Kindred Biosciences, Inc.
Form 424B1
December 12, 2013
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Filed Pursuant to Rule 424(b)(1)
Registration No. 333-192242

PROSPECTUS

7,500,000 Shares

KINDRED BIOSCIENCES, INC.

Common Stock

$7.00 per share

This is the initial public offering of Kindred Biosciences, Inc. We are offering 7,500,000 shares of our common stock. Prior to this offering, there has been no public market for our common stock. The initial public offering price is $7.00 per share.

Our common stock has been approved for listing on the NASDAQ Capital Market under the symbol KIN, subject to official notice of issuance.

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 and future filings.

Investing in our common stock involves a high degree of risk. See Risk Factors beginning on page 12.

	Per Share	Total
Initial public offering price	$ 7.00	$ 52,500,000

Underwriting discounts and commissions[(1)]	$ 0.49	$ 3,675,000
Proceeds, before expenses to us	$ 6.51	$ 48,825,000

(1) We refer you to Underwriting beginning on page 116 of this prospectus for additional information regarding underwriter compensation.

We have granted the underwriters a 30-day option to purchase a total of up to 1,125,000 additional shares of common stock.

The underwriters expect to deliver shares of common stock to purchasers on December 17, 2013.

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.

BMO Capital Markets **Guggenheim Securities**

Roth Capital Partners

The date of this prospectus is December 11, 2013.

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Until January 5, 2014 (25 days after the commencement of this offering), all dealers that buy, sell or trade shares of our common stock, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to the obligation of dealers to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

We have not, and the underwriters have not, authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectus prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the shares offered hereby, but only under the circumstances and in the jurisdictions where it is lawful to do so. The information contained in this prospectus or in any applicable free writing prospectus is current only as of its date, regardless of its time of delivery or any sale of shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

For investors outside the United States: We have not, and the underwriters have not, done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves, and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus outside the United States.

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Kindred Biosciences, Kindred Bio, CereKin, AtoKin, SentiKin and Best Medicines for Our Best Friends are six of our trademarks that are used in this prospectus. This prospectus also includes trademarks, tradenames and service marks that are the property of other organizations. Solely for convenience, trademarks and tradenames referred to in this prospectus appear without the ® and symbols, but those references are not intended to indicate that we will not assert, to the fullest extent under applicable law, our rights or that the applicable owner will not assert its rights, to these trademarks and tradenames.

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PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our common stock. You should read this entire prospectus carefully, especially the section in this prospectus entitled Risk Factors beginning on page 12 and our financial statements and the related notes thereto appearing at the end of this prospectus, before making an investment decision.

As used in this prospectus, references to we, us, our, our company and Kindred refer to Kindred Biosciences, Inc. References to product candidates, drugs, and compounds refer to both small molecules and biologics.

Overview

Our Company

We are a development stage biopharmaceutical company focused on saving and improving the lives of pets. Our mission is to bring to our pets the same kinds of safe and effective medicines that our human family members enjoy. Our core strategy is to identify compounds and targets that have already demonstrated safety and efficacy in humans and to develop therapeutics based on these validated compounds and targets for pets, primarily dogs, cats and horses. We believe this approach will lead to shorter development times and higher approval rates than pursuing new, non-validated compounds and targets. We have three product candidates that are in, or will shortly enter, pivotal field efficacy trials, or pivotal trials, and expect approval of one or more of these product candidates in 2015. In addition, we have seven other product candidates, including several biologics, in various stages of development. We believe there are significant unmet medical needs for pets, and that the pet therapeutics segment of the animal health industry is likely to grow substantially as new therapeutics are identified, developed and marketed specifically for pets.

Our lead product candidates are CereKin for the treatment of osteoarthritis pain and inflammation in dogs, AtoKin for the treatment of atopic dermatitis in dogs, and SentiKin for the treatment of post-operative pain in dogs. All of these product candidates, if approved, would be first-in-class drugs in the pet therapeutic market.

In August 2013, we initiated the pivotal trial for CereKin, and we expect to initiate the pivotal trials for AtoKin and SentiKin by early 2014. We have received from the U.S. Food and Drug Administration, or FDA, Protocol Concurrences for CereKin and AtoKin, and expect to receive a similar Protocol Concurrence for SentiKin. A Protocol Concurrence in animal drug development is analogous to a Special Protocol Assessment in human drug development, and means that the FDA fundamentally agrees with the design, execution and analysis proposed in a protocol, and will not later alter its perspective on these issues unless public or animal health concerns appear that were not recognized at the time of protocol assessment. Assuming positive results from these trials, we intend to submit New Animal Drug Applications, or NADAs, for marketing approval of CereKin, AtoKin and SentiKin in the United States starting in 2014, and anticipate potential marketing approvals and product launches in the second half of 2015. If approved in the United States, we may make similar regulatory filings for these products with the European Medicines Agency, or EMA, for marketing approval in the European Union, or EU.

We are currently developing product candidates for ten additional indications, with the potential to launch two or more products annually for several years starting in the second half of 2015. We plan to commercialize our products in the United States through a direct sales force complemented by selected distributor relationships, and in the EU through distributors and other third parties. Because we seek to identify product candidates that are not protected by third-party patents, we typically do not need to obtain licenses or make any upfront, milestone or royalty payments in

connection with our product candidates.

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Relative to human drug development, the development of pet therapeutics is generally faster, more predictable and less expensive, since it requires fewer clinical studies involving fewer subjects and can be conducted directly in the target species. For example, studies that are typically required for approval of human drugs such as QTc studies, which detect cardiac irregularities, elderly patient studies, renal impairment studies, hepatic impairment studies or costly, long-term genotoxicity studies are not required for pet therapeutics. Based on our progress since inception in September 2012, we believe we can develop pet therapeutics from the Investigational New Animal Drug, or INAD, filing with the FDA to marketing approval in three to five years at a cost of approximately $3 million to $5 million per product candidate. The lower cost associated with the development of pet therapeutics permits us to pursue multiple product candidates simultaneously and avoid the binary outcome associated with some human biotechnology companies development of a single lead therapy. The active ingredients in many of our small molecule product candidates also have established chemistry, manufacturing and controls, or CMC, which can be important gating factors in the regulatory approval process. As a result, we usually do not need to invest further in active pharmaceutical ingredient, or API, process development to comply with good manufacturing practices, or GMP, standards for our small molecule product candidates.

Our management team s extensive experience in both human and animal drug development has enabled us to quickly establish our product pipeline, obtain Protocol Concurrences from the FDA for CereKin and AtoKin and commence the pivotal trial of CereKin. Members of our management team also have extensive experience in biologics, including in the development of antibodies such as Lucentis, Tysabri, Xolair, and Rituxan.

Richard Chin, M.D., our co-founder and Chief Executive Officer, was previously Head of Clinical Research for the Biotherapeutics Unit at Genentech, Inc., where he oversaw Phase I through Phase IV clinical programs for all products, except oncology. Kevin Schultz, D.V.M., Ph.D., our Chief Scientific Officer, was one of the founding team members of Merial Limited, a leading veterinary medicine company, and served as Merial s Chief Scientific Officer, where he oversaw development of numerous animal therapeutics and vaccines, as well as Frontline Plus, one of the best-selling pet therapeutic products in history. Stephen Sundlof, D.V.M., Ph.D., our Senior Vice President of Regulatory Affairs, was the Director of the FDA s Center for Veterinary Medicine, or CVM, from 1994 to 2008, where he oversaw all veterinary products regulated by the FDA. Denise Bevers, our co-founder and Chief Operating Officer, has over 20 years of experience in clinical operations and medical affairs.

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Product Pipeline

Our current product pipeline consists of small molecules and biologics in various stages of development for a range of indications in dogs, cats and horses. Small molecules are generally chemical compounds administered orally and biologics are generally proteins and vaccines administered by injection. The USDA s Center for Veterinary Biologics and the FDA s Center for Veterinary Medicine have a memorandum of understanding under which animal products are to be regulated by the USDA as biologics, if they are intended for use to diagnose, cure, mitigate, treat, or prevent disease in animals and they work primarily through an immune process, or by the FDA as drugs, if they are intended for use in the diagnosis, cure, mitigation, treatment, or prevention of animal disease if the primary mechanism of action is not immunological or is undefined. Although we believe that most of our current animal biologics will be regulated by the USDA based on their mechanisms of action, it is possible that the agencies may determine that one or more of our animal biologics will be regulated by the FDA instead of the USDA.

The following table illustrates ten product candidates that we are developing for 13 indications. References in the table to PLA mean Application for United States Veterinary Biological Product License with the USDA, also called a Product License Agreement.

In addition to our product candidates currently in development, we have identified over 30 potential small molecule and biologic therapeutics that are in the pre-INAD stage. We utilize a rigorous screening and review

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process to identify compounds and targets that have demonstrated safety and efficacy in humans and would address unmet medical needs in veterinary medicine if formulated for use in pets.

Pet Therapeutics Market

U.S. consumers spent an estimated $53 billion on their pets in 2012, according to the American Pet Products Association, or APPA, an increase of 38% from 2006. The veterinary care segment has been among the fastest growing segments of the overall U.S. pet market. This segment accounted for an estimated $13.7 billion in 2012, an increase of 48% from 2006. In 2011, approximately $4.3 billion was spent on parasiticides and vaccines and approximately $2.4 billion was spent on pet therapeutics, our target segment. We believe several factors, including the increased longevity of pets and willingness of pet owners to treat their pets with medications, will contribute to continued growth in the spending on pet therapeutics.

Despite the growing market, there are relatively few therapeutic treatment options approved for use in pets as compared to humans. As a result, veterinarians often resort to prescribing products approved for use in humans but not approved, formulated or even formally studied in pets. Veterinarians must then rely upon trial and error or untested rules of thumb to assess the proper dosage needed for the human product to be effective in the particular species without undue risk of side effects. The veterinarian also must find a way to administer the human product in animals and determine the amount actually dosed, which are important considerations in treating pets with human drugs. We believe that therapeutics specifically developed for pets can extend and improve the quality of the lives of pets, help veterinarians achieve improved medical outcomes and make the process of administering therapeutics to pets much more convenient.

Although there are many similarities between the businesses of developing and commercializing therapeutics for pets and for humans, there also are a number of important differences, including:

Faster, less expensive and more predictable development. The development of pet therapeutics requires fewer clinical studies in fewer subject animals than human therapeutics and, unlike human drug development, can be conducted directly in the target animals. We believe our strategy of selecting compounds and targets with demonstrated efficacy and safety in humans enhances the predictability of results and probability of success of our pivotal trials relative to compounds and targets that have not been previously validated.

Role and incentives for veterinary practices. In the United States, veterinarians generally serve the dual role of doctor and pharmacist, and pet owners typically purchase medicines directly from their veterinarians. Therapeutics specifically developed for pets enable veterinarians to provide potentially superior treatment options, while also increasing revenue from the sale of these therapeutics.

Primarily private-pay nature of veterinary market. Pet owners in the United States generally pay for pet therapeutics out-of-pocket, and less than 5% of pet owners currently purchase pet insurance. As a result, pet owners must make decisions regarding available treatment options primarily on the advice of their veterinarians, rather than on the treatment options eligibility for reimbursement by insurance companies or government payers. We believe this results in less pricing pressure compared to human healthcare, although the limited adoption of insurance may also reduce pet owners ability to pay for therapeutics recommended

by their veterinarians.

Less generic competition and strong brand loyalty. There is less generic competition in the pet therapeutics industry than in the human therapeutics industry. Approximately 14% of veterinary drugs face generic competition, and the percentage of generic prescriptions in the veterinary space is only 7% as compared to approximately 81% for human drugs. We believe that stronger brand loyalty and lack of mandatory generic drug substitution, as is the case for human pharmaceuticals, partially explains the low penetration of generics in veterinary medicine.

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Lead Product Candidates

CereKin

CereKin is an oral, chewable, beef-flavored formulation of diacerein, an interleukin-1 beta inhibitor that we are developing for osteoarthritis pain and inflammation in dogs. Human drugs containing the active ingredient in CereKin are marketed extensively outside the United States for the treatment of osteoarthritis and are generally considered to be safe, except for certain gastrointestinal side effects and rare indiosyncratic skin and liver side effects in humans, for which the drug is undergoing review in the EU. These side effects appear to be less frequent or absent in dogs. Several published studies have shown that the active ingredient is effective in treating canine arthritis. We initiated the pivotal trial for CereKin in August 2013 under a Protocol Concurrence with the FDA. We expect to have data from the pivotal trial in the second quarter of 2014 and, if positive, intend to submit a NADA in mid-2014, with potential marketing approval in the second half of 2015.

Canine osteoarthritis is a chronic, progressive, degenerative joint disease, diagnosed in an estimated 20% of dogs over the age of one. Non-steroidal anti-inflammatory drugs, or NSAIDs, are the only approved treatment for canine osteoarthritis (other than steroids and a vitamin-mineral based drug), but some dogs have a sensitivity to NSAIDs that results in renal, hepatic or gastrointestinal, or GI, toxicity and, in extreme cases, death. As a result, dogs that are prescribed NSAIDs must often be monitored with baseline and periodic blood tests, and up to approximately 50% of dogs remain untreated or cannot be treated in chronic cases. If approved, we believe CereKin will be effective in the treatment of canine osteoarthritis pain and inflammation, without the need for blood monitoring tests. In humans, the active ingredient in CereKin has demonstrated added effectiveness when combined with NSAIDs versus NSAIDs alone. Based on published data, we expect CereKin may have disease-modifying effects in dogs and also may protect against NSAID-induced GI tract problems.

AtoKin

AtoKin is a high-dose, oral, chewable, beef-flavored formulation of fexofenadine that we are developing for atopic dermatitis in dogs. The active ingredient in AtoKin is a potent and selective antihistamine that is approved for allergic diseases in humans. Published data indicate that the active ingredient is as effective as steroids in treating canine atopic dermatitis. We have been granted a Protocol Concurrence by the FDA for the pivotal trial of AtoKin, which we expect to initiate by early 2014. We expect to receive data from the trial in late 2014 and, if positive, we intend to submit a NADA in late 2014, with potential marketing approval in late 2015.

Atopic dermatitis is a common, potentially chronic, allergic skin disease that affects up to 10% of all dogs. Dogs with atopic dermatitis often suffer from pruritus, or severe itching, hair loss, tearing of the skin from deep scratching, frequent licking of their paws and excessive tear production. While currently approved drugs such as corticosteroids and oral cyclosporine are effective, they all suppress the dog s immune system, potentially leading to serious infections. Corticosteroids also have other side effects, including osteoporosis, endocrine problems, cataracts and frequent urination. We believe that, if approved, AtoKin could be effective as both a first-line therapy and as a long-term maintenance therapy for chronic atopic dermatitis in dogs, with a safety profile superior to currently approved therapeutics.

SentiKin

SentiKin is an oral, non-NSAID, non-opioid analgesic, formulation of flupirtine that we are developing for management of post-operative pain in dogs, cats and horses. The active ingredient in SentiKin is approved for the treatment of pain in humans in multiple countries outside the United States and has demonstrated potency comparable

to tramadol. Published studies suggest that the active ingredient is effective in treating canine pain. We are currently negotiating a Protocol Concurrence with the FDA for the pivotal trial for SentiKin for post-

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operative pain in dogs, and we intend to initiate the trial by early 2014. We expect to receive data from the trial in late 2014 and, if positive, we intend to submit a NADA in late 2014, with potential marketing approval in late 2015.

There is no standard of care for the use of pain medications following dog surgeries, and the only systemic drugs approved for treatment of post-operative pain in dogs are NSAIDs, fentanyl and pentazocine. NSAIDs are generally less effective than opioids in controlling pain and have other well-documented side effects described above in our discussion regarding CereKin. Fentanyl is a controlled narcotic drug, and pets are often kept in the hospital while receiving fentanyl. Pentazocine is a controlled narcotic drug, not widely used in dogs. We believe that, if approved, SentiKin may provide post-operative pain relief that is superior to NSAIDs and comparable to some opioids, without the potential for opioid addiction or the risk of possible diversion and abuse by pet owners.

Business Strategy

Our mission is to bring to pets the same kinds of safe and effective medicines that our human family members enjoy. Key elements of our business strategy are as follows:

- advance CereKin, AtoKin, SentiKin and our other product candidates through development and continue to focus on execution of cost-effective research and development;
- leverage our antibody and biologics experience;
- leverage our current product pipeline in additional animal species;
- expand our pipeline with additional product candidates; and
- commercialize our products with our own direct sales force in the United States and with distributors in other regions.

Risks Related to Our Business

Our ability to successfully implement our business strategy is subject to numerous risks, as more fully described in the section entitled Risk Factors immediately following this prospectus summary. These risks include, among others:

- we have a limited operating history, are not profitable and may never become profitable;
- we will have no material product revenue for the foreseeable future, and we may need to raise additional capital to achieve our goals;

we are substantially dependent on the success of our current lead product candidates, and cannot be certain that any of them will be approved for marketing or successfully commercialized;

most of our current and future small molecule product candidates are or will be based on generic human drugs, and other companies may develop substantially similar products that may compete with our products;

the results of earlier studies may not be predictive of the results of our pivotal trials, and we may be unable to obtain regulatory approval for our existing or future product candidates under applicable regulatory requirements;

development of pet therapeutics is inherently expensive, time-consuming and uncertain, and any delay or discontinuance of our current or future pivotal trials would significantly harm our business and prospects;

even if we obtain regulatory approval for our current or future product candidates, they may never achieve market acceptance or commercial success;

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- we do not own any issued patents covering our product candidates;
- we are dependent upon third-party manufacturers for supplies of our current product candidates and intend to rely on third-party manufacturers for commercial quantities of any of our product candidates that may be approved; and
- if we are not successful in identifying, developing and commercializing additional product candidates, our ability to expand our business and achieve our strategic objectives would be impaired.

Corporate Information

We were incorporated on September 25, 2012 by our co-founder, Richard Chin, M.D., our President and Chief Executive Officer. Our principal executive offices are located at 1499 Bayshore Highway, Suite 226, Burlingame, California 94010, and our telephone number is (650) 701-7901. We also maintain a mailing address at 58 West Portal Avenue, #105, San Francisco, California 94127. Our website address is *www.kindredbio.com.* The information contained in, or accessible through, our website should not be considered a part of this prospectus.

Implications of Being an Emerging Growth Company

As a company with less than $1.0 billion in revenue during our last fiscal year, we qualify as an emerging growth company as defined in the Jumpstart Our Business Startups Act, or JOBS Act, enacted in April 2012. An emerging growth company may take advantage of reduced reporting requirements that are otherwise applicable to public companies. These reduced reporting requirements include:

- not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act of 2002, as amended, or the Sarbanes-Oxley Act;
- reduced disclosure obligations regarding executive compensation in this prospectus and in our future periodic reports, proxy statements and registration statements; and
- not being required to hold a nonbinding advisory vote on executive compensation or to seek stockholder approval of any golden parachute payments not previously approved.

We may take advantage of these reduced reporting obligations until the last day of our fiscal year following the fifth anniversary of the date of the first sale of our common equity securities pursuant to an effective registration statement under the Securities Act of 1933, as amended, or the Securities Act, which fifth anniversary will occur in 2018. However, if certain events occur prior to the end of such five-year period, including if we become a large accelerated filer, our annual gross revenue exceeds $1.0 billion or we issue more than $1.0 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company.

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 might receive from other public reporting companies in which you hold

equity interests.

The JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. We have irrevocably elected not to avail ourselves of this exemption and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

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THE OFFERING

Common stock offered by us	7,500,000 shares (or 8,625,000 shares if the underwriters exercise their option to purchase additional shares in full)
Common stock to be outstanding after this offering	15,047,881 shares (or 16,172,881 shares if the underwriters exercise their option to purchase additional shares in full)
Option to purchase additional shares	We have granted the underwriters a 30-day option to purchase up to 1,125,000 additional shares of our common stock to cover over-allotments, if any
Use of proceeds	We intend to use the net proceeds of this offering for the research and development of our product candidates, to establish our commercial infrastructure in the United States and for general corporate and working capital purposes. See Use of Proceeds on page 38 for a more detailed description of the intended use of proceeds from this offering
Offering price	$7.00 per share
Risk Factors	See Risk Factors beginning on page 12 and other information included in this prospectus for a discussion of factors that you should consider carefully before deciding to invest in our common stock
Directed share program	At our request, the underwriters have reserved up to 5% of the shares to be offered in this offering for sale at the initial public offering price to certain of our directors, officers, existing stockholders, employees, business associates and related persons. Any directed shares not purchased will be offered by the underwriters to the general public on the same basis as all other shares offered
NASDAQ Capital Market symbol	KIN

The number of shares of our common stock to be outstanding after this offering is based on 3,012,675 shares of our common stock outstanding as of September 30, 2013 and 4,535,206 shares of our common stock issued upon the automatic conversion of our outstanding shares of convertible preferred stock as of September 30, 2013, which occurred immediately upon the effectiveness of the registration statement of which this prospectus is a part. The number of shares of our common stock to be outstanding after this offering excludes:

1,165,423 shares of common stock issuable upon exercise of stock options outstanding as of September 30, 2013 at a weighted-average exercise price of $0.55 per share; and

2,827,102 shares of common stock reserved as of September 30, 2013 for future issuance under our 2012 equity incentive plan.

Unless otherwise indicated, the information in this prospectus assumes the following:

the filing of our amended and restated certificate of incorporation and the adoption of our amended and restated bylaws, which will be in effect as of the closing of this offering;

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the automatic conversion of all outstanding shares of our convertible preferred stock into shares of our common stock on a one-for-one basis immediately upon the effectiveness of the registration statement of which this prospectus is a part;

no exercise of the outstanding options, and no issuance or award of shares of our common stock reserved for issuance, under our 2012 equity incentive plan as described above; and

no exercise by the underwriters of their option to purchase additional shares of our common stock.

Our board of directors has indicated its intention to grant options to purchase an aggregate of 45,000 shares of our common stock to certain of our directors and employees concurrent with the pricing of this offering with an exercise price equal to the initial public offering price.

