at an assumed public offering price per share of common stock and related warrants of $1.71, which is the last reported sale price of our common stock on the Nasdaq Capital Market on March 23, 2016, and (b) the repayment by us of $1,500,000 to Ligand under the Ligand Note, consisting of (i) $300,000 in cash, and (ii) $1,200,000 in shares of our common stock, which, based on an assumed public offering price per share of common stock and related warrants of $1.71, the last reported sale price of our common stock on the Nasdaq Capital Market on March 23, 2016, will result in our issuance of an aggregate of 701,754 shares of common stock to Ligand, and (2) excludes the following:

- 365,394 shares of common stock issuable upon the exercise of options outstanding as of December 31, 2015 with a weighted-average exercise price of $8.48 per share;
- 75,750 shares of common stock reserved for future issuance in connection with service-based restricted stock units outstanding as of December 31, 2015 with a weighted-average grant date fair value of $8.27 per share;
- 773,629 shares of common stock reserved as of December 31, 2015 for future issuance under our 2014 Equity Incentive Plan, which contains provisions that may increase its share reserve each year, as more fully described in the section of this prospectus entitled Executive Compensation 2014 Equity Incentive Plan ;
- 452,620 shares of common stock reserved as of December 31, 2015 for future issuance under our 2014 Employee Stock Purchase Plan, which contains provisions that may increase its share reserve each year, as more fully described in the section of this prospectus entitled Executive Compensation 2014 Employee Stock Purchase Plan ; and

82,500 shares of common stock issuable upon the exercise of an outstanding warrant as of December 31, 2015, with an exercise price of $10.00 per share.

Unless indicated otherwise, all information in this prospectus assumes:

no exercise of options or the warrant described above after December 31, 2015;

no exercise of the warrants issued in this offering;

that the secured convertible promissory note previously issued by us to Ligand is not converted into any shares of our common stock; and

no exercise of the underwriters option to purchase approximately $1,350,000 of additional shares of our common stock and/or warrants in this offering.

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Summary Financial Data

The following table sets forth our summary financial data as of the dates and for the periods indicated. We have derived the summary statement of operations data for the years ended December 31, 2014 and 2015 and our historical balance sheet data as of December 31, 2015 from our audited financial statements included elsewhere in this prospectus. The historical results presented below are not necessarily indicative of the results to be expected for any future period. The following summaries of our financial data for the periods presented should be read in conjunction with the sections of this prospectus entitled Risk Factors, Selected Financial Data, Capitalization, Management s Discussion and Analysis of Financial Condition and Results of Operations and our financial statements and the related notes included elsewhere in this prospectus.

	Year Ended December 31,	
	2014	2015
Revenues	$	$
Operating expenses:		
Research and development	22,223,073	6,966,842
General and administrative	1,244,910	5,029,636
Total operating expenses	23,467,983	11,996,478
Loss from operations	(23,467,983)	(11,996,478)
Other income (expense):		
Change in fair value of accrued license fees	1,821,713	(9,381,848)
Change in fair value of debt conversion feature liability	390,763	(1,043,478)
Amortization of debt discount	(557,961)	(893,502)
Interest expense, net	(70,715)	(88,682)
Total other income (expense)	1,583,800	(11,407,510)
Net loss	(21,884,183)	(23,403,988)
Other comprehensive loss, net of tax:		
Unrealized gain (loss) on securities		(7,370)
Comprehensive loss	$ (21,884,183)	$ (23,411,358)
Basic and diluted net loss per share	$ (5.23)	$ (3.68)
Weighted-average shares used to compute basic and diluted net loss per share	4,187,415	6,355,869

	As of December 31, 2015	
	Actual	As Adjusted(1)
		(Unaudited)
Balance Sheet Data		
Cash, cash equivalents and investments	14,104,049	21,765,665

Working capital	13,224,836	21,043,907
Total assets	15,439,103	22,943,264
Total stockholders equity	8,724,998	17,886,614

(1) Gives effect to (a) the sale and issuance by us of $9,000,000 of shares of common stock and related warrants at an assumed public offering price per share of common stock and related warrants of $1.71, the last reported sale price of our common stock on the Nasdaq Capital Market on March 23, 2016, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, and (b) the repayment by us of $1,500,000 to Ligand under the Ligand Note, consisting of (i) $300,000 in cash, and (ii) $1,200,000 in shares of our common stock, which, based on an assumed public offering price per share of common stock and related warrants of $1.71, the last reported sale price of our common stock on the Nasdaq Capital Market on March 23, 2016, will result in our issuance of an aggregate of 701,754 shares of common stock to Ligand upon the consummation of this offering.