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SUMMARY SELECTED FINANCIAL DATA

The following tables set forth a summary of our selected historical financial data as of and for the periods ended on the dates indicated. We have derived the statement of operations and comprehensive loss data for the period from September 25, 2012 (inception) through December 31, 2012 from our audited financial statements included elsewhere in this prospectus. The statement of operations and comprehensive loss data for the nine months ended September 30, 2013 and for the cumulative period from September 25, 2012 (inception) through September 30, 2013 and the balance sheet data as of September 30, 2013 have been derived from our unaudited financial statements appearing elsewhere in this prospectus. This unaudited interim financial information has been prepared on the same basis as our audited financial statements and, in our opinion, reflects all adjustments, consisting only of normal and recurring adjustments, which we consider necessary for a fair presentation of our financial position as of September 30, 2013. You should read this data together with our financial statements and related notes appearing elsewhere in this prospectus and the sections in this prospectus entitled Selected Financial Data and Management s Discussion and Analysis of Financial Condition and Results of Operations. The historical results are not necessarily indicative of the results to be expected for any future periods and the results for the nine months ended September 30, 2013 should not be considered indicative of results expected for the full fiscal year 2013. The results of operations for the period from September 25, 2012 (inception) through September 30, 2012 are not presented as they were insignificant.

	For The Period From September 25, 2012 (Inception) Through December 31, 2012	Nine Months Ended September 30, 2013 (unaudited)	Cumulative Period From September 25, 2012 (Inception) Through September 30, 2013 (unaudited)
Statement of Operations and Comprehensive Loss Data:			
Operating expenses:			
Research and development	$ 74,772	$ 1,394,547	$ 1,469,319
General and administrative	44,864	437,737	482,601
Total operating expenses	119,636	1,832,284	1,951,920
Loss from operations	(119,636)	(1,832,284)	(1,951,920)
Other income (expense):			
Interest income	25	2,662	2,687
Interest expense		(48)	(48)
Total other income, net	25	2,614	2,639
Net loss and comprehensive loss	$ (119,611)	$ (1,829,670)	$ (1,949,281)
Net loss per share attributable to common stockholders, basic and diluted[(1)]	$ (0.06)	$ (0.61)	

Weighted-average common shares outstanding, basic and diluted[(1)]	2,112,520	3,001,286
Pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited)[(1)]	$ (0.04)	$ (0.39)
Weighted-average shares used in computing pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited)[(1)]	2,718,082	4,713,320

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	As of September 30, 2013		
	Actual	Pro Forma[2]	Pro Forma as Adjusted[2][3]
Balance Sheet Data:			
Cash and cash equivalents	$ 10,991,682	$ 10,991,682	$ 58,764,770
Total assets	11,364,946	11,364,946	59,138,034
Total current liabilities	806,682	806,682	806,682
Convertible preferred stock	12,083,952		
Deficit accumulated during the development stage	(1,949,281)	(1,949,281)	(1,949,281)
Total stockholders equity	(1,525,688)	10,558,264	58,331,352
Total liabilities, convertible preferred stock and stockholders equity	11,364,946	11,364,946	59,138,034

(1) See Note 11 of the notes to financial statements included elsewhere in this prospectus for an explanation of the method used to calculate the historical and pro forma basic and diluted net loss per share attributable to common stockholders and the number of shares used in the computation of the per share amounts.

(2) The pro forma balance sheet gives effect to the automatic conversion of all of our outstanding shares of convertible preferred stock as of September 30, 2013 into an aggregate of 4,535,206 shares of common stock immediately upon the effectiveness of the registration statement of which this prospectus is a part.

(3) The pro forma as adjusted balance sheet gives further effect to the issuance and sale of 7,500,000 shares of common stock in this offering at the initial public offering price of $7.00 per share, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

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RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below, as well as the other information in this prospectus, including our financial statements and the related notes and Management s Discussion and Analysis of Financial Condition and Results of Operations, before deciding whether to invest in our common stock. The occurrence of any of the events or developments described below could harm our financial condition, results of operations, business and prospects. In such an event, the market price of our common stock could decline, and you may lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may have similar adverse effects on us.

Risks Related to Our Business

We have a limited operating history, are not profitable and may never become profitable.

We are a development stage biopharmaceutical company. Since our formation in September 2012, our operations have been limited to the identification of product candidates and research and development of our lead product candidates, primarily CereKin, AtoKin and SentiKin. 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 product candidates or successfully overcome the risks and uncertainties frequently encountered by companies in emerging fields such as the pet therapeutics industry. We also have not generated any revenue to date, and continue to incur significant research and development and other expenses. Our net loss and comprehensive loss for the nine months ended September 30, 2013 was $1,829,670 and for the period from September 25, 2012 (inception) through December 31, 2012 was $119,611. As of September 30, 2013, we had a deficit accumulated during the development stage of $1,949,281. For the foreseeable future, we expect to continue to incur losses, which will increase significantly from historical levels as we expand our product development activities, seek regulatory approvals for our product candidates and begin to commercialize them if they are approved by the Center for Veterinary Medicine branch of the U.S. Food and Drug Administration, or FDA, the U.S. Department of Agriculture, or USDA, or the European Medicines Agency, or EMA. Even if we succeed in developing and commercializing one or more product candidates, we expect to continue to incur losses for the foreseeable future, and we may never become profitable. If we fail to achieve or maintain profitability, it would adversely affect the value of our common stock.

We will have no material product revenue for the foreseeable future, and we may need to raise additional capital to achieve our goals.

Until, and unless, we receive approval from the FDA, USDA or EMA, as applicable, for one or more of our product candidates, we cannot market or sell our products in the United States or in the European Union, or EU, and will have no material product revenue. Currently, our only product candidate in a pivotal trial, also known as a field efficacy trial, is CereKin. We expect to initiate the pivotal trials for AtoKin and SentiKin by early 2014. Our other current product candidates will require from three to five years of further development at a cost of approximately $3 million to $5 million per product candidate before we expect to be able to apply for marketing approval in the United States. We also are actively involved in identifying additional human therapeutics for development and commercialization as pet therapeutics, and will continue to expend substantial resources for the foreseeable future to develop our current product candidates and any other product candidates we may develop or acquire. These expenditures will include: costs of identifying additional potential product candidates; costs associated with drug formulation; costs associated with conducting pilot, pivotal, and toxicology studies; costs associated with completing other research and development activities; costs associated with payments to technology licensors and maintaining other intellectual property; costs of obtaining regulatory approvals; costs associated with establishing commercial manufacturing and supply capabilities; and costs associated with marketing and selling any of our products approved for sale. We also

may incur unanticipated costs. Because the

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outcome of our development activities and commercialization efforts is inherently uncertain, the actual amounts necessary to successfully complete the development and commercialization of our current or future product candidates may be greater or less than we anticipate.

We believe the net proceeds from this offering, together with our existing cash, will be sufficient to fund our operating plan through the anticipated approval and launch of one or more of our lead product candidates. However, we may experience unexpected events that require us to seek additional funds sooner than planned through public or private equity or debt financings or other sources such as strategic collaborations. Additionally, we do not expect the proceeds from this offering to be sufficient to complete the development of all of our current product candidates, or of any additional product candidates that we may identify, and we may need to raise additional capital to fund these activities. We have no current agreements or arrangements with respect to any such financings or collaborations, and any such financings or collaborations may result in dilution to our stockholders, the imposition of debt covenants and repayment obligations or other restrictions that may adversely affect our business or the value of our common stock. Even if we believe we have sufficient funds on hand for our current or planned future business and operations, we may seek from time to time to raise additional capital based upon favorable market conditions or strategic considerations such as potential acquisitions.

Our future capital requirements depend on many factors, including, but not limited to:

- the scope, progress, results and costs of researching and developing our current or future product candidates;
- the timing of, and the costs involved in, obtaining regulatory approvals for any of our current or future product candidates;
- the number and characteristics of the product candidates we pursue;
- the cost of manufacturing our current and future product candidates and any products we successfully commercialize;
- the cost of commercialization activities if any of our current or future product candidates are approved for sale, including marketing, sales and distribution costs;
- the expenses needed to attract and retain skilled personnel;
- the costs associated with being a public company;
- our ability to establish and maintain strategic collaborations, licensing or other arrangements and the financial terms of such agreements; and

the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing possible patent claims, including litigation costs and the outcome of any such litigation.

Additional funds may not be available when we need them on terms that are acceptable to us, or at all. If adequate funds are not available to us on a timely basis, we may be required to delay, limit, reduce or terminate one or more of our product development programs or any future commercialization efforts.

We are substantially dependent on the success of our current lead product candidates, and cannot be certain that any of them will be approved for marketing or successfully commercialized even if approved.

We have no product approved for sale in any jurisdiction. Our current efforts are, and a substantial portion of our efforts over the foreseeable future will be, primarily focused on our lead product candidates, CereKin, in which we initiated the pivotal trial in August 2013 under a Protocol Concurrence with the FDA, and AtoKin and SentiKin, in which we expect to initiate pivotal trials by early 2014 under separate Protocol Concurrences. Accordingly, our near-term prospects, including our ability to generate material product revenue, obtain any new

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financing if needed to fund our business and operations, or enter into potential strategic transactions, will depend heavily on the successful development and commercialization of one or more of our lead candidates, which in turn will depend on a number of factors, including the following:

- the successful completion of the pivotal trials and toxicology studies of one or more of our current product candidates, which may take significantly longer than we currently anticipate and will depend, in part, upon the satisfactory performance of third-party contractors;
- our ability to demonstrate to the satisfaction of the FDA, the USDA and the EMA the safety and efficacy of our product candidates and to obtain regulatory approvals;
- the ability of our third-party manufacturers to manufacture supplies of any of our product candidates and to develop, validate and maintain viable commercial manufacturing processes that are compliant with Good Manufacturing Practices, or GMP;
- our ability to successfully launch commercial sales of our current product candidates, assuming marketing approval is obtained, whether alone or in collaboration with others;
- the availability, perceived advantages, relative cost, relative safety and relative efficacy of our products compared to alternative and competing treatments;
- the acceptance of our product candidates as safe and effective by veterinarians, pet owners and the animal health community;
- our ability to achieve and maintain compliance with all regulatory requirements applicable to our business; and
- our ability to obtain and enforce our intellectual property rights and obtain marketing exclusivity for our product candidates, and avoid or prevail in any third-party patent interference, patent infringement claims or administrative patent proceedings initiated by third parties or the U.S. Patent and Trademark Office, or USPTO.

Many of these factors are beyond our control. Accordingly, we cannot assure you that we will be successful in developing or commercializing one or more of our lead product candidates. If we are unsuccessful or are significantly delayed in developing and commercializing CereKin, AtoKin, SentiKin or any of our other current or future product candidates, our business and prospects will be materially adversely affected and you may lose all or a portion of the value of your investment in our common stock.

Most of our current and future small molecule product candidates are or will be based on generic human drugs, and other companies may develop substantially similar products that may compete with our products.

Most of the small molecule product candidates we are currently developing or expect to develop are based on generic human drugs. We do not engage in early-stage research or discovery with respect to our small molecule product candidates, but focus primarily on product candidates whose active pharmaceutical ingredient, or API, has been successfully commercialized or demonstrated to be safe or effective in human trials, which we sometimes refer to as validated. There is little, if any, third-party patent protection of the active ingredient in most of our current small molecule product candidates, and this means that our small molecule product candidates may face competition from their human generic equivalents in countries where such equivalents are available and used in unapproved animal indications, which is known as extra-label use.

While in most cases we select product candidates that are not available as a human generic in the United States, in cases where there is a human generic available there is no assurance that the eventual prices of our products will be lower than or competitive with the prices of human generic equivalents used extra-label, or that a palatable, easy-to-administer formulation such as the chewable, beef-flavored formulation that we utilize will be sufficient to differentiate them from their human equivalents. Human generics available outside the United States cannot be imported into the United States for use in animals, except on a case-by-case basis where the FDA determines it is medically necessary.

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We target small molecule product candidates for which the active ingredients have not been previously approved for use in animals. If we are the first to gain approval for the use of such active ingredients in animals, our small molecule products will enjoy five years of marketing exclusivity in the United States and ten years in the EU for the approved indication. We also plan to differentiate our products where possible with specific formulations, including flavors, methods of administration, new patents and other strategies, but we cannot assure you that we will be able to prevent competitors from developing substantially similar products and bringing those products to market earlier than we can. In addition, while we expect to have composition of matter patents on most of our biologic product candidates, we may not ultimately be able to obtain such patents. Although there are no generic regulatory approval pathways for animal biologics in the United States and European Economic Area, or EEA, our competitors may develop biologics that bind to the same target, but do not infringe any patents we may obtain. Thus, our competitors may be able to develop and market competing products if they are willing and able to conduct the full set of required studies, file a New Animal Drug Application, or NADA, with the FDA, or Application for United States Veterinary Biological Product License with the USDA, also called a Product License Application, or PLA, and obtain marketing approval. If such competing products achieve regulatory approval and commercialization prior to our product candidates, or if our intellectual property protection and efforts to obtain regulatory exclusivity fail to provide us with exclusive marketing rights for some of our products, then our business and prospects could be materially adversely affected.

If our product candidates are approved, they may face significant competition and may be unable to compete effectively.

The development and commercialization of pet therapeutics is highly competitive and our success depends on our ability to compete effectively with other products in the market. If our product candidates are approved, we expect to compete with animal health divisions of major pharmaceutical and biotechnology companies such as Merck Animal Health, Merial, Elanco, Bayer Animal Health, Novartis and Boehringer Ingelheim Animal Health, as well as specialty animal health medicines companies such as Zoetis and, in Europe, Virbac Group, Ceva Animal Health and Dechra Pharmaceuticals. Additionally, we are aware of several early-stage companies that are developing products for use in the pet therapeutics market, including Aratana Therapeutics, which recently completed its initial public offering. We also expect to compete with academic institutions, governmental agencies and private organizations that are conducting research in the field of animal health medicines.

If approved, CereKin and SentiKin will face competition from existing products approved for pain in dogs such as Rimadyl, Deramaxx, Previcox and Metacam. Similarly, AtoKin will face competition from existing products such as Atopica and Apoquel and from steroids, and SentiKin will compete against other pain drugs such as Recuvyra. Many of our product candidates also will face competition from various products approved for use in humans that are used extra-label in animals, and all of our products will face potential competition from new products in development. These and other potential competing products may benefit from greater brand recognition and brand loyalty than our product candidates may achieve.

Many of our competitors and potential competitors have substantially more financial, technical and human resources than we do. Many also have far more experience than we have in the development, manufacture, regulation and worldwide commercialization of animal health medicines, including pet therapeutics. We also expect to compete with academic institutions, governmental agencies and private organizations that are conducting research in the field of animal health medicines.

For these reasons, there is no assurance that we and our products can compete effectively.

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The development of our biologic product candidates is dependent upon relatively novel technologies and uncertain regulatory pathways.

We plan to develop biologics, including animal antibodies, for pets. Identification, optimization, and manufacture of therapeutic animal biologics is a relatively new field in which unanticipated difficulties or challenges could arise, and we expect the discovery, development, manufacturing and sale of biologic products to be a long, expensive and uncertain process. While many biologics have been approved for use in humans, apart from vaccines, relatively few recombinant proteins or antibodies have been approved for use in animals. There are unique risks and uncertainties with biologics, the development, manufacturing, and sale of which are subject to regulations that are often more complex and extensive than the regulations applicable to other small molecule products. We may be unable to identify biologics suitable for development or to achieve the potency and stability required for use in pets. In particular, canine, feline, and equine antibodies represent new types of product candidates that may be difficult to develop successfully.

In some cases, it may be unclear whether our product candidates meet the definition of a biological product subject to regulation by the USDA or a drug subject to regulation by the FDA. The USDA s Center for Veterinary Biologics and the FDA s Center for Veterinary Medicine have a memorandum of understanding concerning their joint responsibilities for resolving jurisdictional issues over products of this nature. Under the memorandum of understanding, animal products are to be regulated by the USDA as biologics, if they are intended for use to diagnose, cure, mitigate, treat, or prevent disease in animals and they work primarily through an immune process, or by the FDA as drugs, if they are intended for use in the diagnosis, cure, mitigation, treatment, or prevention of animal disease if the primary mechanism of action is not immunological or is undefined.

Although we believe that most of our current animal biologics will be regulated by the USDA based on their mechanisms of action, the USDA and the FDA may not agree with our assessment, or disputes may arise between the USDA and the FDA over regulatory jurisdiction for one or more of such biologics. If so, the development of our biologics may be delayed while any such disputes are adjudicated by the agencies. Furthermore, if the agencies were to determine that one or more of our animal biologics will be regulated by the FDA instead of the USDA, the time and cost of developing such biologics may be longer and more expensive than we currently anticipate, and we may determine to discontinue development of such biologics. It is also possible that the USDA s regulatory standards for novel biologics may be more difficult to satisfy than we anticipate.

Because the regulatory standards for pet biologics are often less stringent than for small molecule animal drugs, we believe that some veterinarians prefer to see further efficacy data before making a new biologic product purchasing decision. Accordingly, we may also find it necessary to conduct additional studies of our biologic product candidates in order to achieve commercial success.

The results of earlier studies may not be predictive of the results of our pivotal trials, and we may be unable to obtain regulatory approval for our existing or future product candidates under applicable regulatory requirements. The denial or delay of any regulatory approval would prevent or delay our commercialization efforts and adversely affect our potential to generate material product revenue and our financial condition and results of operations.

The research, testing, manufacturing, labeling, approval, sale, marketing and distribution of pet therapeutics are subject to extensive regulation. We are usually not permitted to market our products in the United States until we receive approval of an NADA from the FDA or a PLA from the USDA, or in the EU or in other EEA countries until we receive marketing approval from the EMA. To gain approval to market a pet therapeutic for a particular species, we must provide the FDA, the USDA and the EMA, as applicable, with efficacy data from pivotal trials that adequately demonstrate that our product candidates are safe and effective in the target species (*e.g.*, dogs, cats or

horses) for the intended indications. In addition, we must provide manufacturing data. For the FDA and EMA, we must provide data from toxicology studies, also called target animal safety studies, and in

some cases environmental impact data. We are conducting the pivotal trial of CereKin internally without

significant outsourcing, and plan to also conduct the pivotal trials in AtoKin and SentiKin the same way, but we rely on contract research organizations, or CROs, and other third parties to conduct our toxicology studies and for certain other development activities. The results of toxicology studies and other initial development activities, and of any previous studies in humans or animals conducted by us or third parties, may not be predictive of future results of pivotal trials or other future studies, and failure can occur at any time during the conduct of pivotal trials and other development activities by us or our CROs. Our pivotal trials may fail to show the desired safety or efficacy of our product candidates despite promising initial data or the results in previous human or animal studies conducted by others, and success of a product candidate in prior animal studies, or in the treatment of human beings, does not ensure success in subsequent studies. Clinical trials in humans and pivotal trials in animals sometimes fail to show a benefit even for drugs that are effective, because of statistical limitations in the design of the trials or other statistical anomalies. Therefore, even if our studies and other development activities are completed as planned, the results may not be sufficient to obtain regulatory approval for our product candidates.

The FDA, USDA or EMA can delay, limit or deny approval of any of our product candidates for many reasons, including:

- if the FDA, USDA or EMA disagrees with our interpretation of data from our pivotal studies or other development efforts;
- if we are unable to demonstrate to the satisfaction of the FDA, USDA or EMA that the product candidate is safe and effective for the target indication;
- if the FDA, USDA or EMA requires additional studies or changes its approval policies or regulations;
- if the FDA, USDA or EMA does not approve of the formulation, labeling or the specifications of our current and future product candidates; and
- if the FDA, USDA or EMA fails to approve the manufacturing processes of our third-party contract manufacturers.

Further, even if we receive approval of our product candidates, such approval may be for a more limited indication than we originally requested, and the FDA, USDA or EMA may not approve the labeling that we believe is necessary or desirable for the successful commercialization of our product candidates.

Any delay or failure in obtaining applicable regulatory approval for the intended indications of our product candidates would delay or prevent commercialization of such product candidates and would materially adversely impact our business and prospects.

Our Protocol Concurrences with the FDA for our pivotal studies do not guarantee marketing approval in the United States.

We have Protocol Concurrences with the FDA for the pivotal trial of CereKin for the treatment of osteoarthritis in dogs and for our planned pivotal trials of AtoKin for the treatment of atopic dermatitis in dogs. A Protocol

Concurrence means that the FDA fundamentally agrees with the design, execution, and analyses proposed in a protocol, and is a commitment that the FDA will not later alter its perspectives on these issues unless public or animal health concerns appear that were not recognized at the time of protocol assessment. Even under a Protocol Concurrence, approval of an NADA by the FDA is not guaranteed because a final determination that the agreed-upon protocol satisfies a specific objective, such as the demonstration of efficacy, or supports an approval decision, will be based on a complete review of all the data submitted to the FDA.

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Development of pet therapeutics is inherently expensive, time-consuming and uncertain, and any delay or discontinuance of our current or future pivotal trials would significantly harm our business and prospects.

Development of pet therapeutics remains an inherently lengthy, expensive and uncertain process, and there is no assurance that our development activities will be successful. We do not know whether our current or planned pivotal trials of CereKin, AtoKin and SentiKin, or of our other current or future product candidates, will begin or conclude on time, and they may be delayed or discontinued for a variety of reasons, including if we are unable to:

address any safety concerns that arise during the course of the studies;

complete the studies due to deviations from the study protocols or the occurrence of adverse events;

add new study sites;

address any conflicts with new or existing laws or regulations; or

reach agreement on acceptable terms with study sites, which can be subject to extensive negotiation and may vary significantly among different sites.

Any delays in completing our development efforts will increase our costs, delay our product candidate development and approval process and jeopardize our ability to commence product sales and generate revenue. Any of these occurrences may significantly harm our business, financial condition and prospects. In addition, factors that may cause a delay in the commencement or completion of our development efforts may also ultimately lead to the denial of regulatory approval of our product candidates which, as described above, would materially, adversely impact our business and prospects.

We currently rely on third parties to conduct some of our development activities, and may rely more heavily on such third parties in the future. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may be unable to obtain regulatory approval for or commercialize our current or future product candidates as planned.

We currently plan to conduct our own pivotal trials, including our current and planned pivotal trials of CereKin, AtoKin and SentiKin, but we rely upon CROs to conduct our toxicology studies and for other development activities. We also may rely on CROs in the future to conduct one or more pivotal trials. These CROs are not our employees, and except for contractual duties and obligations, we have limited ability to control the amount or timing of resources that they devote to our programs or manage the risks associated with their activities on our behalf. We are responsible to regulatory authorities for ensuring that each of our studies is conducted in accordance with the development plans and trial protocols, and any failure by our CROs to do so may adversely affect our ability to obtain regulatory approvals, subject us to penalties, or harm our credibility with regulators. The FDA and foreign regulatory authorities also require us and our CROs to comply with regulations and standards, commonly referred to as good clinical practices, or GCPs, or good laboratory practices, or GLPs, for conducting, monitoring, recording and reporting the results of our studies to ensure that the data and results are scientifically credible and accurate.

Our agreements with CROs may allow termination by the CROs in certain circumstances with little or no advance notice to us. These agreements generally will require our CROs to reasonably cooperate with us at our expense for an orderly winding down of the CROs services under the agreements. If the CROs conducting our studies do not comply with their contractual duties or obligations to us, or if they experience work stoppages, do not meet expected deadlines, terminate their agreements with us or need to be replaced, or if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to our development protocols or GCPs or for any other reason, we may need to secure new arrangements with alternative CROs, which could be difficult and costly. In such event, our studies also may need to be extended, delayed or terminated as a result, or may need to be repeated. If any of the foregoing were to occur, regulatory approval and commercialization of our product candidates may be delayed and we may be required to expend substantial additional resources.

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Even if we obtain regulatory approval of one or more of our current or future product candidates, they may never achieve market acceptance or commercial success.

If we obtain FDA, USDA or EMA approvals for one or more of our current or future product candidates, they may not achieve market acceptance among veterinarians and pet owners, and may not be commercially successful. Market acceptance of any of our current or future product candidates for which we may receive approval depends on a number of factors, including:

- the indications for which our products are approved;
- the potential and perceived advantages of our product candidates over alternative treatments, including generic medicines and competing products currently prescribed by veterinarians, and products approved for use in humans that are used extra-label in animals;
- the cost of treatment in relation to alternative treatments and willingness on the part of veterinarians and pet owners to pay for our products, including other discretionary items, especially during economically challenging times;
- the prevalence and severity of any adverse side effects of our products;
- the relative convenience and ease of administration of our products;
- the effectiveness of our sales and marketing efforts; and
- the proper training and administration of our products by veterinarians and acceptance by veterinarians and pet owners of our products as safe and effective.

Any failure by our product candidates that obtain regulatory approval to achieve market acceptance or commercial success would adversely affect our financial condition and results of operations.

Pet therapeutics, like human therapeutics, are subject to unanticipated post-approval safety or efficacy concerns, which may harm our business and reputation.

The success of our commercialization efforts will depend upon the perceived safety and effectiveness of pet therapeutics, in general, and of our products, in particular. Unanticipated safety or efficacy concerns can arise with respect to approved pet therapeutics after they enter into commerce, which may result in product recalls or withdrawals or suspension of sales, as well as product liability and other claims. It is also possible that the occurrence of significant adverse side effects in approved human generic compounds upon which our product candidates are based could impact our products. Diacerein, the active ingredient in CereKin, has been associated with gastrointestinal side effects and rare skin and liver side effects that occur at a rate of one in a million or less in humans, for which diacerein is undergoing a safety and efficacy review by the EMA. Because reliable detection of such rare events

would require exposure of millions or tens of millions of dogs, it is not possible to rule out the risk until well after the launch of the product. The EMA s Pharmacovigilance Risk Assessment Committee has recommended to the Coordination Group for Mutual Recognition and Decentralised Procedures Human, or CMDh, that diacerein be suspended from marketing for humans because of these side effects, until convincing evidence of a positive benefit-risk balance in a specific human patient population is provided. Subject to possible appeal of the EMA s decision by affected parties, the CMDh will undertake its own assessment of the drug, followed possibly by review by the European Commission.

The active ingredient in SentiKin, has been associated with rare idiosyncratic liver adverse reactions. The EMA has conducted a review of the drug and has determined that the risk-benefit profile in humans justifies its use in short-term indications, but not in long-term indications. We intend to develop SentiKin for short-term treatment of post-operative pain, but we may be not able to rule out a potential liver adverse effect until well after the launch of the drug. Any safety or efficacy concerns, or recalls, withdrawals or suspensions of sales of our products or other pet therapeutics, or of their human equivalents, could harm our reputation, in particular, or pet therapeutics, generally, and materially, adversely affect our business and prospects or the potential growth of the pet therapeutics industry, regardless of whether such concerns or actions are justified.

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Future federal and state legislation may result in increased exposure to product liability claims, which could result in substantial losses to us.

Under current federal and state laws, pets are generally considered to be personal property of their pet owners and, as such, pet owners recovery for product liability claims involving their pets may be limited to the replacement value of the pets. Pet owners and their advocates, however, have filed lawsuits from time to time seeking non-economic damages such as pain and suffering and emotional distress for harm to their pets based on theories applicable to personal injuries to humans. If new legislation is passed to allow recovery for such non-economic damages, or if precedents are set allowing for such recovery, we could be exposed to increased product liability claims that could result in substantial losses to us if successful. In addition, some horses can be worth millions of dollars or more, and product liability for horses may be very high.

We currently have no product liability insurance, but intend to obtain it as we get closer to the commercialization of our product candidates. We cannot assure you that we will be able to do so on affordable terms, or at all. It also is possible that any product liability insurance we obtain will not be sufficient to cover any future product liability claims against us.

If we fail to retain current members of our senior management, or to attract and keep additional key personnel, our business and prospects could be materially adversely impacted.

Our success depends on our continued ability to attract, retain and motivate highly qualified management and scientific personnel. We are highly dependent upon our senior management, particularly Richard Chin, M.D., our President and Chief Executive Officer, Kevin Schultz, D.V.M., Ph.D., our Head of Research and Development and Chief Scientific Officer, Denise Bevers, our Chief Operating Officer, Stephen Galliker, our Chief Financial Officer, and Stephen Sundlof, D.V.M., Ph.D., our Senior Vice President of Regulatory Affairs. The loss of services of any of our key personnel could adversely affect our ability to successfully develop our current or future product pipeline and commercialize our product candidates. Although we have entered into employment agreements with these key members of senior management, such agreements generally do not prohibit them from leaving our employ at any time. We currently do not maintain key man life insurance on any of our senior management team. The loss of Dr. Chin or other members of our current senior management could adversely affect the timing or outcomes of our current and planned studies, as well as longer-term prospects for commercializing our product candidates.

In addition, competition for qualified personnel in the animal health fields is intense, because there is a limited number of individuals who are trained or experienced in the field. We will need to hire additional personnel as we expand our product development and commercialization activities, and we may not be able to attract and retain qualified personnel on acceptable terms, or at all.

We are dependent upon third-party manufacturers for supplies of our current product candidates, and intend to rely on third-party manufacturers for commercial quantities of any of our product candidates that may be approved.

We currently have no internal capability to manufacture the formulated product candidates for use in our studies or commercial supplies of any of our product candidates that may be approved, and will be entirely dependent upon third-party manufacturers for such supplies. We and our contract manufacturers have historically been able to obtain supplies of the API for development of our product candidates, but neither we nor our contract manufacturers have long-term supply agreements with the API manufacturers. We also have no agreements for commercial-scale supply of the API or manufacture of any of our product candidates. As a result, we and our contract manufacturers may be unable to procure API in a timely manner on commercially reasonable terms, or at all. Any delay in identifying and

contracting with third-party contract manufacturers on commercially reasonable terms would have an adverse impact upon our current product development activities and future commercialization efforts.

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The facilities used by our contract manufacturers to manufacture the drugs are subject to inspections by the FDA, USDA, and the EMA, and we depend on our contract manufacturers to comply with GMP. If our contract manufacturers cannot successfully manufacture material in compliance with these strict regulatory requirements, we and they will not be able to secure or maintain regulatory approval for their manufacturing facilities. In some cases, we also are dependent on our contract manufacturers to produce supplies in conformity to our specifications and maintain quality control and quality assurance practices and not to employ disqualified personnel. If the FDA or a comparable foreign regulatory authority does not approve the manufacturing facilities of our contract manufacturers, or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which could result in delays in, or adversely affect our ability to, develop or commercialize our product candidates. We and our contract manufacturers also may be subject to penalties and sanctions from the FDA and other regulatory authorities for any violations of applicable regulatory requirements. The USDA and EMA employ different regulatory standards than the FDA, so we may require multiple manufacturing processes and facilities for the same product candidate or any approved product.

The commercialization of any of our product candidates could be adversely affected if we are unable to secure sufficient quantities and quality of drug products in a timely manner.

The raw materials used to manufacture our current small molecule product candidates are generally readily available in commercial quantities from multiple suppliers, but we will be dependent upon our contract manufacturers to obtain these raw materials. If manufacturers are unable to do so as and when they are needed to supply our development and commercial needs, we will have no other means of producing our product candidates until they are able to do so or we or they procure alternative supplies of the API. If our third-party manufacturers suffer damage or destruction to their facilities or equipment, we may experience disruptions in supplies, or be unable to obtain supplies of product candidates on a timely basis. Any inability to secure sufficient quantities and quality of the API or other raw materials in our products candidates would adversely impact our development activities and commercialization efforts. In some cases, contract manufacturers may be reluctant to manufacture the API in pet therapeutics, because of regulatory or other concerns. This may make it more difficult for us to identify manufacturers needed to supply sufficient quantities of our product candidates for development.

Biologics manufacturing is difficult and costly, and may not be commercially viable.

There are no established sources of the active ingredients in our biologic product candidates, so we or our collaborators will be required to develop the manufacturing process, perform validation and in some cases establish new facilities to manufacture pet biologics. Manufacturing of pet biologics, apart from vaccines, is a relatively new field in which unanticipated difficulties or challenges could arise. Small changes in the manufacturing process can have significant impact on product quality, consistency and yield. Manufacturing biologics, especially in large quantities, is complex and may require the use of innovative technologies that we may need to develop ourselves or in conjunction with third-party collaborators. Such manufacturing requires facilities specifically designed and validated for this purpose and sophisticated quality assurance and quality control procedures. Biologics are also usually costly to manufacture, because production usually requires the use of living organisms. Factors such as these may make it more technically challenging, time-consuming and expensive than we anticipate to manufacture biologics. Animal antibodies also must be manufactured at a sufficiently low cost that they are economically viable for us and for our customers. There is no assurance that we will be able to manufacture biologics at an economical cost, if at all.

If we are unable to establish sales capabilities on our own or through third parties, we may not be able to market and sell our current or future product candidates, if approved, and generate product revenue.

We currently have no sales, marketing or distribution capabilities. If our current or future product candidates receive regulatory approval, we expect to establish a direct sales organization in the United States and to utilize distributors to commercialize our products, which will be expensive and time-consuming. In jurisdictions outside of the United States we intend to utilize companies with an established commercial presence to market our

products in those jurisdictions, but we may be unable to enter into such arrangements on acceptable terms, if at all. We have no prior experience in the marketing, sale and distribution of pet therapeutics or other products, and there are significant risks involved in building and managing a sales organization, including our potential inability to hire, retain and motivate qualified individuals, generate sufficient sales leads, provide adequate training to sales and marketing personnel and effectively oversee a geographically-dispersed sales and marketing team. Any failure or delay in the development of our internal sales, marketing and distribution capabilities and entry into adequate arrangements with distributors would adversely impact the commercialization of our product candidates. If we are not successful in commercializing any of our current or future product candidates, either on our own or through one or more distributors, we may never generate significant revenue and may continue to incur significant losses, which would adversely affect our financial condition and results of operations.

If we are not successful in identifying, developing, and commercializing additional product candidates, our ability to expand our business and achieve our strategic objectives would be impaired.

A key element of our strategy is to identify, develop and commercialize a portfolio of products to serve the emerging pet therapeutics market. We expect to identify additional potential pet therapeutic product candidates from targets, molecules, and compounds discovered or developed as part of human biopharmaceutical research. Ideally, we try to identify product candidates that are free from any intellectual property rights of others. If we are unable to identify human health-generated molecules and compounds to conduct research and development, our ability to develop new products could be limited. In addition, we may in the future enter into license agreements with third parties to provide us with rights to the compounds for purposes of our business. Even if we enter into these arrangements, we may not be able to maintain these relationships or establish new ones in the future on acceptable terms, or at all.

Even if we successfully identify or license potential product candidates, we may still fail to yield product candidates for development and commercialization for many reasons, including the following:

- product candidates we develop may be covered by third parties patents or other exclusive rights unknown to us;
- a product candidate may on further study be shown to have harmful side effects in pets or other characteristics that indicate it is unlikely to be effective or otherwise does not meet applicable regulatory criteria;
- a product candidate may not be capable of being produced in commercial quantities at an acceptable cost, or at all;
- a product candidate may not be accepted as safe and effective by veterinarians, pet owners and the pet therapeutic community; and
- competitors may develop alternatives that render our product candidates obsolete.

Failure to identify further product candidates ultimately suitable for development and commercialization would have an adverse impact on our growth strategy and future business prospects.

Changes in distribution channels for pet therapeutics may make it more difficult or expensive to distribute our products.

In the United States, pet owners typically purchase their pet therapeutics from their local veterinarians who also prescribe such therapeutics. There is a trend, however, toward increased purchases of pet therapeutics from Internet-based retailers, big-box retail stores and other over-the-counter distribution channels, which follows a significant shift in recent years away from the traditional veterinarian distribution channel in the sale of parasiticides and vaccines. It is also possible that pet owners may come to rely increasingly on internet-based animal health information rather than on their veterinarians. We currently expect to market our pet therapeutics directly to veterinarians, so any reduced reliance on veterinarians by pet owners could materially adversely affect our business and prospects. Pet owners also may substitute human health products for pet therapeutics if the human health products are less expensive or more readily available, which substitution also could adversely affect our business.

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Legislation has been or may be proposed in the United States or abroad that would require veterinarians to provide pet owners with written prescriptions and disclosures that the pet owner has the right to fill the prescriptions through other means. If enacted, such legislation could lead to a reduction in the number of pet owners who purchase their pet therapeutics directly from veterinarians, which also could adversely affect our business.

While most of our biologic products will be delivered by injection and therefore may be insulated to a degree from competition from non-veterinary dispensing, for our small molecule products, over time, these and other competitive conditions may make us reliant upon Internet-based retailers, big-box retail stores or other over-the-counter distribution channels, for which we have no current or planned business relationships, to sell our pet products. Any of these events could materially adversely affect our business and prospects or require us to dramatically change our marketing and distribution strategies, which may not be feasible or successful.

Consolidation of our customers could negatively affect the pricing of our products.

Veterinarians will be our primary customers for any approved products. In recent years, there has been a trend towards the consolidation of veterinary clinics and animal hospitals. If this trend continues, these large clinics and hospitals could attempt to leverage their buying power to obtain favorable pricing from us and other pet therapeutics companies. Any resulting downward pressure on the prices of any of our approved products could have a material adverse effect on our results of operations and financial condition.

We will need to increase the size of our organization and may not successfully manage our growth.

We currently have only six full-time employees and three part-time employees, and our management systems currently in place are not likely to be adequate to support our future growth, if any. Our ability to manage our growth effectively will require us to hire, train, retain, manage and motivate additional employees and to implement and improve our operational, financial and management systems. These demands also may require the hiring of additional senior management personnel or the development of additional expertise by our senior management personnel. If we fail to expand and enhance our operational, financial and management systems in conjunction with our potential future growth, it could have a material adverse effect on our business, financial condition and results of operations.

Our research and development relies on evaluations in animals, which is controversial and may become subject to bans or additional regulations.

The evaluation of our product candidates in target animals is required to develop and commercialize our product candidates. Although our animal testing will be subject to GLP and GCP requirements, as applicable, animal testing in the human pharmaceutical industry and in other industries has been the subject of controversy and adverse publicity. Some organizations and individuals have sought to ban animal testing or encourage the adoption of additional regulations applicable to animal testing. To the extent that such bans or regulations are imposed, our research and development activities, and by extension our operating results and financial condition, could be materially adversely affected. In addition, negative publicity about animal practices by us or in our industry could harm our reputation among potential customers for our products.

If approved, our product candidates may be marketed in the United States only in the target animals and for the indications for which they are approved, and if we want to expand the approved animals or indications, we will need to obtain additional FDA or USDA approvals, which may not be granted.

If our product candidates are approved by regulatory authorities, we may market or advertise them only in the specific species and for treatment of the specific indications for which they were approved, which could limit use of the

products by veterinarians and pet owners. We intend to develop, promote and commercialize one or more of our current product candidates for other animals and new treatment indications in the future, but there is no assurance whether or at what additional time and expense we will be able to do so. If we do not obtain marketing approvals for other animals or for new indications, our ability to expand our business may be adversely affected.

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Use of a drug outside its cleared or approved indications in the animal context is known as extra-label use. Under the Animal Medicinal Drug Use Clarification Act of 1994, or AMDUCA, veterinarians are permitted to prescribe extra-label uses of certain approved animal drugs and approved human drugs for animals under certain conditions. Thus, although veterinarians may in the future prescribe and use human-approved products or our products for extra-label uses, we may not promote our products for extra-label uses. If the FDA determines that any of our marketing activities constitute promotion of an extra-label use, it could subject us to regulatory enforcement, which could have an adverse impact on our reputation and potential liability to us.

The commercial potential of a product candidate in development is difficult to predict. The market for our product candidates, or for the pet therapeutics industry as a whole, is uncertain and may be smaller than we anticipate, which could significantly and negatively impact our revenue, results of operations and financial condition.

It is very difficult to estimate the commercial potential of any of our product candidates because of the emerging nature of our industry as a whole. The pet therapeutics market continues to evolve and it is difficult to predict the market potential for what we believe to be the unmet medical needs of pets. The market will depend on important factors such as safety and efficacy compared to other available treatments, including potential human generic therapeutic alternatives with similar efficacy profiles, changing standards of care, preferences of veterinarians, the willingness of pet owners to pay for such products, and the availability of competitive alternatives that may emerge either during the product development process or after commercial introduction. If the market potential for our product candidates is less than we anticipate due to one or more of these factors, it could negatively impact our business, financial condition and results of operations. Further, the willingness of pet owners to pay for our product candidates, if approved, may be less than we anticipate, and may be negatively affected by overall economic conditions. The current penetration of pet insurance in the United States is low, pet owners are likely to have to pay for our products, if at all, out-of-pocket, and pet owners may not be willing or able to pay for any approved products of ours.

Risks Related to Intellectual Property

We currently do not own any issued patents, and there can be no assurance that our patent strategy will be effective to enhance marketing exclusivity.

We currently do not own any issued patents, and we cannot assure you that patents based on our patent applications will ever be issued. The strength of patents in the field of pet therapeutics involves complex legal and scientific questions and can be uncertain. Our patent applications may fail to result in issued patents in the United States or in other countries. Even if patents do successfully issue, third parties may challenge their validity, enforceability or scope, which may result in such patents being narrowed, invalidated or held unenforceable. Furthermore, even if they are unchallenged, our patents, if issued, may not adequately protect our intellectual property or prevent others from designing around their claims. If we cannot obtain ownership of issued patents covering our product candidates, our business and prospects would be adversely affected.

Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of any patents that issue. On September 16, 2011, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications are prosecuted, redefine prior art, may affect patent litigation, and switch the U.S. patent system from a first-to-invent system to a first-to-file system. Under a first-to-file system, assuming the other requirements for patentability are met, the first inventor to file a patent application generally will be entitled to the patent on an invention regardless of whether another inventor had made the invention earlier. The USPTO recently developed new regulations and procedures to

govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, and in particular, the first-to-file provisions, only became effective on March 16, 2013. Accordingly, it is not clear what, if any, impact the Leahy-

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Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of any patents that issue, all of which could have a material adverse effect on our business and financial condition.

We may become subject to third parties claims alleging infringement of patents and proprietary rights or priority of invention, which would be costly, time-consuming and, if successfully asserted against us, delay or prevent the development and commercialization of our current or future product candidates.

There has been substantial litigation regarding patents and other intellectual property rights in the field of therapeutics, as well as patent challenge proceedings, including interference and administrative law proceedings before the United States Patent and Trademark Office, or the USPTO, and oppositions and other comparable proceedings in foreign jurisdictions. Under U.S. patent reform laws, new procedures, including *inter partes* review and post-grant review, were implemented as of March 16, 2013, and the implementation of such reform laws presents uncertainty regarding the outcome of any challenges to our future patents, if any. We are aware of several issued patents and pending patent applications with claims directed to long-acting or extended-release pharmaceutical formulations and uses of the same small molecules as in some of our small molecule product candidates, and other patents and pending patent applications with claims directed to pharmaceutical formulations and use of human biologics conceptually similar to some of our biologics product candidates. There also may be other patents already issued of which we are unaware that might be infringed by one of our current or future product candidates. Because patent applications can take many years to issue and may be confidential for eighteen months or more after filing, there may be applications now pending of which we are unaware and which may later result in issued patents that may be infringed by our current or future product candidates. There is no assurance that our current or future product candidates will not infringe these or other existing or future third-party patents. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents.

To the extent we become subject to future third-party claims against us or our collaborators, we could incur substantial expenses and, if any such claims are successful, we could be liable to pay substantial damages, including treble damages and attorney s fees if we or our collaborators are found to be willfully infringing a third-party s patents. If a patent infringement suit were brought against us or our collaborators, we or they could be forced to stop or delay research, development, manufacturing or sales of the product candidate that is the subject of the suit. Even if we are successful in defending such claims, infringement and other intellectual property claims can be expensive and time-consuming to litigate and divert management s attention from our business and operations. As a result of or in order to avoid potential patent infringement claims, we or our collaborators may be compelled to seek a license from a third party for which we would be required to pay license fees or royalties, or both. Moreover, these licenses may not be available on acceptable terms, or at all. Even if we or our collaborators were able to obtain such a license, the rights may be nonexclusive, which could allow our competitors access to the same intellectual property. Any of these events could harm our business and prospects.

In addition to possible infringement claims against us, we may be subject to third-party preissuance submission of prior art to the USPTO, or become involved in opposition, derivation, reexamination, *inter partes* review, post-grant review, or other patent office proceedings or litigation in the United States or elsewhere, challenging our patent rights or the patent rights of others. If third parties have prepared and filed patent applications in the United States that also claim technology to which we have rights, we may have to participate in interference proceedings in the USPTO to determine the priority of invention. We may also become involved in similar opposition proceedings in the European Patent Office or similar offices in other jurisdictions regarding our intellectual property rights with respect to our products and technology. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our future patent rights, if any, allow third parties to commercialize our technology or products

and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights.