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RISK FACTORS

Investing in our common stock and warrants involves a high degree of risk. You should consider carefully the risks and uncertainties described below, together with all of the other information in this prospectus, before making a decision to invest in our common stock and warrants. The risks and uncertainties described below may not be the only ones we face. If any of the risks actually occur, our business, financial condition and results of operations could be materially and adversely affected. In that event, the trading price of our common stock and warrants could decline, and you could lose part or all of your investment.

Risks Relating to Our Business

We are a clinical-stage company, have a very limited operating history and are expected to incur significant operating losses during the early stage of our corporate development.

We are a clinical-stage company. We were incorporated in, and have only been conducting operations since, September 2012. Our operations to date have been limited to raising capital, building infrastructure, obtaining the worldwide rights to certain technology from Ligand Pharmaceuticals Incorporated, or Ligand, and planning, preparing and conducting preclinical studies and clinical trials of our drug candidates, including VK5211 and VK0612, which are currently in Phase 2 clinical development, VK2809, which has completed Phase 1 clinical development and VK0214 and the EPOR and DGAT-1 programs, which are each currently in preclinical development. As a result, we have no meaningful historical operations upon which to evaluate our business and prospects and have not yet demonstrated an ability to obtain marketing approval for any of our drug candidates or successfully overcome the risks and uncertainties frequently encountered by companies in the biopharmaceutical industry. We also have not generated any revenue to date, and we continue to incur significant research and development and other expenses. Our net loss for the years ended December 31, 2014 and 2015 was $21,884,183 and $23,403,988, respectively. As of December 31, 2015, we had an accumulated deficit of $45,545,445. For the foreseeable future, we expect to continue to incur losses, which will increase significantly from historical levels as we expand our drug development activities, seek regulatory approvals for our drug candidates and begin to commercialize them if they are approved by the U.S. Food and Drug Administration, or the FDA, the European Medicines Agency, or EMA, or comparable foreign authorities. Even if we succeed in developing and commercializing one or more drug candidates, we may never become profitable. If we fail to achieve or maintain profitability, it would adversely affect the value of our common stock.

We are substantially dependent on technologies we licensed from Ligand, and if we lose the license to such technologies or the Master License Agreement is terminated for any reason, our ability to develop existing and new drug candidates would be harmed, and our business, financial condition and results of operations would be materially and adversely affected.

Our business is substantially dependent upon technology licensed from Ligand. Pursuant to the Master License Agreement, we have been granted exclusive worldwide rights to VK5211, VK2809, VK0214, VK0612 and preclinical programs for anemia and lipid disorders. SARMS, such as our lead program VK5211, are key compounds used by us in the development and commercialization of our drug candidates. All of the intellectual property related to our drug candidates is currently owned by Ligand, and we have the rights to use such intellectual property pursuant to the Master License Agreement. Therefore, our ability to develop and commercialize our drug candidates depends entirely on the effectiveness and continuation of the Master License Agreement. If we lose the right to license any of these key compounds, our ability to develop existing and new drug candidates would be harmed.

Ligand has the right to terminate the Master License Agreement under certain circumstances, including, but not limited to: (1) in the event of our insolvency or bankruptcy, (2) if we do not pay an undisputed amount owing under the Master License Agreement when due and fail to cure such default within a specified period of time, or (3) if we default on certain of our material obligations and fail to cure the default within a specified period of time.

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We are dependent on the success of one or more of our current drug candidates and we cannot be certain that any of them will receive regulatory approval or be commercialized.

We have spent significant time, money and effort on the licensing and development of our core metabolic and endocrine disease assets, VK5211, VK2809, VK0214, VK0612 and our earlier-stage assets, the EPOR and DGAT-1 programs. To date, no pivotal clinical trials designed to provide clinically and statistically significant proof of efficacy, or to provide sufficient evidence of safety to justify approval, have been completed with any of our drug candidates. All of our drug candidates will require additional development, including clinical trials as well as further preclinical studies to evaluate their toxicology, carcinogenicity and pharmacokinetics and optimize their formulation, and reg