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If our efforts to protect the proprietary nature of the intellectual property related to any of our current or future product candidates are not adequate, we may not be able to compete effectively in our market.

We intend to rely upon a combination of regulatory exclusivity periods, patents, trade secret protection, confidentiality agreements, and license agreements to protect the intellectual property related to our current product candidates and our development programs.

Composition-of-matter patents on the active ingredients in pharmaceutical products, including pet therapeutics, are generally considered to be the strongest form of intellectual property protection, since such patents provide protection without regard to any particular method of use or manufacture. We do not have composition-of-matter patents for the active ingredient in our small molecule product candidates, and there is little, if any, such composition-of-matter patent protection available. Moreover, we cannot be certain that the claims in our patent applications covering composition-of-matter of our biologics product candidates will be considered patentable by the USPTO and courts in the United States, or by the patent offices and courts in foreign countries.

Method-of-use patents protect the use of a product for the specified method. This type of patent does not prevent a competitor from developing or marketing an identical product for an indication that is outside the scope of the patented method. Moreover, even if competitors do not actively promote their product for our targeted indications for which we may obtain patents, veterinarians may recommend that pet owners use these products extra-label, or pet owners may do so themselves. Although extra-label use may infringe or contribute to the infringement of method-of-use patents, the practice is common and such infringement is difficult to prevent or prosecute.

If the breadth or strength of protection provided by any patent applications or future patents we may own, in-license, or pursue with respect to any of our current or future product candidates is threatened, it could threaten our ability to commercialize any of our current or future product candidates. Further, if we encounter delays in our development efforts, the period of time during which we could market any of our current or future product candidates under any patent protection we obtain would be reduced.

Even where laws provide protection or we are able to obtain patents, costly and time-consuming litigation may be necessary to enforce and determine the scope of our proprietary rights, and the outcome of such litigation would be uncertain. Moreover, any actions we may bring to enforce our intellectual property against our competitors could provoke them to bring counterclaims against us, and some of our competitors have substantially greater intellectual property portfolios than we have.

We also rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable or for which we have not filed patent applications, processes for which patents are difficult to enforce and other elements of our product development processes that involve proprietary know-how, information or technology that is not covered by patents. Although we require all of our employees to assign their inventions to us, and endeavor to execute confidentiality agreements with all of our employees, consultants, advisors and any third parties who have access to our proprietary know-how, information or technology, we cannot be certain that we have executed such agreements with all parties who may have helped to develop our intellectual property or had access to our proprietary information, or that our agreements will not be breached. We cannot guarantee that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. If we are unable to prevent material disclosure of the intellectual property related to our technologies to third parties, we will not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, results of operations and financial condition.

Any disclosure to or misappropriation by third parties of our confidential proprietary information could enable competitors to quickly duplicate or surpass our technological achievements, thus eroding our competitive position in our market.

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We may be involved in lawsuits to protect or enforce any future patents issued to us, which could be expensive, time-consuming and unsuccessful.

Competitors may infringe any patents that may issue to us, or any patents that we may license. To counter infringement or unauthorized use of any patents we may obtain, we may be required to file infringement claims, which can be expensive and time-consuming to litigate. In addition, if we or one of our future collaborators were to initiate legal proceedings against a third party to enforce a patent covering our current product candidates, or one of our future products, the defendant could counterclaim that the patent is invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a materially misleading statement, during prosecution. Third parties may also raise similar claims before the USPTO, even outside the context of litigation. The outcome following legal assertions of invalidity and unenforceability is unpredictable. We cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of any future patent protection on our current or future product candidates. Such a loss of patent protection could have a material adverse impact on our business.

Litigation proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be unsuccessful, it could have an adverse effect on the price of our common stock. Finally, we may not be able to prevent, alone or with the support of our licensors, misappropriation of our trade secrets or confidential information, particularly in countries where the laws may not protect those rights as fully as in the United States.

Changes in U.S. patent law could diminish the value of patents in general, thereby impairing our ability to protect our products.

As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involves both technological and legal complexity. Therefore, obtaining and enforcing biopharmaceutical patents is costly, time-consuming and inherently uncertain. In addition, the United States has recently enacted and is currently implementing wide-ranging patent reform legislation. The U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce patents that we might obtain in the future.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on product candidates throughout the world would be prohibitively expensive. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we may obtain

patent protection, but where patent enforcement is not as strong as that in the United States. These products may compete with our products in jurisdictions where we do not have any issued or licensed patents and any future patent claims or other intellectual property rights may not be effective or sufficient to prevent them from so competing.

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Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biopharmaceuticals, which could make it difficult for us to stop the infringement of our future patents, if any, or marketing of competing products in violation of our proprietary rights generally. Further, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. Proceedings to enforce our future patent rights, if any, in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business.

We have no registered trademarks for our company name or for our current product candidates in the United States or any other countries, and failure to obtain those registrations could adversely affect our business.

Although we have filed a trademark application for our company name and for our CereKin and AtoKin product candidates in the United States, our applications have not been granted and the corresponding marks have not been registered in the United States. We have not filed for these or other trademarks in any other countries. During trademark registration proceedings, we may receive rejections. If so, we will have an opportunity to respond, but we may be unable to overcome such rejections. In addition, USPTO and comparable agencies in many foreign jurisdictions may permit third parties to oppose pending trademark applications and to seek to cancel registered trademarks. If opposition or cancellation proceedings are filed against any of our trademark applications or any registered trademarks, our trademarks may not survive such proceedings. Moreover, any name we propose to use with our product candidates in the United States must be approved by the FDA or the USDA, regardless of whether we have registered or applied to register as a trademark. The FDA typically conducts a review of proposed product names, including an evaluation of potential for confusion with other product names. If the FDA or the USDA objects to any of our proposed proprietary product names, we may be required to expend significant additional resources in an effort to identify a suitable substitute name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA or USDA.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties.

We have received confidential and proprietary information from third parties. In addition, we employ individuals who were previously employed at other biotechnology, pharmaceutical or animal health companies. We may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise improperly used or disclosed confidential information of these third parties or our employees former employers. Litigation may be necessary to defend against any such claims. Even if we are successful in defending against any such claims, such litigation could result in substantial cost and be a distraction to our management and employees.

Risks Related to Government Regulation

Even if we receive regulatory approval for any of our current or future product candidates, we will be subject to ongoing FDA, USDA, and EMA obligations and continued regulatory review, which may result in significant additional expense. Additionally, any product candidates, if approved, will be subject to labeling and manufacturing requirements and could be subject to other restrictions. Failure to comply with these regulatory requirements or the occurrence of unanticipated problems with our products could result in significant penalties.

If the FDA, USDA, or EMA approves any of our current or future product candidates, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the

product will be subject to extensive and ongoing regulatory requirements. These

requirements include submissions of safety and other post-marketing information and reports, establishment registration, and product listing, as well as continued compliance with GMP, GLP and GCP for any studies that we conduct post-approval. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

- restrictions on the marketing or manufacturing of the product, withdrawal of the product from the market, or voluntary product recalls;
- fines, warning letters or holds on target animal studies;
- refusal by the FDA, USDA, or EMA to approve pending applications or supplements to approved applications filed by us or our strategic collaborators, or suspension or revocation of product license approvals;
- product seizure or detention, or refusal to permit the import or export of products; and
- injunctions or the imposition of civil or criminal penalties.

The FDA, USDA, or EMA s policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability, which would adversely affect our business.

If approved, any of our current or future products may cause or contribute to adverse medical events that we are required to report to regulatory authorities and, if we fail to do so, we could be subject to sanctions that would materially harm our business.

If we are successful in commercializing any of our current or future product candidates, at least certain regulatory authorities will require that we report certain information about adverse medical events if those products may have caused or contributed to those adverse events. The timing of our obligation to report would be triggered by the date we become aware of the adverse event as well as the nature of the event. We may fail to report adverse events we become aware of within the prescribed timeframe. We may also fail to appreciate that we have become aware of a reportable adverse event, especially if it is not reported to us as an adverse event or if it is an adverse event that is unexpected or removed in time from the use of our products. If we fail to comply with our reporting obligations, the regulatory authorities could take action including criminal prosecution, seizure of our products or delay in approval or clearance of future products.

Legislative or regulatory reforms with respect to pet therapeutics may make it more difficult and costly for us to obtain regulatory clearance or approval of any of our current or future product candidates and to produce, market,

and distribute our products after clearance or approval is obtained.

From time to time, legislation is drafted and introduced in the U.S. Congress or EU that could significantly change the statutory provisions governing the testing, regulatory clearance or approval, manufacture, and marketing of regulated products. In addition, FDA and USDA regulations and guidance are often revised or reinterpreted by the FDA and USDA in ways that may significantly affect our business and our products. Similar changes in laws or regulations can occur in other countries. Any new regulations or revisions or reinterpretations of existing regulations in the United States or in other countries may impose additional costs or lengthen review times of any of our current or future product candidates. We cannot determine what effect changes in regulations, statutes, legal interpretation or policies, when and if promulgated, enacted or adopted may have on our business in the future. Such changes could, among other things, require:

changes to manufacturing methods;

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recall, replacement, or discontinuance of certain products; and

additional record keeping.

Each of these would likely entail substantial time and cost and could materially harm our financial results. In addition, delays in receipt of or failure to receive regulatory clearances or approvals for any future products would harm our business, financial condition, and results of operations.

Certain of our product candidates currently in development may be classified as controlled substances, the manufacture, use, sale, importation, exportation, and distribution of which are subject to additional regulation by state, federal, and foreign law enforcement and other regulatory agencies.

Certain of our product candidates may be subject to regulation as controlled substances under the federal Controlled Substances Act of 1970, or CSA, and regulations of the U.S. Drug Enforcement Administration, or DEA. The DEA regulates controlled substances as Schedule I, II, III, IV or V substances. Schedule I substances by definition have no established medicinal use and may not be marketed or sold in the United States. An animal drug product may be listed as Schedule II, III, IV or V, with Schedule II substances considered to present the highest risk of abuse and Schedule V substances the lowest relative risk of abuse among such substances.

Various states also independently regulate controlled substances. Though state controlled substances laws often mirror federal law, because the states are separate jurisdictions, they may separately schedule drugs as well. While some states automatically schedule a drug when the DEA does so, in other states there must be rulemaking or a legislative action. State scheduling may delay commercial sale of any controlled substance drug product for which we obtain federal regulatory approval and adverse scheduling could impair the commercial attractiveness of such product. We would also be required to obtain separate state registrations in order to be able to obtain, handle and distribute controlled substances for target animal studies, and failure to meet applicable regulatory requirements could lead to enforcement and sanctions from the states in addition to those from the DEA or otherwise arising under federal law.

For any of our product candidates classified as controlled substances, we and our suppliers, manufacturers, contractors, customers and distributors will be required to obtain and maintain applicable registrations from state, federal and foreign law enforcement and regulatory agencies and comply with state, federal and foreign laws and regulations regarding the manufacture, use, sale, importation, exportation and distribution of controlled substances. There is a risk that DEA regulations may limit the supply of the compounds used in pivotal trials of our product candidates, and, in the future, the ability to produce and distribute our products in the volume needed to meet commercial demand.

Regulations associated with controlled substances govern manufacturing, labeling, packaging, testing, dispensing, production and procurement quotas, recordkeeping, reporting, handling, shipment and disposal. These regulations increase the personnel needs and the expense associated with development and commercialization of product candidates containing controlled substances. The DEA and some states conduct periodic inspections of registered establishments that handle controlled substances. Failure to obtain and maintain required registrations or comply with any applicable regulations could delay or preclude us from developing and commercializing our product candidates containing controlled substances and subject us to enforcement action. The DEA may seek civil penalties, refuse to renew necessary registrations or initiate proceedings to revoke those registrations. In some circumstances, violations could lead to criminal proceedings. Because of their restrictive nature, these regulations could limit commercialization of any of our product candidates that are classified as controlled substances.

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Risks Related to this Offering and Our Common Stock

The price of our common stock could be subject to volatility related or unrelated to our operations.

If a market for our common stock develops following this offering, the trading price of our common stock could be subject to wide fluctuations in response to various factors, some of which are beyond our control. These factors include those discussed previously in this Risk Factors section of this prospectus and others, such as:

- any delays in, or suspension or failure of, our current and future studies;
- announcements of regulatory approval or disapproval of any of our current or future product candidates or of regulatory actions affecting us or our industry;
- delays in the commercialization of our current or future product candidates;
- manufacturing and supply issues related to our development programs and commercialization of our current or future product candidates;
- quarterly variations in our results of operations or those of our competitors;
- changes in our earnings estimates or recommendations by securities analysts;
- announcements by us or our competitors of new product candidates, significant contracts, commercial relationships, acquisitions or capital commitments;
- announcements relating to future development or license agreements including termination of such agreements;
- adverse developments with respect to our intellectual property rights or those of our principal collaborators;
- commencement of litigation involving us or our competitors;
- any major changes in our board of directors or management;

new legislation in the United States relating to the prescription, sale, distribution or pricing of pet therapeutics;

product liability claims, other litigation or public concern about the safety of our product candidates or future products;

market conditions in the animal health industry, in general, or in the pet therapeutics sector, in particular, including performance of our competitors; and

general economic conditions in the United States and abroad.

In addition, the stock market, in general, or the market for stocks in our industry, in particular, may experience broad market fluctuations, which may adversely affect the market price or liquidity of our common stock. Any sudden decline in the market price of our common stock could trigger securities class-action lawsuits against us. If any of our stockholders were to bring such a lawsuit against us, we could incur substantial costs defending the lawsuit and the time and attention of our management would be diverted from our business and operations. We also could be subject to damages claims if we are found to be at fault in connection with a decline in our stock price.

No active market for our common stock exists or may develop, and you may not be able to resell your common stock at or above the initial public offering price.

Prior to this offering, there has been no public market for shares of our common stock. We and the representatives of the underwriters determined the initial public offering price of our common stock by arm s-length negotiations, and the initial public offering price does not necessarily reflect the price at which investors in

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the market will be willing to buy and sell our shares following this offering. If no active trading market for our common stock develops or is sustained following this offering, you may be unable to sell your shares when you wish to sell them or at a price that you consider attractive or satisfactory. The lack of an active market may also adversely affect our ability to raise capital by selling securities in the future, or impair our ability to in-license or acquire other product candidates, businesses or technologies using our shares as consideration.

Purchasers in this offering will experience immediate and substantial dilution in the book value of their investment.

The initial public offering price of our common stock is substantially higher than the pro forma net tangible book value per share of our common stock before giving effect to this offering. Accordingly, if you purchase our common stock in this offering, you will incur immediate dilution of approximately $3.12 per share, representing the difference between the initial public offering price of $7.00 per share and our pro forma as adjusted net tangible book value per share as of September 30, 2013. In addition, following this offering, purchasers in this offering will have contributed approximately 81.3% of the total gross consideration paid by stockholders to us to purchase shares of our common stock through September 30, 2013, but will own only approximately 49.8% of the shares of common stock outstanding immediately after this offering. Furthermore, if the underwriters exercise their option to purchase additional shares of our common stock or our outstanding stock options are exercised, you will experience further dilution. For a further description of the dilution that you will experience immediately after this offering, see the section in this prospectus entitled Dilution.

If securities or industry analysts do not publish research or reports about our company, or if they issue an adverse or misleading opinions regarding us or our stock, our stock price and trading volume could decline.

We do not currently have research coverage by securities and industry analysts, and if no significant coverage is initiated or maintained following this offering, the market price for our stock may be adversely affected. Our stock price also may decline if any analyst who covers us issues an adverse or erroneous opinion regarding us, our business model, our intellectual property or our stock performance, or if our target animal studies and operating results fail to meet analysts expectations. If one or more analysts cease coverage of us or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our stock price or trading volume to decline and possibly adversely affect our ability to engage in future financings.

Our principal stockholders and management own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

Upon the closing of this offering, based on shares outstanding as of November 11, 2013, our executive officers, directors, holders of 5% or more of our capital stock and their respective affiliates will beneficially own in the aggregate approximately 24.7% of our outstanding shares of common stock. As a result of their stock ownership, these stockholders may have the ability to influence our management and policies, and will be able to significantly affect the outcome of matters requiring stockholder approval such as elections of directors, amendments of our organizational documents or approvals of any merger, sale of assets or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that you may feel are in your best interest as one of our stockholders.

Sales of a substantial number of shares of our common stock in the public market could cause our stock price to fall.

If our existing stockholders sell, or indicate an intention to sell, substantial amounts of our common stock in the public market after the expiration or termination of the lock-up and other legal restrictions on resale discussed in this prospectus, the trading price of our common stock could decline. Based upon the number of shares outstanding as of September 30, 2013, upon the closing of this offering, we will have outstanding a total of 15,047,881 shares of common stock. Of these shares, approximately 7,500,000 shares, plus any shares sold upon exercise of the underwriters option to purchase additional shares of our common stock, will be freely tradable in the public market immediately following this offering.

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The lock-up agreements pertaining to this offering will expire 180 days from the date of this prospectus. After the lock-up agreements expire, up to an additional 7,547,881 shares of common stock will be eligible for sale in the public market, 3,720,506 of which shares are held by directors, executive officers and other affiliates and will be subject to vesting schedules or volume limitations under Rule 144 under the Securities Act. The representatives of the underwriters may, in their sole, joint discretion, permit our officers, directors and other stockholders who are subject to lock-up agreements to sell shares even prior to the expiration of the lock-up agreements. In addition, shares of common stock that are subject to outstanding options under our 2012 equity incentive plan will become eligible for sale in the public market to the extent permitted by the provisions of various vesting schedules, the lock-up agreements and Rule 144 and Rule 701 under the Securities Act. The sale or possible sale of these additional shares may adversely affect the trading price of our common stock.

We will have broad discretion to use the net proceeds of this offering, and may use them in ways that do not enhance our operating results or the market price of our common stock.

Our management will have broad discretion regarding the use of proceeds of this offering, and we could spend the net proceeds 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 of this offering for the research and development of our product candidates, manufacturing, marketing, distribution and commercialization of any approved products and other general corporate and working capital purposes. We may also use a portion of the net proceeds to acquire additional product candidates or complementary assets or businesses; however, we currently have no agreements or commitments to complete any such transaction. Our use of these proceeds may differ substantially from our current plans. If we do not invest or apply the proceeds of this offering in ways that improve our operating results or our prospects, our stock price could decline.

We have identified material weaknesses in our internal control over financial reporting. If we fail to remedy these material weaknesses or otherwise achieve and maintain effective internal control over financial reporting, we may not be able to accurately report our operating results or prevent fraud and, as a result, our business could be harmed and current and potential stockholders could lose confidence in us, which could cause our stock price to fall.

Prior to this offering, we were not subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and had limited accounting personnel and other resources with which to address our internal controls and procedures. As a public reporting company, we will be required, among other obligations, to maintain effective internal control over financial reporting suitable to prepare our publicly reported financial statements in a timely and accurate manner. In connection with this offering and in preparation and audit of our financial statements included in this prospectus, we identified two material weaknesses in our internal control over financial reporting. A material weakness is defined as a control deficiency, or combination of control deficiencies, that adversely affects an entity s ability to initiate, authorize, record, process or report financial data reliably in accordance with accounting principles generally accepted in the United States, or GAAP, such that there is more than a remote likelihood that a material misstatement of the entity s financial statements will not be prevented or detected by the entity s internal control over financial reporting. The material weaknesses we have identified relate to our accounting for complex equity transactions and our lack of segregation of duties within the accounting function due to a limited number of personnel. Although we have implemented steps aimed at addressing these material weaknesses, including the recent hiring of a Chief Financial Officer and additional employees and accounting consultants, these steps may not remedy the material weaknesses. Our management and independent registered public accounting firm did not perform an evaluation of our internal control over financial reporting during any period in accordance with the provisions of the Sarbanes-Oxley Act of 2002, or Sarbanes-Oxley Act. Going forward, as a public company, absent an available exemption, our management will be required to comply with Section 404(a) of the Sarbanes-Oxley Act in

the course of preparing our financial statements; however, so long as we remain an emerging growth company, we will not be required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act. Had we and our independent registered public accounting firm performed an evaluation of our internal control over financial reporting in accordance with the provisions of the Sarbanes-Oxley Act, additional control

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deficiencies amounting to material weaknesses may have been identified. We cannot be certain as to when we will be able to implement the requirements of Section 404 of the Sarbanes-Oxley Act. If we fail to implement the requirements of Section 404 in a timely manner, we might be subject to sanctions or investigation by regulatory agencies such as the SEC. In addition, failure to comply with Section 404 or the report by us of a material weakness may cause investors to lose confidence in our financial statements, and the trading price of our common stock may decline. If we fail to remedy any material weakness, our financial statements may be inaccurate, our access to the capital markets may be restricted and the trading price of our ordinary shares may suffer.

Provisions in our charter documents and under Delaware law could discourage a takeover that stockholders may consider favorable and may lead to entrenchment of management.

Our amended and restated certificate of incorporation and amended and restated bylaws that will be in effect upon the closing of this offering will contain provisions that could delay or prevent changes in control or changes in our management without the consent of our board of directors. We expect these provisions to include the following:

- a classified board of directors with three-year staggered terms, which may delay the ability of stockholders to change the membership of a majority of our board of directors;
- no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- the exclusive right of our board of directors to elect a director to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;
- the ability of our board of directors to authorize the issuance of shares of preferred stock and to determine the terms of those shares, including preferences and voting rights, without stockholder approval, which could adversely affect the rights of our common stockholders or be used to deter a possible acquisition of our company;
- the ability of our board of directors to alter our bylaws without obtaining stockholder approval;
- the required approval of the holders of at least two-thirds of the shares entitled to vote at an election of directors to adopt, amend or repeal our bylaws or repeal the provisions of our amended and restated certificate of incorporation regarding the election and removal of directors;
- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;

the requirement that a special meeting of stockholders may be called only by the chairman of the board of directors, the chief executive officer, the president or the board of directors, which may delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors; and

advance notice procedures that stockholders must comply with in order to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders meeting, which may 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 us.

These provisions could inhibit or prevent possible transactions that some stockholders may consider attractive.

We are also subject to the anti-takeover provisions contained in Section 203 of the Delaware General Corporation Law. Under Section 203, a corporation generally may not engage in a business combination with any holder of 15% or more of its capital stock unless the holder has held the stock for three years or, among other exceptions, the board of directors has approved the transaction.

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Our amended and restated by-laws designate the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders ability to obtain a favorable judicial forum for disputes with us or our directors, officers or other employees.

Our amended and restated by-laws provide that, unless we consent in writing to an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee to us or our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, or (iv) any action asserting a claim that is governed by the internal affairs doctrine. Any person purchasing or otherwise acquiring any interest in any shares of our capital stock shall be deemed to have notice of and to have consented to this provision of our amended and restated by-laws. This choice-of-forum provision may limit our stockholders ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits. Alternatively, if a court were to find this provision of our amended and restated by-laws inapplicable or unenforceable with respect to one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business and financial condition.

We do not intend to pay dividends on our common stock, and your ability to achieve a return on your investment will depend on appreciation in the market price of our common stock.

As described in the section entitled Dividend Policy in this prospectus, we currently intend to invest our future earnings, if any, to fund our growth and not to pay any cash dividends on our common stock. Since we do not intend to pay dividends, your ability to receive a return on your investment will depend on any future appreciation in the market price of our common stock. There is no assurance that our common stock will appreciate in price.

As a newly public company, we will incur significant additional costs, and our management will be required to devote substantial management time and attention to our public reporting obligations.

As a privately-held company, we have not been required to comply with public reporting, corporate governance and financial accounting practices and policies required of a publicly-traded company. As a publicly-traded company, we will incur significant additional legal, accounting and other expenses compared to historical levels. In addition, new and changing laws, regulations and standards relating to corporate governance and public disclosure, including the Dodd-Frank Wall Street Reform and Consumer Protection Act and the rules and regulations thereunder, as well as under the Sarbanes-Oxley Act, the JOBS Act and the rules and regulations of the U.S. Securities and Exchange Commission, or SEC, and The NASDAQ Stock Market, may result in an increase in our costs and the time that our board of directors and management must devote to our compliance with these rules and regulations. We expect these rules and regulations to substantially increase our legal and financial compliance costs and to divert management time and attention from our product development and other business activities.

We are an emerging growth company and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and we may take advantage of certain exemptions and relief from various reporting requirements that are applicable to other public companies that are not emerging growth companies. In particular, while we are an emerging growth company (i) we will not be required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act, (ii) we will be exempt from any rules that may be adopted by the Public Company

Accounting Oversight Board requiring mandatory audit firm rotations or a supplement to the auditor s report on financial statements, (iii) we will be subject to reduced disclosure

obligations regarding executive compensation in our periodic reports and proxy statements and (iv) we will not be required to hold nonbinding advisory votes on executive compensation or stockholder approval of any golden parachute payments not previously approved. In addition, the JOBS Act provides that an emerging growth company can delay its adoption of any new or revised accounting standards, but we have irrevocably elected not to avail ourselves of this exemption and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

We may remain an emerging growth company until as late as December 31, 2018 (the fiscal year-end following the fifth anniversary of the completion of this initial public offering), though we may cease to be an emerging growth company earlier under certain circumstances, including (i) if the market value of our common stock that is held by non-affiliates exceeds $700 million as of any June 30, in which case we would cease to be an emerging growth company as of the following December 31, or (ii) if our gross revenue exceeds $1 billion in any fiscal year.

The exact implications of the JOBS Act are still subject to interpretations and guidance by the SEC and other regulatory agencies, and we cannot assure you that we will be able to take advantage of all of the benefits of the JOBS Act. In addition, investors may find our common stock less attractive if we rely on the exemptions and relief granted by the JOBS Act. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may decline and/or become more volatile.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. All statements other than statements of historical facts contained in this prospectus, including statements regarding our future results of operations and financial position, business strategy, prospective products, product approvals, research and development costs, timing and likelihood of success, plans and objectives of management for future operations, and future results of current and anticipated products are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as may, will, should, expect, plan, a anticipate, could, intend, target, project, contemplate, believe, estimate, predict, potential or con of these terms or other similar expressions. The forward-looking statements in this prospectus are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this prospectus and are subject to a number of risks, uncertainties and assumptions described under the sections in this prospectus entitled Risk Factors and Management s Discussion and Analysis of Financial Condition and Results of Operations and elsewhere in this prospectus. Forward-looking statements are subject to inherent risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Moreover, we operate in a dynamic industry and economy. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties that we may face. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

INDUSTRY DATA

Unless otherwise indicated, information contained in this prospectus concerning our industry and the markets in which we operate, including our general expectations and market position, market opportunity and market share, is based on information from our own management estimates and research, as well as from industry and general publications and research, surveys and studies conducted by third parties. Management estimates are derived from publicly available information, our knowledge of our industry and assumptions based on such information and knowledge, which we believe to be reasonable. In addition, assumptions and estimates of our and our industry s future performance are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in Risk Factors. These and other factors could cause our future performance to differ materially from our assumptions and estimates. See Special Note Regarding Forward-Looking Statements.

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USE OF PROCEEDS

We estimate that the net proceeds to us from the sale of the common stock that we are offering will be approximately $47.8 million (or $55.1 million if the underwriters exercise their option to purchase additional shares in full), after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

We intend to use the net proceeds of this offering for the research and development of our product candidates, to establish our commercial infrastructure within the United States and for other general corporate and working capital purposes. More specifically, we expect to use:

- approximately $3 million to $5 million each to complete the clinical development of:
  - CereKin for the treatment of osteoarthritis pain in dogs;
  - AtoKin for the treatment of atopic dermatitis in dogs; and
  - SentiKin for the treatment of post-operative pain in dogs; and
- the balance, together with our existing cash and cash equivalents, to establish our commercial infrastructure within the United States once one or more of our product candidates obtains marketing approval and for other general corporate and working capital purposes.

We may also use a portion of the net proceeds to acquire additional product candidates or complementary assets or businesses; however, we currently have no agreements or commitments to complete any such transaction.

Pending use of the proceeds as described above, we intend to invest the net proceeds of this offering in short-term, interest-bearing, investment-grade securities or certificates of deposit.

Our management will have broad discretion regarding the use of proceeds of this offering, and investors will be relying on the judgment of our management regarding the application of the proceeds from this offering. We may change the use of these proceeds from those described above as a result of various factors such as competitive developments, the results of our early clinical development and commercialization efforts, acquisition and investment opportunities and other factors.

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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 related to dividend policy will be made at the discretion of our board of directors after considering our financial condition, results of operations, capital requirements, business prospects and other factors the board of directors deems relevant, and subject to the restrictions contained in our current or future financing instruments.

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CAPITALIZATION

The following table sets forth our cash and cash equivalents and capitalization as of September 30, 2013 as follows:

- on an actual basis;
- on a pro forma basis to reflect the automatic conversion of all shares of our convertible preferred stock outstanding as of September 30, 2013 into 4,535,206 shares of common stock immediately upon the effectiveness of the registration statement of which this prospectus is a part; and
- on a pro forma as adjusted basis to give further effect to our issuance and sale of 7,500,000 shares of common stock in this offering at the initial public offering price of $7.00 per share, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

You should read this information in conjunction with our financial statements and the related notes appearing at the end of this prospectus and the section in this prospectus entitled Management s Discussion and Analysis of Financial Condition and Results of Operations and other financial information contained in this prospectus.

	As of September 30, 2013		
	Actual	Pro Forma	Pro Forma As Adjusted
Cash and cash equivalents	$ 10,991,682	$ 10,991,682	$ 58,764,770
Convertible preferred stock (Series AA, A-1 and A-1A), par value $0.0001 per share; 5,015,000 shares authorized, 4,535,206 shares issued and outstanding, actual; no shares issued and outstanding, pro forma and pro forma as adjusted	$ 12,083,952	$	$
Common stock, par value $0.0001 per share; 50,000,000 shares authorized, 3,012,675 shares issued and outstanding, actual; 7,547,881 shares issued and outstanding, pro forma; 15,047,881 shares issued and outstanding, pro forma as adjusted	301	755	1,505
Preferred stock, par value $0.0001 per share; 9,985,000 shares authorized, no shares issued and outstanding, actual and pro forma; 10,000,000 shares authorized, no shares issued and outstanding pro forma as adjusted			
Additional paid-in capital	423,292	12,506,790	60,279,128
Deficit accumulated during the development stage	(1,949,281)	(1,949,281)	(1,949,281)
Total stockholders equity (deficit)	(1,525,688)	10,558,264	58,331,352
Total capitalization	$ 10,558,264	$ 10,558,264	$ 58,331,352

The table above does not reflect:

1,165,423 shares of common stock issuable upon exercise of stock options outstanding as of September 30, 2013 at a weighted-average exercise price of $0.55 per share; and

2,827,102 shares of common stock reserved as of September 30, 2013 for future issuance under our 2012 equity incentive plan.

Our board of directors has indicated its intention to grant options to purchase an aggregate of 45,000 shares of our common stock to certain of our directors and employees concurrent with the pricing of this offering with an exercise price equal to the initial public offering price.

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DILUTION

If you invest in our common stock in this offering, your ownership interest will be immediately diluted to the extent of the difference between the initial public offering price per share and the pro forma as adjusted net tangible book value per share of our common stock after this offering.

As of September 30, 2013, we had a historical net tangible book value (deficit) of $(1.5) million, or $(0.51) per share of common stock. Our historical net tangible book value (deficit) per share represents total tangible assets less total liabilities and convertible preferred stock divided by the number of shares of common stock outstanding at September 30, 2013.

Our pro forma net tangible book value as of September 30, 2013 was $10.6 million, or $1.40 per share of our common stock, after giving effect to the automatic conversion of all outstanding shares of our convertible preferred stock into 4,535,206 shares of common stock immediately upon the effectiveness of the registration statement of which this prospectus is a part.

After giving further effect to the sale of 7,500,000 shares of common stock in this offering at the initial public offering price of $7.00 per share, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of September 30, 2013 would have been approximately $58.3 million, or approximately $3.88 per share. This amount represents an immediate increase in pro forma net tangible book value of $2.48 per share to our existing stockholders and an immediate dilution in pro forma net tangible book value of approximately $3.12 per share to new investors purchasing shares of common stock in this offering.

Dilution per share to new investors is determined by subtracting pro forma as adjusted net tangible book value per share after this offering from the initial public offering price per share paid by new investors. The following table illustrates this dilution:

Initial public offering price per share		$ 7.00
Historical net tangible book value (deficit) per share as of September 30, 2013	$ (0.51)	
Increase per share attributable to the conversion of our convertible preferred stock	1.91	
Pro forma net tangible book value per share as of September 30, 2013	1.40	
Increase in pro forma net tangible book value per share attributable to this offering	2.48	
Pro forma as adjusted net tangible book value per share after this offering		3.88
Dilution per share to new investors		$ 3.12

If the underwriters exercise their option to purchase additional shares of our common stock in full in this offering, the pro forma as adjusted net tangible book value after the offering would be $4.06 per share, the increase in pro forma as adjusted net tangible book value per share to existing stockholders would be $2.66 per share and the dilution per share to new investors would be $2.94 per share.

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The following table summarizes on the pro forma as adjusted basis described above, as of September 30, 2013, the differences between the number of shares purchased from us, the total consideration paid to us in cash and the average price per share that existing stockholders and new investors in this offering paid. The calculation below is based on the initial public offering price of $7.00 per share, before deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
Existing stockholders	7,547,881	50.2%	$ 12,099,794	18.7%	$ 1.60
New investors	7,500,000	49.8%	$ 52,500,000	81.3%	$ 7.00
Total	15,047,881	100%	$ 64,599,794	100%	$ 4.29

The foregoing tables and calculations exclude:

- 1,165,423 shares of common stock issuable upon exercise of stock options outstanding as of September 30, 2013 at a weighted-average exercise price of $0.55 per share; and
- 2,827,102 shares of common stock reserved for issuance as of September 30, 2013 under our 2012 equity incentive plan.

Our board of directors has indicated its intention to grant options to purchase an aggregate of 45,000 shares of our common stock to certain of our directors and employees concurrent with the pricing of this offering with an exercise price equal to the initial public offering price.

To the extent any of these outstanding options is exercised, there will be further dilution to new investors. If all of such outstanding options had been exercised as of September 30, 2013, the pro forma as adjusted net tangible book value per share after this offering would be $3.64, and total dilution per share to new investors would be $3.36.

If the underwriters exercise their option to purchase additional shares of our common stock in full:

- the percentage of shares of common stock held by existing stockholders will decrease to approximately 46.7% of the total number of shares of our common stock outstanding after this offering; and
- the number of shares held by new investors will increase to 8,625,000, or approximately 53.3% of the total number of shares of our common stock outstanding after this offering.

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SELECTED FINANCIAL DATA

You should read the following selected financial data in conjunction with our financial statements and the related notes thereto appearing elsewhere in this prospectus and in the section of this prospectus entitled Management s Discussion and Analysis of Financial Condition and Results of Operations.

We have derived the statements of operations and comprehensive loss data for the period from September 25, 2012 (inception) through December 31, 2012 and the balance sheet data as of December 31, 2012 from our audited financial statements appearing elsewhere in this prospectus. The statement of operations and comprehensive loss data for the nine months ended September 30, 2013 and for the cumulative period from September 25, 2012 (inception) through September 30, 2013 and the balance sheet data as of September 30, 2013 have been derived from our unaudited financial statements appearing elsewhere in this prospectus. The unaudited interim financial information has been prepared on the same basis as our audited financial statements and, in our opinion, reflects all adjustments, consisting only of normal and recurring adjustments, that we consider necessary for a fair presentation of our financial position as of September 30, 2013 and operating results for the period ended September 30, 2013. The historical results are not necessarily indicative of the results to be expected for any future periods and the results for the nine months ended September 30, 2013 should not be considered indicative of results expected for the full fiscal year 2013. The results of operations for the period from September 25, 2012 (inception) through September 30, 2012 are not presented as they were insignificant.

	For The Period From September 25, 2012 (Inception) Through December 31, 2012	Nine Months Ended September 30, 2013 (unaudited)	Cumulative Period From September 25, 2012 (Inception) Through September 30, 2013 (unaudited)
Statement of Operations and Comprehensive Loss Data:			
Operating expenses:			
Research and development	$ 74,772	$ 1,394,547	$ 1,469,319
General and administrative	44,864	437,737	482,601
Total operating expenses	119,636	1,832,284	1,951,920
Loss from operations	(119,636)	(1,832,284)	(1,951,920)
Other income (expense):			
Interest income	25	2,662	2,687
Interest expense		(48)	(48)
Total other income, net	25	2,614	2,639
Net loss and comprehensive loss	$ (119,611)	$ (1,829,670)	$ (1,949,281)

Net loss per share attributable to common stockholders, basic and diluted[1]	$ (0.06)	$ (0.61)
Weighted-average common shares outstanding, basic and diluted[1]	2,112,520	3,001,286
Pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited)[1]	$ (0.04)	$ (0.39)
Weighted-average shares used in computing pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited)[1]	2,718,082	4,713,320

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	As of December 31, 2012	As of September 30, 2013 (unaudited)
Balance Sheet Data:		
Cash and cash equivalents	$ 937,516	$ 10,991,682
Total assets	938,020	11,364,946
Total liabilities	70,281	806,682
Convertible preferred stock	987,050	12,083,952
Deficit accumulated during the development stage	(119,611)	(1,949,281)
Total liabilities, convertible preferred stock and stockholders equity (deficit)	938,020	11,364,946

(1) See Note 11 of the notes to financial statements included elsewhere in this prospectus for an explanation of the method used to calculate the historical and pro forma basic and diluted net loss per share attributable to common stockholders and the number of shares used in the computation of the per share amounts.

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MANAGEMENT S DISCUSSION

AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and the related notes and other financial information included elsewhere in this prospectus. Some of the information contained in this discussion and analysis or set forth elsewhere in this prospectus, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. You should review the Risk Factors section of this prospectus for a discussion of important factors that could cause our actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We are a development stage biopharmaceutical company focused on saving and improving the lives of pets. Our mission is to bring to our pets the same kinds of safe and effective medicines that our human family members enjoy. Our core strategy is to identify compounds and targets that have already demonstrated safety and efficacy in humans and to develop therapeutics based on these validated compounds and targets for pets, primarily dogs, cats and horses. We believe this approach will lead to shorter development times and higher approval rates than pursuing new, non-validated compounds and targets. We have three product candidates that are in, or will shortly enter, pivotal field efficacy trials, or pivotal trials, and expect approval of one or more of these product candidates in 2015. In addition, we have seven other product candidates, including several biologics, in various stages of development. We believe there are significant unmet medical needs for pets, and that the pet therapeutics segment of the animal health industry is likely to grow substantially as new therapeutics are identified, developed and marketed specifically for pets.

Our lead product candidates are CereKin for the treatment of osteoarthritis pain and inflammation in dogs, AtoKin for the treatment of atopic dermatitis in dogs and SentiKin for the treatment of post-operative pain in dogs. All of these product candidates, if approved, would be first-in-class drugs in the pet therapeutic market.

In August 2013, we initiated the pivotal trial for CereKin, and we expect to initiate the pivotal trials for AtoKin and SentiKin by early 2014. We have received from the U.S. Food and Drug Administration, or FDA, Protocol Concurrences for CereKin and AtoKin, and expect to receive a similar Protocol Concurrence for SentiKin. A Protocol Concurrence in animal drug development is analogous to a Special Protocol Assessment in human drug development, and means that the FDA fundamentally agrees with the design, execution and analyses proposed in a protocol, and will not later alter its perspectives on these issues unless public or animal health concerns appear that were not recognized at the time of protocol assessment. Assuming positive results from these trials, we intend to submit new animal drug applications, or NADAs, for marketing approval of CereKin, AtoKin, and SentiKin in the United States starting in 2014, and anticipate potential marketing approvals and product launches in the second half of 2015. If approved in the United States, we will potentially make similar regulatory filings for these products with the European Medicines Agency, or EMA.

We are currently developing product candidates for ten additional indications, with the potential to launch two or more products annually for several years starting in the second half of 2015. We plan to commercialize our products in the United States through a direct sales force complemented by selected distributor relationships, and in the EU through distributors and other third parties.

We are a development-stage company with no products approved for marketing and sale, and we have not generated any revenue. We have incurred significant net losses since our inception. We incurred net losses of $119,611 for the

period from September 25, 2012 (inception) through December 31, 2012 and $1,829,670 for the nine months ended September 30, 2013. These losses have resulted principally from costs incurred in connection with investigating and developing our product candidates, research and development activities and general and administrative costs associated with our operations. As of September 30, 2013, we had a deficit accumulated during the development stage of $1,949,281 and cash and cash equivalents of $10,991,682.

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For the foreseeable future, we expect to continue to incur losses, which will increase significantly from historical levels as we expand our product development activities, seek regulatory approvals for our product candidates and begin to commercialize them if they are approved by the Center for Veterinary Medicine branch of the U.S. Food and Drug Administration, or FDA, the U.S. Department of Agriculture, or USDA, or the European Medicines Agency, or EMA. If we are required to further fund our operations, we expect to do so through public or private equity offerings, debt financings, corporate collaborations and licensing arrangements. We cannot assure you that such funds will be available on terms favorable to us, if at all. Arrangements with collaborators or others may require us to relinquish rights to certain of our technologies or product candidates. In addition, we may never successfully complete development of, obtain adequate patent protection for, obtain necessary regulatory approval, or achieve commercial viability for any product candidate. If we are not able to raise additional capital on terms acceptable to us, or at all, as and when needed, we may be required to curtail our operations, and we may be unable to continue as a going concern.

Revenue

We do not have any products approved for sale, have not generated any revenue from product sales since our inception and do not expect to generate any material revenue from the sale of products in the near future. If our development efforts result in clinical success and regulatory approval or collaboration agreements with third parties for any of our product candidates, we may generate revenue from those product candidates.

Operating Expenses

The majority of our operating expenses to date have been for the research and development activities related to our lead product candidates.

Research and Development Expense

Research and development expense is expensed as incurred and consists primarily of wages, stock-based compensation and employee benefits for all employees engaged in scientific research and development functions, and other operational costs related to our research and development activities, including costs of studies, contract manufacturers and API service providers, regulatory, professional and consulting fees, and travel costs.

We are currently pursuing ten product candidates for 13 indications. We typically use our employee and infrastructure resources across multiple development programs. We track outsourced development costs by development compound but do not allocate personnel or other internal costs related to development to specific programs or development compounds.

General and Administrative Expense

General and administrative expense consists primarily of personnel costs, including salaries, related benefits and stock-based compensation for employees, consultants and directors. General and administrative expenses also include rent and other facilities costs and professional and consulting fees for legal, accounting, tax services and other general business services.

Income Taxes

As of December 31, 2012, we had net operating loss carryforwards for federal and state income tax purposes of $89,511 which will begin to expire in fiscal year 2032. Our management has evaluated the factors bearing upon the realizability of our deferred tax assets, which are comprised principally of net operating loss carryforwards. Our

management concluded that, due to the uncertainty of realizing any tax benefits as of December 31, 2012, a valuation allowance was necessary to fully offset our deferred tax assets.

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Critical Accounting Policies and Significant Judgments and Estimates

Our management s discussion and analysis of financial condition and results of operations is based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States, or U.S. GAAP. The preparation of our financial statements and related disclosures requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, and revenue, costs and expenses and related disclosures during the reporting periods. On an ongoing basis, we evaluate our estimates and judgments, including those described below. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are more fully described in Note 2 of the notes to our financial statements appearing elsewhere in this prospectus, we believe that the estimates and assumptions involved in the following accounting policies may have the greatest potential impact on our financial statements.

JOBS Act

On April 5, 2012, the Jumpstart Our Business Startups Act, or the JOBS Act, was signed into law. The JOBS Act contains provisions that, among other things, reduce certain reporting requirements for an emerging growth company. As an emerging growth company we are electing not to take advantage of the extended transition period afforded by the JOBS Act for the implementation of new or revised accounting standards, 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 non-emerging growth companies. Section 107 of the JOBS Act provides that our decision not to take advantage of the extended transition period is irrevocable.

In addition, we are in the process of evaluating the benefits of relying on the other exemptions and reduced reporting requirements provided by the JOBS Act. Subject to certain conditions set forth in the JOBS Act, if as an emerging growth company we choose to rely on such exemptions, we may not be required to, among other things, (i) provide an auditor s attestation report on our system of internal controls over financial reporting pursuant to Section 404, and (ii) comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor s report providing additional information about the audit and the financial statements (auditor discussion and analysis). These exemptions will apply for a period of five years following the completion of our initial public offering or until we no longer meet the requirements of being an emerging growth company, whichever is earlier.

Research and Development

As part of the process of preparing our financial statements, we are required to estimate accrued research and development expenses. Examples of estimated accrued expenses include fees paid to vendors and clinical sites in connection with our pivotal studies, to CROs in connection with our toxicology studies, and to contract manufacturers in connection with the production of API and formulated drug.

We review new and open contracts and communicate with applicable internal and vendor personnel to identify services that have been performed on our behalf and estimate the level of service performed and the associated costs incurred for the service when we have not yet been invoiced or otherwise notified of the actual cost for accrued expenses. The majority of our service providers invoice us monthly in arrears for services performed or as milestones are achieved in relation to our contract manufacturers. We make estimates of our accrued expenses as of each balance

sheet date.

We base our accrued expenses related to pivotal studies on our estimates of the services received and efforts expended pursuant to contracts with vendors, our internal resources, and payments to clinical sites based on enrollment projections. The financial terms of the vendor agreements are subject to negotiation, vary from

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contract to contract and may result in uneven payment flows. Payments under some of these contracts depend on factors such as the successful enrollment of animals and the completion of development milestones. We estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from our estimate, we adjust the related expense accrual accordingly on a prospective basis. If we do not identify costs that have been incurred or if we underestimate or overestimate the level of services performed or the costs of these services, our actual expenses could differ from our estimates. To date, we have not made any material adjustments to our estimates of accrued research and development expenses or the level of services performed in any reporting period presented.

Stock-Based Compensation

We measure stock-based awards granted to employees and directors at fair value on the date of grant and recognize the corresponding compensation expense of the awards, net of estimated forfeitures, over the requisite service periods, which correspond to the vesting periods of the awards. Generally, we issue stock-based awards with only service-based vesting conditions, and record compensation expense for these awards using the straight-line method. Our intention is to grant stock-based awards with exercise prices equivalent to the fair value of our common stock as of the date of grant.

We account for all stock-based awards issued to non-employees based on the fair value of the award on each measurement date. Stock-based awards granted to non-employees are subject to revaluation at each reporting date over their vesting terms or until approved by our board of directors and settled. As a result, the charge to operations for non-employee awards with vesting conditions or awards which have not been approved and settled is affected each reporting period by changes in the fair value of our common stock.

The fair value of each stock-based award is estimated using the Black-Scholes option-pricing model. At the time of our historical option grants, we were a private company and lacked company-specific historical and implied stock price volatility information. Therefore, we estimated our expected stock price volatility based on the historical volatility of our publicly-traded peer companies and expect to continue to do so until such time as we have adequate historical data regarding the volatility of our common stock price. The expected terms of our awards have been determined utilizing the simplified method, since our historical experience for option grants is not relevant to our expectations for recent grants. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. Expected dividend yield is zero, based on the fact that we have never paid cash dividends and do not expect to pay any cash dividends in the foreseeable future. The assumptions we used to determine the fair value of stock-based compensation in each period were as follows:

	Period from September 25, 2012 (inception) through December 31, 2012	Nine Months Ended September 30, 2013
Risk-free interest rate	0.62% - 0.72%	0.62% - 2.75%
Expected term (in years)	10.0	5.0-10.0
Expected volatility	90%	80%-90%
Expected dividend yield		

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The fair value of our common stock underlying stock-based awards has historically been determined by our board of directors, with assistance from management, based upon information available at the time of grant. The intention has been that all awards granted are exercisable at a price per share not less than the per share fair value of our common stock underlying those awards on the date of grant. Given the absence of a public trading market for our common stock, and in accordance with the American Institute of Certified Public Accountants Practice Aid, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*, our board of directors has exercised reasonable judgment and considered numerous objective and subjective factors to determine the best estimate of the fair value of our common stock at each grant date. These factors included:

- contemporaneous or retrospective third-party valuations of our company and our securities;
- historical operating and financial performance;
- our stage of development and the material risks related to our business and industry;
- current business conditions and projections;
- risks inherent to the development of our products;
- the progress of our research and development programs, including the status of clinical studies for our products;
- achievement of enterprise milestones;
- our financial condition, including cash on hand;
- our need for future financing to fund our research and development efforts and the commercialization of our product candidates;
- the composition of, and changes to, our management team and board of directors;
- the rights and preferences of our Series AA, Series A-1 and Series A-1A convertible preferred stock relative to our common stock;
- the lack of marketability of our common stock;

an analysis of mergers and acquisitions, initial public offerings and the market performance of similar companies in the animal health and biotechnology industry sectors;

the likelihood of achieving a discrete liquidity event, such as a sale or merger, or initial public offering, given prevailing market conditions; and

external market and economic conditions and other trends and conditions affecting the pharmaceutical, animal health and biotechnology industry sectors.

The following table summarizes stock options granted from our inception through November 11, 2013:

	Number of Common Shares Subject to Options Granted	Per Share Exercise Price of Options	Reassessed Fair Value of Common Stock[1]	Intrinsic Value of Common Share at Grant Date
February 4, 2013	176,525	$ 0.32	$ 0.32	
February 4, 2013	400,000	$ 0.36	$ 0.32	
May 9, 2013	154,793	$ 0.32	$ 0.32	
August 29, 2013	156,488	$ 0.90[2]	$ 2.27	$ 1.37
August 29, 2013	256,092	$ 1.37[3]	$ 2.27	$ 0.90
September 12, 2013	29,000	$ 1.37	$ 2.27	$ 0.90
November 11, 2013	183,241	$ 3.83	$ 3.83	

(1) In connection with the preparation of our financial statements for the period from September 25, 2012 (inception) through December 31, 2012 and for the nine months ended September 30, 2013 and in preparing for our initial public offering, we reexamined the valuations of our common stock as of each grant date in

2013 due to the acceleration of the timeframe to a potential liquidity event. In connection with our reexamination, we obtained a retrospective independent third-party valuation of our common stock to assist our board of directors in its reassessment.

(2) Reflects options granted to non-employee consultants.

(3) Reflects options granted to directors, officers and other employees at an exercise price of $0.90 per share based on an internal valuation performed by our board of directors. In preparation for the initial filing of the registration statement of which this prospectus is a part, we undertook a reassessment of our board of directors initial valuation, which resulted in a fair value determination of $1.37 per share. Given the grants had only recently been made, with the consent of each employee or director, we adjusted the exercise price of their options to $1.37 per share. The exercise price of options issued to consultants (i.e., those not subject to the provisions of Section 409A of the Internal Revenue Code) was not adjusted.

Based on the initial public offering price of $7.00 per share, the aggregate intrinsic value of stock-based awards outstanding as of November 11, 2013, was $7.8 million, of which $3.1 million related to vested stock-based awards and $4.7 million related to unvested stock-based awards.

The following discussion describes our board of directors analysis of the fair value of our common stock as of each grant date.

Stock-based Awards Granted on February 4, 2013 and May 9, 2013

On February 4, 2013 and May 9, 2013, our board of directors granted options to purchase 576,525 and 154,793 shares, respectively, of our common stock. These grants included an option to purchase 400,000 shares of our common stock granted to our President and Chief Executive Officer at an exercise price of $0.36 per share, which reflected 110% of the board of directors estimated fair value of our common stock. The remaining options were granted with an exercise price of $0.32 per share. In establishing this exercise price for the February 4, 2013 grants, our board of directors performed an internal valuation of the fair value of our common stock as of that date. In performing this valuation, our board of directors considered various traditional valuation techniques. After considering the current stage of our development and other factors including the fact that they were valuing a non-marketable common stock interest in a closely-held company, our board of directors determined that the Backsolve Method and the Asset Approach were likely to provide a reasonable indication of fair value.

The Backsolve Method derives the implied value for one type of equity security from a contemporaneous transaction involving another equity security. The February 4, 2013 valuation was based on the issuance price of the Series AA convertible preferred stock that we sold to investors in November 2012. Given that the sale of the Series AA convertible preferred stock had occurred within close proximity to the February 4, 2013 internal valuation and involved third-party investors, our board of directors believed it was reasonable to use that transaction in establishing the enterprise value of our company. Our board of directors also considered the Asset Approach for determining enterprise value. The Asset Approach considers the book value of equity, plus intangible value created through research and development efforts, as an indication of value. No intangible value was attributed to research and development efforts given our early stage of development and the fact that we had not yet initiated clinical trials or other significant development efforts and did not own any patents. Weightings of 60% and 40% were applied to the Backsolve Method and the Asset Approach, respectively, to determine our implied enterprise value.

Our board of directors then used the option pricing method, or OPM, to allocate the resulting enterprise value among our respective classes of capital stock to determine the fair value of our common stock. The OPM treats common stock and preferred stock as call options on the total equity value of a company, with exercise prices based on the value thresholds at which the allocation among the various holders of a company s securities changes. Under this method, the common stock has value only if the funds available for distribution to the

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stockholders exceed the value of the liquidation preference at the time of a liquidity event such as a merger, sale or initial public offering, or IPO, assuming the enterprise has funds available to make a liquidation preference meaningful and collectible by the holders of preferred stock. The common stock is modeled as a call option on the underlying equity value at a predetermined exercise price. In the model, the exercise price is based on a comparison with the total equity value, rather than, as in the case of a regular call option, a comparison with a per share stock price. The OPM uses the Black-Scholes option-pricing model to price the call option. This model defines the securities fair values as functions of the current fair value of a company and uses assumptions such as the anticipated timing of a potential liquidity event and the estimated volatility of the equity securities.

For purposes of the February 4, 2013 internal valuation, we allocated value to the respective classes of stock using the OPM assuming a weighted expected term to liquidity of five years based on then-current plans and estimates of our board of directors and management regarding a liquidity event, which assumed a high probability of failure. The volatility assumption was based on an analysis of guideline public companies historical equity volatility for a period of five years, which is commensurate with the term assumption. The guideline public companies used for comparison were selected by us based on the similarity of their industry, market capitalization and stage of development as compared to us. Based on this analysis, we utilized, a volatility assumption of 90%. The risk-free rate was estimated as the five-year U.S. Treasury yield. Since we are a private company and our common stock is illiquid, we applied a discount for lack of marketability of 33% to the common stock value. Based on these factors, our board of directors concluded that our common stock had a fair value of $0.32 per share as of February 4, 2013.

In connection with the May 9, 2013 grant of options, our board of directors reexamined its February 4, 2013 internal valuation. The board of directors noted that, although we had continued to make progress on the development of our potential product candidates, we had achieved no significant milestones since the February 4, 2013 internal valuation. Our board of directors also acknowledged the continued risk inherent in development of our product candidates, our expected need for additional financing and our financial position, including our limited available cash. Based on this analysis, our board of directors determined that no change had occurred in the fair value of our common stock since the February 4, 2013 internal valuation and that the estimated fair value of our common stock also was $0.32 per share as of May 9, 2013.

Stock-based Awards Granted on August 29, 2013 and September 12, 2013

On August 29, 2013 and September 12, 2013, our board of directors granted options to purchase an aggregate of 412,580 and 29,000 shares, respectively, of our common stock initially with an exercise price of $0.90 per share. In establishing this exercise price for the August 29, 2013 option grants, our board of directors performed an internal valuation of the fair value of our common stock as of that date. Based on this internal valuation, our board of directors determined that the estimated fair value of our common stock as of August 29, 2013 was $0.90 per share. Given the close proximity to the August 29, 2013 grant date and that no significant changes had occurred in the business since that date, our board of directors determined that the estimated fair value of our common stock as of September 12, 2013 also was $0.90 per share.

Subsequent to the completion of our internal valuation of the fair value of our common stock as of August 29, 2013 and the grant of the August 29, 2013 and September 12, 2013 stock options, our board of directors reconsidered the factors previously used to estimate the fair value of $0.90 per share and determined that a revised valuation should be conducted. In performing this revised valuation certain assumptions used in the initial valuation were changed including revising the volatility assumption from 44% to 70%. To assist in this revision of the August 29, 2013 valuation, our board of directors considered a third-party valuation in determining the value of our common stock as of that date.

In performing the August 29, 2013 revised valuation, the third party valuation considered various traditional valuation techniques and determined that the Backsolve Method was the most appropriate method to provide a reasonable indication of the implied enterprise value of our company.

For purposes of the Backsolve Method, our board of directors relied on the issuance price of the Series A-1 and Series A-1A convertible preferred stock that we sold to investors in June through August 2013 at a price of $3.17 per share. Given that the Series A-1 and Series A-1A financings included third-party investors, and given the proximity of the financings to the August 29, 2013 internal valuation, our board of directors believed it was reasonable to use the Series A-1 and Series A-1A financing transactions in establishing the enterprise value of our company.

For purposes of the August 29, 2013 revised valuation, we allocated value among our respective classes of stock using the OPM assuming a time to liquidity of one year based on then-current plans and estimates of our board of directors and management regarding a liquidity event. The decrease in the time to liquidity from five years in the February 4, 2013 valuation to the one year assumption used in our August 29, 2013 valuation was due to several factors that had changed during this timeframe. These factors included better than anticipated progress in our stage of development, improving capital markets, and consideration by our board of directors of accelerating the timeframe for an initial public offering. As a result our board of directors concluded that it was appropriate to use an estimate of a time to liquidity of one year for purposes of the August 29, 2013 revised valuation.

The volatility assumption was based on an analysis of guideline public companies historical equity volatility for a period of one year, which is commensurate with the term assumption. We selected the guideline public companies based on the similarity of their industry, business model, product offerings and stage of development as compared to us. Based on this analysis, we utilized a volatility assumption of 70%. The risk-free rate was estimated as the one-year U.S. Treasury yield. A discount for lack of marketability of 21% was then applied to the common stock value as we are a private company and our common stock is illiquid.

Based on this analysis, our board of directors determined that the reassessed estimated fair value of our common stock as of August 29, 2013 was $1.37 per share. Given the close proximity to the August 29, 2013 grant date and that no significant changes had occurred in the business since that date, our board of directors determined that the reassessed estimated fair value of our common stock was $1.37 per share as of September 12, 2013.

In connection with the completion of the reassessed valuation the board of directors, with the consent of the affected option holders, approved an increase in the exercise price from $0.90 per share to $1.37 per share for all employee and directors options granted to the option holders on August 29, 2013 and September 12, 2013. The exercise price of options issued to non-employee outside consultants was not adjusted.

Stock-based Awards Granted on November 11, 2013

On November 11, 2013, our board of directors granted options to purchase an aggregate of 183,241 shares of our common stock with an exercise price of $3.83 per share. To assist in establishing the exercise price of these grants, our board of directors considered a third-party valuation of our common stock as of October 21, 2013. Between October 21, 2013 and November 11, 2013, our board of directors noted that we continued to operate our business in the ordinary course, and no events occurred that would cause the fair value of our common stock to increase between these dates. In performing the October 21, 2013 valuation, the third-party valuation considered various traditional valuation techniques. After considering the current stage of our development and other factors, including the fact that they were valuing a non-marketable common stock interest in a closely-held company, the third party valuation determined that the probability-weighted expected return method, or PWERM, was the most appropriate method to provide a reasonable indication of fair value. Under the PWERM, the value of our various equity securities are estimated based upon an analysis of future values for the enterprise assuming various future outcomes.

Shares are valued based on the probability-weighted present value of expected future investment returns, considering each of the possible future outcomes regarding our company, as well as the rights of each class of

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stock. The future outcomes considered typically include an initial public offering, a sale or merger of our company, any dissolution and our remaining as a private company. The future value of the common stock under each outcome is discounted back to the valuation date at an appropriate risk-adjusted discount rate and probability weighted to arrive at an indication of value for our preferred stock and our common stock. A discount for lack of marketability, to account for the illiquidity of our common stock, is applied to the indicated common stock value to determine the fair value of our common stock.

Four types of future event scenarios were considered: an IPO in the near term, a sale or merger of our company in the later term, an IPO in the later term, and a bankruptcy of our company. As of October 21, 2013, management and our board of directors determined that the probability for the IPO in the near term was 60%, the later term sale or merger scenario was 10%, the IPO in the later term was 20% and bankruptcy was 10%.

The enterprise value was estimated using the guideline public company method and guideline transaction method under the market approach for the IPO and sale or merger scenarios. For the bankruptcy scenario, a net asset value approach was used.

The multiples of market value of total invested capital or MVIC to cash, book value of invested capital, research and development expenses, and return on investment were selected to be the most appropriate to determine the fair value of our company in the early term IPO scenario. The multiples of MVIC to the projected revenues were considered for the later term IPO scenario as we expect to commercialize our products and start generating revenues. Additionally, the MVIC of the selected comparable companies was considered. The selected multiples were adjusted to reflect the perceived growth and risk of our company relative to those of the guideline companies. The future value was then discounted back to the valuation date based on the appropriate risk adjusted discount rate.

For the later term sale or merger scenario, we utilized the guideline transaction method, which considers pricing multiples from acquisitions of guideline companies. The recent acquisitions of entities in our industry or similar industries were estimated to generate comparable revenue at the time of sale or merger in the later term. The multiples of MVIC to the projected revenues then were applied. The level of MVIC was also considered. The selected multiples were then adjusted to reflect the perceived growth and risk of our company relative to those of the acquisition transactions. The future value was then discounted back to the valuation date based on the appropriate risk adjusted discount rate.

Due to early stage of our company, there is a low probability of successful commercialization of our product candidates and of our becoming profitable. Thus, a probability to the orderly liquidation scenario was incorporated. We believe that our cash and cash equivalents balance as of September 30, 2013 is sufficient to fund our planned operations for a least the next 12 months, so an end-date of 2015 was selected as the expected term for the bankruptcy scenario. A company s orderly liquidation value is the net amount received if its assets are sold and its liabilities retired. Our intellectual property was considered our primary asset at the point of bankruptcy. The fair value of our intellectual property under the bankruptcy scenario was estimated based on the projected research and development expenses and discounted to present value as of the valuation date.

To derive the value of our common stock for each scenario, the proceeds to the common stockholders were calculated based on the respective preferences and priorities of our preferred and common stock. In our common stock valuations as of October 21, 2013, we applied risk adjusted discount rates of 20% for each of the near-term IPO, later term sale or merger, and later term IPO scenarios. This discount rate was applied for the October 21, 2013 valuation due to the higher likelihood of an early liquidity event, achieved milestones, and lower risk of our business compared to the August 29, 2013 retrospective valuation (see below). A lower discount rate of 16.5% was applied for the bankruptcy risk scenario due to lower volatility associated with the projected expenses that were used to estimate the liquidation

value of the asset under a bankruptcy scenario. In assessing the appropriate discount rate for various scenarios, we examined the definitions associated with various stages of development and liquidity event and compared these definitions to the current state of our business.

We utilized the Black-Scholes Option Pricing Model to determine the value of a theoretical put option based on the preliminary value indications, because our common stock lacks liquidity until a liquidity event occurs. The volatility assumption was based on an analysis of guideline public companies historical equity volatility for a period commensurate with the assumed term used for each of the scenarios. Based on the selected guideline public companies and remaining terms, a volatility of 80% was selected for each of the early term IPO, later term sale or merger, and later IPO scenarios. As of October 21, 2013, discounts for lack of marketability of 12.5%, 28.5%, and 28.5% were applied to the near term IPO, later term sale or merger, and later term IPO scenarios, respectively.

Based on this analysis and a consideration of events and other factors that had occurred between the October 21, 2013 common stock valuation date and the November 11, 2013 grant date, our board of directors determined that the estimated fair value of our common stock as of October 21, 2013 was $3.83 per share.

Retrospective Valuations of Common Stock

In connection with the preparation of our financial statements for the period from September 25, 2012 (inception) through December 31, 2012 and for the nine months ended September 30, 2013, and in preparing for our initial public offering, we determined that retrospective valuations of our common stock as of each of our option grant dates were appropriate due to the acceleration of the timeframe to a potential liquidity event. In connection with that reexamination, we obtained retrospective third-party valuations of our common stock to assist our board of directors in its reassessment.

February 4, 2013 and May 9, 2013

In connection with our reexamination, we engaged in a retrospective valuation of the fair value of our common stock for financial reporting purposes as of February 4, 2013 and May 9, 2013. To assist in its reassessment, our board of directors obtained a retrospective third-party valuation of our common stock. In performing this valuation, the third-party valuation considered various traditional valuation techniques. After considering the current stage of our development and other factors, including the fact that they were valuing a non-marketable common stock interest in a closely-held company, the third party valuation determined that the Backsolve Method and the Asset Approach were likely to provide a reasonable indication of fair value. The February 9, 2013 retrospective valuation was based on the price of the Series AA convertible preferred stock that we sold to investors in November 2012. The Asset Approach considered the total invested capital to date in the company. A weighting of 50% was applied to both the Backsolve Method and the Asset Approach to determine the implied enterprise value of our company.

The value was allocated to the respective classes of stock using the OPM assuming a weighted expected term to liquidity of two years based on then-current plans and estimates of the board of directors and management regarding a liquidity event. The volatility assumption was based on an analysis of guideline public companies historical equity volatility for a period of two years, which is commensurate with the term assumption. The guideline public companies used for comparison were selected based on the similarity of their industry, business model, product offerings and stage of development as compared to us. Based on this analysis we utilized, a volatility assumption of 70%. The risk-free rate was estimated as the then-average yield of U.S. Treasury notes commensurate with the estimated time to liquidity of two years. A discount for lack of marketability of 29% was then applied to the common stock value as we are a private company and our common stock is illiquid. Based on this analysis, our board of directors concluded that the fair value of our common stock as of February 4, 2013 was $0.22 per share.

Our board of directors considered the results of the third-party valuation, which was lower than the previously estimated fair value of $0.32 per share of common stock derived from the board of directors February 4, 2013 internal valuation. As a result, our board determined that no change to the fair value of our common stock was necessary for

financial reporting purposes for the February 4, 2013 and May 9, 2013 option

grants. Our board of directors also considered the factors that contributed to the different fair values in each valuation, the most significant of which was the assumption related to the time to a liquidity event of five years in the February 4, 2013 internal valuation and two years in the retrospective valuation.

August 29, 2013 and September 12, 2013

In connection with the preparation of our financial statements, our board of directors obtained a retrospective third-party valuation of our common stock as of August 29, 2013. The third-party valuation considered various traditional valuation techniques. After considering the current stage of our development and the closely-held nature of our company, the third party determined that the PWERM was the most appropriate method to provide a reasonable indication of fair value.

As of August 29, 2013, four types of future event scenarios were considered: an IPO in the near term; a sale or merger in the later term; an IPO in the later term; and a bankruptcy. As of August 29, 2013, management and our board of directors determined that the probability for the IPO in the near term was 30%, for the later term sale or merger scenario 25%, the IPO in the later term 25% and 20% for a bankruptcy.

The enterprise value of our company was estimated using the guideline public company method and guideline transaction method under the market approach for the IPO and sale or merger scenarios. The net asset value approach was used for the bankruptcy scenario.

The IPO scenario is based on the guideline company method. Appropriate guideline companies were considered to be publicly traded biotechnology companies that were in the early development stage. The pool of potential guideline companies was then narrowed based on the companies business descriptions, markets served, stages of growth, business model, pipeline of drugs, profitability and revenue. The multiples of MVIC to cash, book value of invested capital, research and development expenses, and return on investment were concluded to be the most applicable to determine the fair value of our company under the early term IPO scenario. The multiples of MVIC to the projected revenues were considered for the later term IPO scenario as we expect to commercialize our products and begin to generate revenue. The value of invested capital of the selected guideline public companies was also considered. The selected multiples were adjusted to reflect the perceived growth and risk of our company relative to those of the guideline public companies. The future value was then present valued to the valuation date based on the appropriate risk adjusted discount rate.

For the later term sale or merger scenario the Guideline Transaction Method was applied to consider pricing multiples from acquisitions of guideline companies. Recent acquisitions of entities in the same or similar industries to our company were estimated to generate comparable revenue at the time of sale or merger in the later term. The multiples of MVIC to the projected revenues were applied. The level of MVIC was also considered. The selected multiples were then adjusted to reflect the perceived growth and risk of the Company relative to those of the guideline transactions. The future value was then present valued to the valuation date based on the appropriate risk adjusted discount rate.

Due to the early stage of our company, there is a low probability of successful commercialization of our product candidates and of becoming profitable, so a probability to the orderly liquidation scenario was incorporated. We believe that our cash and cash equivalents balance as of September 30, 2013 is sufficient to fund our planned operations for at least the next 12 months. Based on our current cash and cash equivalents, we selected an end-date of 2015 as the expected term for the bankruptcy scenario. A company s orderly liquidation value is the net amount received if its assets are sold and its liabilities retired. Our primary asset would be our intellectual property, the fair value of which was estimated based on the projected research and development expenses prior to bankruptcy, and discounted to present value as of the valuation date.

To derive the value of our common stock for each scenario, the proceeds to the common stock holders were calculated based on the preferences and priorities of our preferred and common stock. For purposes of the August 29, 2013 valuation, a risk adjusted discount rate of 35% were applied to each of the near-term IPO, later term sale or merger, and later term IPO scenarios. A lower discount rate of 16.5% was applied for the bankruptcy

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risk scenario due to a lower volatility associated with the projected expenses used to estimate the liquidation value of our assets under a bankruptcy scenario. In assessing the appropriate discount rate for various scenarios, we examined the definitions associated with various stages of development and liquidity event and compared these definitions to the current state of our business.

We utilized the Black-Scholes Option Pricing Model to determine the value of a theoretical put option based on the preliminary value indications, because our common stock lacks liquidity until a liquidity event occurs. The volatility assumption was based on an analysis of the guideline public companies historical equity volatility for a period commensurate with the assumed term used for each of the scenarios.

Based on the selected guideline companies and the remaining terms to each event, we selected volatilities of 85% for the early term IPO and 80% for each of the later term sale or merger and later term IPO scenarios. Discounts for lack of marketability of 15%, 29.5%, and 29.5% were applied to the near term IPO, later term sale or merger, and later term IPO scenarios, respectively.

Based on this analysis, our board of directors determined that the estimated fair value of our common stock as of August 29, 2013 was $2.27 per share. Given, for financial accounting purposes, the close proximity to the August 29, 2013 grant date and our board of directors conclusion that no significant changes had occurred in our business since that date, our board of directors determined that the estimated fair value of our common stock was $2.27 per share as of September 12, 2013 for financial accounting purposes.

Initial Public Offering

We note that, as is typical in IPOs, the estimated price range for this offering was not derived using a formal determination of fair value, but was determined by negotiation between us and the underwriters. Among the factors that were considered in setting this range were the following:

- an analysis of the typical valuation ranges seen in recent IPOs for companies in our industry;
- the general condition of the securities markets and the recent market prices of, and the demand for, publicly traded common stock of generally comparable companies;
- an assumption that there would be a receptive public trading market for pre-commercial animal health companies such as us; and
- an assumption that there would be sufficient demand for our common stock to support an offering of the size contemplated by this prospectus.

We believe that the difference between the fair value of our common stock as of November 11, 2013 and the midpoint of the price range for this offering is the result of these factors and the following factors and positive developments with respect to our business that occurred subsequent to November 11, 2013:

the PWERM method uses a probability weighted approach as described above, and the resulting estimate of the fair value of our common stock as of November 11, 2013 reflected the potential for alternative liquidity events, which decreases the estimated fair value due to the combination of (i) the mix of other expected business equity values that were lower in the alternative liquidity events scenario than in the IPO scenario and (ii) the application of a discount for lack of marketability; conversely, the midpoint of the estimated price range for this offering necessarily assumes only a single potential liquidity event, the IPO, and does not include a discount for lack of marketability, as an active trading market for the common stock will exist following the IPO. As a result, the midpoint of the estimated price range for this offering was neither reduced by other expected business equity values from other potential future liquidity events nor discounted for lack of marketability;

we made progress in our ongoing pivotal trial of CereKin for the treatment of dogs for the treatment of osteoarthritis pain and inflammation; and

the NASDAQ Biotechnology index increased 8.2% from November 11, 2013 to November 26, 2013 and the market for initial public offerings of common stock of similarly situated biotechnology companies has been very favorable.

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Results of Operations

Our results of operations from September 25, 2012 (inception) through December 31, 2012 and for the nine months ended September 30, 2013 are as follows:

	For The Period From September 25, 2012 (Inception) Through December 31, 2012	Nine Months Ended September 30, 2013 (unaudited)	Cumulative Period From September 25, 2012 (Inception) Through September 30, 2013 (unaudited)
Operating expenses:			
Research and development	$ 74,772	$ 1,394,547	$ 1,469,319
General and administrative	44,864	437,737	482,601
Total operating expenses	119,636	1,832,284	1,951,920
Loss from operations	(119,636)	(1,832,284)	(1,951,920)
Other income (expense):			
Interest income	25	2,662	2,687
Interest expense		(48)	(48)
Total other income, net	25	2,614	2,639
Net loss and comprehensive loss	$ (119,611)	$ (1,829,670)	$ (1,949,281)
Net loss per share attributable to common stockholders, basic and diluted	$ (0.06)	$ (0.61)	
Weighted-average common shares outstanding, basic and diluted	2,112,520	3,001,286	
Pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited)	$ (0.04)	$ (0.39)	
Weighted-average shares used in computing pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited)	2,718,082	4,713,320	

Revenue

We did not generate any revenue during the period from September 25, 2012 (inception) through December 31, 2012 or for the nine months ended September 30, 2013.

Research and Development Expense

Research and development expense for the period from September 25, 2012 (inception) through December 31, 2012 was $74,772. Research and development expense for the nine months ended September 30, 2013 was $1,394,547. The composition of these expenses was as follows:

	For the Period from September 25, 2012 (Inception) through December 31, 2012	Nine Months Ended September 30, 2013
Payroll and related	$ 51,417	$ 406,960
Consulting	12,963	519,433
Clinical trial costs	4,427	399,989
Other	5,965	68,165
	$ 74,772	$ 1,394,547

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Payroll and related costs, as well as consulting costs, for the period ended December 31, 2012 were primarily attributable to recruiting and building our research and development team. During this period, we relied extensively on consultants as we began to build our internal research and development team. There were no outsourced research and development expenses for the period from September 25, 2012 (inception) to December 31, 2012 related to our CereKin, AtoKin or SentiKin product development programs. During this period, we also filed three INADs, including the INADs for CereKin and AtoKin. Included in research and development expense for the period ended December 31, 2012 was $11,340 of stock-based compensation expense.

During the nine months ended September 30, 2013, research and development expenses primarily related to advancing the development of our lead product candidates. During this period we developed the protocols for CereKin and AtoKin, received Protocol Concurrences from the FDA for both compounds and increased our staffing to support the planning for initiation of the pivotal trials of CereKin and AtoKin. Outsourced research and development expenses related to our CereKin, AtoKin and SentiKin product development programs for the nine months ended September 30, 2013 were $521,138, $97,164 and $1,848, respectively. Included in research and development expenses for the nine months ended September 30, 2013 was $434,370 of stock-based compensation expense.

We expect research and development expense to increase significantly for the foreseeable future as we continue to increase our headcount, commence pivotal studies and further develop our compounds. Due to the inherently unpredictable nature of our development, we cannot reasonably estimate or predict the nature, specific timing or estimated costs of the efforts that will be necessary to complete the development of our product candidates.

General and Administrative Expense

General and administrative expense for the period from September 25, 2012 (inception) through December 31, 2012 was $44,864. General and administrative expense for the nine months ended September 30, 2013 was $437,737. The composition of general and administrative expense was as follows:

	For the Period from September 25, 2012 (Inception) through December 31, 2012	Nine Months Ended September 30, 2013
Payroll and related	$ 36,406	$ 218,603
Consulting and legal fees	2,527	162,822
Other	5,931	56,312
	$ 44,864	$ 437,737

For the period ended December 31, 2012, general and administrative expense related primarily to our corporate formation and initial financing activities.

For the nine months ended September 30, 2013, general and administrative expense related primarily to additional financing activities, salaries, rent and other facilities costs, professional and consulting fees for legal, accounting and tax services and other general business services. We expect general and administrative expense to increase

significantly as we begin operating as a public company and continue to build our corporate infrastructure. Included in general and administrative expense for the nine months ended September 30, 2013 was $69,192 of stock-based compensation expense.

Liquidity and Capital Resources

We have incurred losses and negative cash flows from operations and have not generated any revenue since our inception in September 2012 through September 30, 2013. As of September 30, 2013, we had a deficit

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accumulated during the development stage of $1,949,281. We believe that our cash and cash equivalents balance as of September 30, 2013 is sufficient to fund our planned operations for at least the next 12 months.

Cash Flows

The following table shows a summary of our cash flows for the periods set forth below:

	For the Period from September 25, 2012 (Inception) through December 31, 2012	Nine Months Ended September 30, 2013
Cash flows used in operating activities	$ (62,784)	$ (1,031,468)
Cash flows used in investing activities	$	$ (13,660)
Cash flows provided by financing activities	$ 1,000,300	$ 11,099,294

Net cash used in operating activities

During the period from September 25, 2012 (inception) through December 31, 2012, net cash used in operating activities was $62,784. Net cash used in operating activities primarily resulted from our net loss of $119,611, partially offset by non-cash, stock-based compensation of $11,340 and changes in operating assets and liabilities of $45,487.

During the nine months ended September 30, 2013, net cash used in operating activities was $1,031,468. Net cash used in operating activities primarily resulted from our net loss of $1,829,670, partially offset by non-cash, stock-based compensation of $503,562 and changes in operating assets and liabilities of $293,364.

Net cash used in investing activities

During the period from September 25, 2012 (inception) through December 31, 2012, we did not have any cash provided by or used in investing activities.

During the nine months ended September 30, 2013, net cash used in investing activities was $13,660, which related to purchases of property and equipment.

Net cash provided by financing activities

During the period from September 25, 2012 (inception) through December 31, 2012, net cash provided by financing activities was $1,000,300 and primarily consisted of the gross proceeds of $990,000 from the private placement of our Series AA convertible preferred stock and proceeds of a $10,000 note payable to our co-founder and current Chief Executive Officer.

During the nine months ended September 30, 2013, net cash provided by financing activities was $11,099,294, which consisted primarily of gross proceeds from private placements of our Series A-1 and Series A-1A convertible preferred stock.

Future Funding Requirements

We anticipate that we will continue to incur losses for the next several years due to expenses relating to:

- pivotal trials of our product candidates;
- toxicology studies for our product candidates;
- biologics manufacturing; and
- commercialization of one or more of our product candidates, if approved.

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We believe the net proceeds from this offering, together with our existing cash and cash equivalents, will be sufficient to fund our operating plan through the anticipated approval and launch of one or more of our lead product candidates, CereKin, AtoKin and SentiKin. However, our operating plan may change as a result of many factors currently unknown to us, and we may need to seek additional funds sooner than planned, through public or private equity or debt financings or other sources, such as strategic collaborations. Such financing may result in dilution to stockholders, imposition of debt covenants and repayment obligations or other restrictions that may affect our business. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans.

Our future capital requirements depend on many factors, including, but not limited to:

- the scope, progress, results and costs of researching and developing our current or future product candidates;
- the timing of, and the costs involved in, obtaining regulatory approvals for any of our current or future product candidates;
- the number and characteristics of the product candidates we pursue;
- the cost of manufacturing our current and future product candidates and any products we successfully commercialize;
- the cost of commercialization activities if any of our current or future product candidates are approved for sale, including marketing, sales and distribution costs;
- the expenses needed to attract and retain skilled personnel;
- the costs associated with being a public company;
- our ability to establish and maintain strategic collaborations, licensing or other arrangements and the financial terms of such agreements; and
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing possible patent claims, including litigation costs and the outcome of any such litigation.

Off-Balance Sheet Arrangements

Since inception, we have not engaged in the use of any off-balance sheet arrangements, such as structured finance entities, special purpose entities or variable interest entities.

Recently Issued Accounting Pronouncements

Comprehensive Income - Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income: In February 2013, the FASB issued guidance requiring entities to report the effect of significant reclassifications out of accumulated other comprehensive income on the respective line items in net income if the amount is required to be reclassified under U.S. GAAP. For amounts that are not required to be reclassified in their entirety to net income, an entity is required to cross-reference to other disclosures that provide additional details about those amounts. This guidance revised the previous guidance issued in June 2011 that was deferred. This guidance was applied by us for all interim and annual periods beginning on January 1, 2013. The adoption of this guidance did not have a material impact on our financial condition, results of operations or cash flows.

Fair Value Measurement - Amendments to Achieve Common Fair Value Measurements and Disclosure Requirements in U.S. GAAP and IFRS: In May 2011, the FASB issued guidance which represents the converged guidance of FASB and the IASB on fair value measurement and disclosures. In particular, the new guidance: (1) requires the disclosure of the level within the fair value hierarchy level for financial instruments that are not measured at fair value but for which the fair value is required to be disclosed; (2) expands level 3 fair value

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disclosures about valuation process and sensitivity of the fair value measurement to changes in unobservable inputs; (3) permits an exception to measure fair value of a net position for financial assets and financial liabilities managed on a net position basis; and (4) clarifies that the highest and best use measurement is only applicable to nonfinancial assets. This guidance was applied prospectively for interim and annual periods beginning in 2012. The adoption of this guidance did not have a material effect on our financial condition, results of operations or cash flows.

Quantitative and Qualitative Disclosures about Market Risk

Interest Rate Fluctuation Risk

Our cash and cash equivalents as of September 30, 2013 were held in a cash account and money market account. Our primary exposure to market risk for our cash is interest income sensitivity, which is affected by changes in the general level of U.S. interest rates. However, because our cash and cash equivalents are held in bank accounts, a sudden change in the interest rates associated with our cash and cash equivalents balances would not be expected to have a material impact on our financial condition or results of operations.

We do not have any foreign currency or derivative financial instruments.

Controls and Procedures

We have not performed an evaluation of our internal control over financial reporting, such as required by Section 404 of the Sarbanes-Oxley Act, nor have we engaged our independent registered public accounting firm to perform an audit of our internal control over financial reporting as of any balance sheet date or for any period reported in our financial statements included elsewhere in this prospectus. Had we performed such an evaluation or had our independent registered public accounting firm performed an audit of our internal control over financial reporting, control deficiencies, including material weaknesses and significant deficiencies, in addition to those discussed below, may have been identified.

Solely in connection with the audit of our financial statements for the period from September 25, 2012 (inception) through December 31, 2012, we identified two material weaknesses in our internal control over financial reporting. A material weakness is defined as a control deficiency, or combination of control deficiencies, that adversely affects an entity s ability to initiate, authorize, record, process or report financial data reliably in accordance with U.S. GAAP such that there is more than a remote likelihood that a material misstatement of the entity s financial statements will not be prevented or detected by the entity s internal control over financial reporting. The material weaknesses we have identified relate to our accounting for complex equity transactions and our lack of segregation of duties within the accounting function due to a limited number of personnel.

We have taken certain steps and plan to take additional steps intended to address the underlying causes of the material weaknesses, primarily through the recent hiring of a Chief Financial Officer and additional employees and accounting consultants. The actions that we have taken are subject to ongoing senior management review.

Notwithstanding the material weaknesses described above, we have performed additional analyses and other procedures to enable management to conclude that our financial statements included in this filing were prepared in accordance with U.S. GAAP.

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BUSINESS

Overview

We are a development stage biopharmaceutical company focused on saving and improving the lives of pets. Our mission is to bring to our pets the same kinds of safe and effective medicines that our human family members enjoy. Our core strategy is to identify compounds and targets that have already demonstrated safety and efficacy in humans and to develop therapeutics based on these validated compounds and targets for pets, primarily dogs, cats and horses. We believe this approach will lead to shorter development times and higher approval rates than pursuing new, non-validated compounds and targets. We have three product candidates that are in, or will shortly enter, pivotal field efficacy trials, or pivotal trials, and expect approval of one or more of these product candidates in 2015. In addition, we have seven other product candidates, including several biologics, in various stages of development. We believe there are significant unmet medical needs for pets, and that the pet therapeutics segment of the animal health industry is likely to grow substantially as new therapeutics are identified, developed and marketed specifically for pets.

Our lead product candidates are CereKin for the treatment of osteoarthritis pain and inflammation in dogs, AtoKin for the treatment of atopic dermatitis in dogs and SentiKin for the treatment of post-operative pain in dogs. All of these product candidates, if approved, would be first-in-class drugs in the pet therapeutic market.

In August 2013, we initiated the pivotal trial for CereKin, and we expect to initiate the pivotal trials for AtoKin and SentiKin by early 2014. We have received from the U.S. Food and Drug Administration, or FDA, Protocol Concurrences for CereKin and AtoKin, and expect to receive a similar Protocol Concurrence for SentiKin. A Protocol Concurrence in animal drug development is analogous to a Special Protocol Assessment in human drug development, and means that the FDA fundamentally agrees with the design, execution and analyses proposed in a protocol, and will not later alter its perspectives on these issues unless public or animal health concerns appear that were not recognized at the time of protocol assessment. Assuming positive results from these trials, we intend to submit new animal drug applications, or NADAs, for marketing approval of CereKin, AtoKin, and SentiKin in the United States starting in 2014, and anticipate potential marketing approvals and product launches in the second half of 2015. If approved in the United States, we will potentially make similar regulatory filings for these products with the European Medicines Agency, or EMA, for marketing approval in the European Union, or EU.

We are currently developing product candidates for ten additional indications, with the potential to launch two or more products annually for several years starting in the second half of 2015. We plan to commercialize our products in the United States through a direct sales force complemented by selected distributor relationships, and in the EU through distributors and other third parties. Because we seek to identify product candidates that are not protected by third-party patents, we typically do not need to obtain licenses or make any upfront, milestone or royalty payments in connection with our product candidates.

Relative to human drug development, the development of pet therapeutics is generally faster, more predictable and less expensive, since it requires fewer clinical studies involving fewer subjects and can be conducted directly in the target species. For example, studies that are typically required for approval of human drugs such as QTc studies, which detect cardiac irregularities, elderly patient studies, renal impairment studies, hepatic impairment studies or costly, long-term genotoxicity studies are not required for pet therapeutics. Based on our progress since inception in September 2012, we believe we can develop pet therapeutics from the Investigational New Animal Drug, or INAD, filing with the FDA to marketing approval in three to five years at a cost of approximately $3 million to $5 million per product candidate. The lower cost associated with the development of pet therapeutics permits us to pursue multiple product candidates simultaneously and avoid the binary outcome associated with the development of a single lead therapy by some human biotechnology companies. Because we typically develop drugs that have successfully been

developed for humans, the active ingredients in many of our small molecule product candidates also have established chemistry, manufacturing

and controls, or CMC, which are important gating factors in the regulatory approval process. As a result, we usually do not need to invest in active pharmaceutical ingredient, or API, process development to comply with good manufacturing practices, or GMP, standards for our small molecule product candidates, and we can often advance our programs more rapidly than if we were pursuing new chemical entities.

We estimate that the total U.S. market for veterinary care was approximately $13.7 billion in 2012, an increase of 48% from 2006. We believe there are many unmet or underserved medical needs and that the pet therapeutics portion of the market can grow significantly as new, safe and effective therapeutics are identified, developed and marketed. As an example, the market for therapeutics treating osteoarthritis for dogs has grown from less than $10 million to over $450 million since 1997, driven by the introduction of non-steroidal anti-inflammatory drugs, or NSAIDs, such as Rimadyl approved for animals. We expect continued market growth as new pet therapeutics are developed and owners grow more familiar with the treatment of pets with such therapeutics. This continues a trend reported by the American Pet Products Association, or APPA, which found approximately 78% of U.S. dog owners treated their dogs with medications in 2010, as compared to 50% in 1998.

Our management team s extensive experience in both human and animal drug development has enabled us to quickly establish our product pipeline, obtain Protocol Concurrences from the FDA for CereKin and AtoKin and commence the pivotal trial of CereKin. Our management team also has extensive experience in biologics, including in the development of antibodies such as Lucentis, Tysabri, Xolair, and Rituxan.

Richard Chin, M.D., our co-founder and Chief Executive Officer, was previously Head of Clinical Research for the Biotherapeutics Unit at Genentech, Inc., where he oversaw Phase I through Phase IV clinical programs for all products except oncology. Kevin Schultz, D.V.M., Ph.D., our Chief Scientific Officer, was one of the founding team members of Merial Limited, a leading veterinary medicine company, and served as Merial s Chief Scientific Officer, where he oversaw development of numerous animal therapeutics and vaccines, as well as Frontline Plus, one of the best-selling pet therapeutic products in history. Stephen Sundlof, D.V.M., Ph.D., our Senior Vice President of Regulatory Affairs, was the Director of the FDA s Center for Veterinary Medicine, or CVM, from 1994 to 2008, where he oversaw all veterinary products regulated by the FDA. Denise Bevers, our co-founder and Chief Operating Officer, has over 20 years of experience in clinical operations and medical affairs.

Product Pipeline

Our current product pipeline consists of small molecules and biologics for a range of indications in dogs, cats and horses. Small molecules are generally chemical compounds administered orally and biologics are generally proteins and vaccines administered by injection. In December 2012, we filed INADs for CereKin for osteoarthritis in dogs and for AtoKin for atopic dermatitis in dogs. We filed INADs for SentiKin for post-operative pain in dogs and for KIND-006 for gastrointestinal disease in cats in March 2013, and in June 2013, we filed an INAD for KIND-007 for cancer and immune diseases in dogs. Although there is no equivalent of an INAD for biologic products, we have requested that the USDA assign a reviewer for several of our biologic product candidates to begin the USDA review process.

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The USDA s Center for Veterinary Biologics and the FDA s Center for Veterinary Medicine have a memorandum of understanding under which animal products are to be regulated by the USDA as biologics, if they are intended for use to diagnose, cure, mitigate, treat, or prevent disease in animals and they work primarily through an immune process, or by the FDA as drugs, if they are intended for use in the diagnosis, cure, mitigation, treatment, or prevention of animal disease if the primary mechanism of action is not immunological or is undefined. Although we believe that most of our current animal biologics will be regulated by the USDA based on their mechanisms of action, it is possible that the agencies may determine that one or more of our animal biologics will be regulated by the FDA instead of the USDA.

The following table illustrates ten product candidates that we are developing for 13 indications. References in the table to PLA mean an Application for United States Veterinary Biological Product License with the USDA, also called a Product License Agreement.

In addition to our product candidates currently in development, we have identified over 30 potential small molecule and biologic therapeutics that are in the pre-INAD stage, including molecules targeting cancer metabolism.

Product Selection and Development

We utilize a rigorous screening and review process to identify compounds and targets that have demonstrated safety and efficacy in humans. Where possible, we try to identify compounds that have already demonstrated efficacy in the target companion animal species and that address unmet medical needs in veterinary medicine. In some cases, we identify a chemical or functional equivalent of a validated human drug that

addresses the same biological target or pathway. We review these compounds and targets with a view to differentiating them from existing treatments, including human products used extra-label in animals, based on ease of administration, method of delivery, dosing regimen, and other similar factors. We also try to identify product candidates that are free from any intellectual property rights of others, including drugs or dosage forms that are not marketed in the United States, or marketed only in a few countries, to minimize the potential for competition from human generics. For example, previously approved drugs that are found to have an idiosyncratic side effect in humans fit well with our target criteria since such drugs are often no longer available for human use and could potentially be well suited for companion animals. We then develop these compounds for dogs, cats or horses for regulatory approval in the United States and the EU. As our product candidates are generally not protected by third-party patents, we typically do not need to obtain a license or make any upfront, milestone or royalty payments in connection with our product candidates.

For our small molecule product candidates, we customize the dosage, formulation, flavor and other characteristics of the product candidate before initiating pivotal clinical trials. In some cases, we reformulate the drug to have a longer half-life or into a form that is easier to administer for certain species, such as our chewable, beef-flavored formulation for dogs. Pet therapeutics that are palatable to animals can command premium price and significant market share, as evidenced by the still-dominant position of Rimadyl compared to generic carprofen. Usually, the active ingredients in our small molecule product candidates are already available as a GMP-quality API. We target small molecule product candidates for which the active ingredient has not been previously approved for use in animals. If we are the first to gain approval for the use of such active ingredient in animals, our small molecule product will enjoy five years of marketing exclusivity in the United States and ten years in the EU for the approved indication. Where appropriate, we also will seek patents and trademarks to provide added intellectual property protection in addition to the five-year or ten-year marketing exclusivity. In addition, we plan to introduce improved formulations, combination products and other product improvements in order to extend the lifecycle of our products.

Our biologic product candidates are based on therapies and targets for which products have been successfully commercialized for humans. Human antibody therapies are expensive and are often ineffective in other species since they are usually immunogenic, or recognized as foreign bodies and rejected by the immune systems of dogs, cats, horses and other animals. We identify or create biologics, including antibodies that are fully or mostly canine, feline, or equine. As an example, we have created new biologics for dogs that target the canine counterparts of the human targets of Enbrel and Orencia. We are currently undertaking the development of manufacturing processes for our initial biologic product candidates. We generally intend to seek composition-of-matter patents and other patents for these new chemical entities. Our biologic products, if approved, will not face generic competition or such generic competition may be significantly delayed, because there is presently no biosimilar pathway for veterinary biologics in the United States or in the EU. Our management team has extensive experience in human antibody therapies and in the development of biologics products, including Lucentis, Tysabri, and Xolair.

Business Strategy

Key elements of our business strategy are as follows:

Advance CereKin, AtoKin, SentiKin and our other product candidates through development and regulatory approval

We have initiated enrollment in the pivotal trial of CereKin, and intend to initiate the pivotal trials of AtoKin and SentiKin by early 2014. The trials are being, or will be, conducted in parallel with the required toxicology, or target animal safety, studies and CMC activities. If these trials and other development activities are successful, we expect to submit NADAs for CereKin in mid-2014, and for AtoKin and SentiKin in late 2014, with potential marketing

approvals for the first of these products starting in the second half of 2015. If approved in the United States, we will consider making similar regulatory filings for these products with the EMA.

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In addition to CereKin, AtoKin and SentiKin, we are developing product candidates for ten additional indications in dogs and cats. We intend to advance these products into pivotal trials, which, if successful, and completed on time as currently planned, would enable us to launch two or more approved products annually for several years beginning in the second half of 2015.

Continue to focus on cost-effective research and development execution

In order to execute our studies rapidly and efficiently, we have built an experienced team drawn from both the veterinary and human pharmaceutical industries. We rely primarily on our own personnel or independent contractors, rather than on contract research organizations, or CROs, for many business-critical tasks, including protocol designs, regulatory interactions, statistics, data management and clinical operations. By doing so, we believe we can maintain higher quality, achieve lower costs and seek regulatory approval more quickly. Since our inception in September 2012, we have been able to, among other things:

- identify 10 product candidates that we are developing for 13 indications;
- obtain Protocol Concurrences with the FDA for two of our lead product candidates;
- commence pivotal trial enrollment for CereKin; and
- create new biologics for dogs that target the canine counterpart targets of Enbrel and Orencia.

Leverage our antibody and biologics experience

Members of our team have extensive experience developing biologics such as antibodies. We are leveraging their expertise to identify and develop antibody-based therapies for pets based on approved human therapies, and to identify appropriate manufacturing technologies for these product candidates.

Leverage our current product pipeline in additional animal species

We intend to develop our product candidates primarily for approval in one or more indications in dogs, cats and horses. For example, we are initially developing CereKin for the treatment of osteoarthritis pain in dogs, but have also filed an INAD and conducted a pharmacokinetic study for its use in horses. We are also developing SentiKin for post-operative pain in horses. We believe the market for horse therapeutics may be particularly attractive, as it can be targeted by a limited sales force and has potentially less price sensitivity than therapeutic treatments for dogs and cats, because horse owners are willing to spend more on treatments for these more expensive companion animals. As an example, a one-month supply of omeprazole for a horse can cost several thousand dollars. We may consider the development of our current or future product candidates for additional species in the future, but our pipeline currently is focused on dogs, cats and horses only.

Expand our pipeline with additional product candidates

We actively seek to identify small molecule and biologic therapeutics, or in some cases therapeutic targets, that have demonstrated safety and efficacy in humans, focusing on small molecules that are already marketed for humans or

biologics for which there are no animal counterparts, and that are free from intellectual property rights of others in the United States. These therapeutics typically have been tested in animals such as dogs as part of standard toxicology studies in human clinical development. We have identified over 30 additional product candidates in the pre-INAD stage that we may potentially pursue. We will seek to protect our product candidates through a combination of regulatory exclusivity periods in the United States and in the EU, patents, know-how and other customary means.

Commercialize our products with our own direct sales force in the United States and with distributors in other regions

In conjunction with FDA approval of one or more of our lead product candidates, if approved, we intend to establish a direct sales organization eventually numbering approximately 50 sales representatives to market our

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products directly to veterinarians in the United States. We believe such a sales force will be sufficient to reach the top quartile of the highest prescribing veterinary clinics in the United States. By adding complementary distributor relationships, we believe we can expand our commercial reach to a majority of all veterinarians in the United States. We also intend to establish collaborations with distributors to commercialize any of our products that may be approved with the EMA.

Pet Therapeutics Market

Overview

U.S. consumers spent an estimated $53 billion on their pets in 2012, according to the American Pet Products Association, or APPA, an increase of 38% from 2006. This figure includes approximately $3.5 billion spent on flea and tick treatments, $1.5 billion spent on knee-joint surgeries in dogs and $370 million spent on pet Halloween costumes.

The veterinary care segment has been among the fastest growing segments of the overall U.S. pet market. This segment accounted for an estimated $13.7 billion in 2012, an increase of 48% from 2006. In 2011, approximately $4.3 billion was spent on parasiticides and vaccines and approximately $2.4 billion was spent on pet therapeutics, our target segment. With approximately 83 million dogs and 96 million cats in the United States, this represents average annual spending on pet therapeutics of less than $14 per pet. This compares to approximately $1,700 that veterinarians estimate their clients would be willing to pay before refusing or stopping treatment for their pets, according to a 2012 DVM Newsmagazine State of the Profession survey.

We believe several factors will contribute to an increase in spending on pet therapeutics. Pets are generally living longer, with the average lifespan for dogs increasing by half a year to 11 years between 2002 and 2012 according to a study by Banfield Pet Hospital. As a result, pets are increasingly exhibiting many of the same diseases associated with aging in humans. The incidence of osteoarthritis in dogs, for example, has increased by 38% since 2007 according to the same study. Among pet owners, there is growing familiarity in treating these pet diseases with medications. According to the APPA, approximately 78% of U.S. dog owners treated their dogs with medications in 2010, as compared to 50% in 1998. In a 2010 poll by Associated Press, 35% of pet owners are willing to spend $2,000 to treat their pet for a serious medical condition. We expect pet owners to spend more on their pets health and welfare as new therapeutics are developed specifically for pets, particularly as 91% of pet owners considered their pet to be a member of their family, according to a 2011 survey by the Harris Poll of Harris Interactive.

Pet Therapeutics Market Dynamics

The respective businesses of developing and commercializing therapeutics for pets and for humans share a number of characteristics, including the need to demonstrate safety and efficacy in clinical trials, obtain FDA or other regulatory approval for marketing, manufacture the therapeutics in facilities compliant with GMP requirements and market the therapeutics only for their intended indication based on claims permitted in the product label, and not for other uses, which is referred to as extra-label use.

Despite their similarities, there are a number of important differences between the pet therapeutics and human therapeutics businesses, including:

Faster, less expensive and more predictable development. The development of pet therapeutics requires fewer clinical studies in fewer subject animals than the development of human therapeutics and, unlike human therapeutics, is conducted directly in the target animals. We believe our strategy of selecting compounds and targets with demonstrated efficacy and safety in humans enhances the predictability of results and probability of success of our pivotal trials relative to compounds and targets that have not been previously validated.

Role and incentives for veterinary practices. In the United States, veterinarians generally serve the dual role of doctor and pharmacist, and pet owners typically purchase medicines directly from their

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veterinarians. Therapeutics specifically developed for pets enable veterinarians to provide potentially superior treatment options, while also increasing revenue from the sale of these therapeutics.

Primarily private-pay nature of veterinary market. Pet owners in the United States generally pay for pet therapeutics out-of-pocket, and less than 5% of pet owners currently purchase pet insurance. As a result, pet owners must make decisions primarily on their veterinarians advice regarding available treatment options, rather than on the treatment options eligibility for reimbursement by insurance companies or government payers. We believe this results in less pricing pressure than in human healthcare, although the limited adoption of insurance may also reduce pet owners ability to pay for therapeutics recommended by their veterinarians.

Less generic competition and strong brand loyalty. There is less generic competition in the pet therapeutics industry than in the human healthcare industry. Approximately 14% of veterinary drugs face generic competition, and the percentage of generic prescriptions in the veterinary space is only 7% as compared to approximately 81% for human drugs. For example, Rimadyl, the leading U.S. pet NSAID, lost regulatory exclusivity in 2001, but its sales continued to grow since generic competition was introduced in 2005. We believe that stronger brand loyalty and lack of mandatory generic drug substitution, as in human pharmaceuticals, partially explains the low penetration of generics in veterinary medicine.

Unmet Medical Needs in the Pet Therapeutics Market

Despite the growing market for pet therapeutics, there are relatively few treatment options approved for use in pets as compared to human therapeutic treatments. As a result, veterinarians often must resort to prescribing products approved for use in humans but not approved, formulated or even formally studied in pets. Veterinarians must then rely upon trial and error or untested rules of thumb to assess the proper dosage needed to be effective in the particular species without undue risk of side effects. The veterinarian must also find a way to administer the human product in animals and determine the amount actually dosed, which are important and potentially overlooked practical considerations in the treatment of pets.

Even in disease categories with approved pet therapeutics, significant unmet medical needs remain. For example, the NSAID class of products, commonly prescribed for pain, have potentially serious side effects in dogs that limit their long-term use and may require ongoing monitoring by veterinarians. The treatment of pain in cats is further complicated as a result of their differing biology, which makes NSAIDs toxic.

Animal health companies have been relatively slow to develop new therapeutics for pets, and have tended to focus primarily on the larger market for the treatment of livestock and other farm animals. On average, only approximately 11 NADAs were filed annually for animal therapeutics, compared to an average of approximately 123 NDAs filed annually for human therapeutics, over the five-year periods ended June 30, 2012 and December 31, 2011, respectively. In 2012, human pharmaceutical companies received FDA approval for 39 new drugs, while pet therapeutics companies received FDA approval for only 11 new drugs, six of which were for use in dogs or cats. In the EU, human pharmaceutical companies received EMA approval for 52 drugs in 2012, compared to only three approvals for pet therapeutics companies.

We believe that therapeutics specifically developed for pets can extend and improve the quality of the lives of pets, help veterinarians achieve improved medical outcomes and make the process of administering therapeutics to pets much more convenient. Advances in human medicines have created new therapeutics for managing chronic diseases associated with aging, such as osteoarthritis, cancer, diabetes and cardiovascular diseases. Pets often suffer from the

same disease as humans, including diabetes, arthritis, cancer, Alzheimer s disease (canine cognitive dysfunction), lupus, Crohn s disease, Lou Gehrig s disease (degenerative myelopathy) and others. In most cases, the biologies of the diseases in pets are very similar to those in humans. Because of the similarity of the diseases, many human drugs, when formulated properly and administered in proper doses, are effective in pets. However, most human drugs are neither formulated nor approved for animals.

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Products in Development

CereKin

Overview

CereKin is an oral, chewable, beef-flavored formulation of diacerein, an interleukin-1 beta, or IL-1, inhibitor that we are developing for osteoarthritis pain and inflammation in dogs. We initiated the pivotal trial for CereKin in August 2013 under a Protocol Concurrence with the FDA. We expect to have data from the pivotal trial in the second quarter of 2014 and, if positive, intend to submit a NADA in mid-2014, with potential marketing approval in the second half of 2015. If approved, CereKin would be a first-in-class drug for the veterinary market.

The active ingredient in CereKin has been the subject of multiple studies in humans, has been used by millions of human patients over twenty years, and has been demonstrated to be effective for the treatment of osteoarthritis pain and inflammation. Human drugs containing the active ingredient in CereKin are marketed extensively outside the United States for treatment of osteoarthritis and are generally considered to be safe, except for certain gastrointestinal side effects and rare idiosyncratic skin and liver side effects in humans that occur at a rate of one in a million or less, for which the active ingredient is undergoing review in the EU. These side effects appear to be less frequent or absent in dogs.

We have also conducted a pharmacokinetic study of CereKin in horses, and plan to develop it for osteoarthritis pain in horses. We have an INAD for this indication and expect to initiate the pivotal trial in 2014.

The active ingredient in CereKin is available as GMP-grade material from several suppliers, and we believe our current manufacturer or other suppliers will be able to provide sufficient quantities of the API for potential commercialization.

Canine Osteoarthritis Market Opportunity

Canine osteoarthritis is a chronic, progressive degenerative joint disease and the most common inflammatory joint disease in dogs. The prevalence of osteoarthritis increases with age, usually occurring in dogs aged nine years or older, but it can occur even in young animals. According to industry sources, the number of pets diagnosed with osteoarthritis has increased significantly over the past five years and an estimated 20% of dogs over the age of one are diagnosed with osteoarthritis. Osteoarthritis is manifested clinically by lameness and pain, immobility, restriction of motion, decreased weight-bearing and swollen joints. Other changes include joint instability, narrowing of joint space, erosion and ulceration of the cartilage of the joint and detrimental remodeling of bone and joint surfaces.

NSAIDs such as carprofen, which is marketed under the brand name Rimadyl, are the most common treatment for canine osteoarthritis. Rimadyl was the first product approved for the control of pain and inflammation associated with canine osteoarthritis and its introduction created a product category around a previously unmet medical need. Corticosteroids are also used to treat canine osteoarthritis extra-label, but safety considerations restrict their long-term application.

The NSAID segment has been one of the fastest growing categories in pet therapeutics since 2005, with four additional NSAID approvals and the approval of the first of five generic carprofen products. According to surveys conducted in 2013 by Brakke Consulting, the U.S. dog and cat pain market was approximately $247 million in 2012. Veterinarians recommended NSAID therapy for 83% of the dogs they treated with osteoarthritis, and believed approximately 60% received treatment. Rimadyl remains the leading prescription treatment with 2012 U.S. sales of

$90 million and nearly 40% market share, with generic carprofen sales limited to approximately $20 million in that year.

While NSAID side effects in most dogs are generally mild, some dogs have a sensitivity that results in hepatic and/or gastrointestinal toxicity and, in extreme cases, death. As a result, NSAID label language contains

bolded warnings and specifies that baseline blood tests should be conducted, and pets should be periodically monitored using blood tests to check for any toxic effects. Given the associated side effects and required monitoring with blood tests that are associated with NSAID therapy, up to approximately 50% of dogs remain untreated or cannot be treated chronically.

Non-steroidal anti-inflammatory drugs, or NSAIDs, are the only approved treatment for canine osteoarthritis, other than steroids and one vitamin-mineral based drug.

Our Solution - CereKin

We are developing CereKin for the management of pain and inflammation associated with osteoarthritis, initially for dogs. The active ingredient in CereKin has demonstrated efficacy in treating osteoarthritis in both humans and dogs. We believe that, if approved, CereKin will not require blood monitoring tests and may be used alone or in combination with NSAIDs. In humans, the active ingredient in CereKin has demonstrated added effectiveness when combined with NSAIDs versus NSAIDs alone. Based on data from a study published in 1999 in *Arthritis & Rheumatism,* we expect CereKin may have disease-modifying effects, mediated by direct protection of bone tissue in dogs and may protect against NSAID-induced GI tract problems.

Diacerein, the active ingredient in CereKin, is an oral IL-1 inhibitor with potential disease-modifying effects that has been shown to be an effective osteoarthritis therapeutic in humans. The active ingredient is approved in multiple countries in the EU and other foreign jurisdictions for the treatment of osteoarthritis in humans. Its efficacy has been demonstrated in multiple, randomized, controlled human trials in patients with knee or hip osteoarthritis, and has been used for decades in millions of human patients. Diacerein is not associated with the serious adverse events caused by NSAIDs, such as gastrointestinal bleeding or renal failure. In humans, diacerein is associated with certain gastrointestinal side effects, such as diarrhea, and rare idiosyncratic skin and liver side effects. Based on a recommendation from the EMA s Pharmacovigilance Risk Assessment Committee, the EMA is currently considering the suspension of human drugs containing diacerein until convincing evidence of a positive risk-benefit balance is provided in a specific human population. We believe these side effects are less frequent or absent in dogs, and that the risk-benefit balance in dogs is more favorable than in humans due to the relative lack of approved treatment options for dogs. However, because reliable detection of rare events would require exposure of millions or tens of millions of dogs, it is not possible to rule out the risk of such events until well after the launch of the product.

CereKin works through a different mechanism than corticosteroids or NSAIDs. Preclinical studies have demonstrated that the active ingredient in CereKin downregulates the production and activity of IL-1, an important signaling molecule that activates inflammation in a variety of tissues. IL-1 is a well-validated target. Human antibodies and other biologics against IL-1 such as anakinra, gevokizumab, and rilonacept, have shown activity in a number of diseases, including rheumatoid arthritis, gout and uveitis. However, unlike these biologics, CereKin can be administered orally. In addition, by inhibiting IL-1, CereKin downregulates a number of other cytokines, including tumor necrosis factor, or TNF, a cytokine that plays a key role in many inflammatory diseases such as arthritis.

Clinical Data

The active ingredient in CereKin has demonstrated pain-reducing and disease-modifying effects in humans and animals, including dogs, sheep, and mice.

In multiple randomized, placebo-controlled studies in humans, the active ingredient in CereKin significantly reduced osteoarthritis pain and improved function compared with placebo. For example, in a study of 168 patients published in *Arthritis & Rheumatism* in 2007, the active ingredient in CereKin demonstrated up to a 70% response rate compared

to 40% for placebo following a three-month dosing interval. For the purpose of determining the response rate, a response was considered to have occurred if the patient experienced a specified reduction in pain in combination with a specified change in the Western Ontario and McMaster Universities Osteoarthritis Index, or WOMAC, a validated osteoarthritis scale.

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Response Rates in Human Osteoarthritis Patients with the

Active Ingredient in CereKin and Placebo

In several studies in laboratory dogs, the active ingredient in CereKin has demonstrated an ability to effectively treat osteoarthritis, and in many cases to delay bone damage caused by the disease. In the above-mentioned 1999 study, a randomized, placebo-controlled study was conducted in adult dogs in a model of osteoarthritis of the knee. Dogs treated with the active ingredient in CereKin exhibited a statistically significant lower SFA score, a validated measure of osteoarthritis severity with higher numbers representing greater severity, than dogs treated with placebo, as shown in the following table:

SFA Scores in Dogs Treated with the Active Ingredient in CereKin and Placebo

	Week 16	**Week 32**
Diacerein	0.6	3.4
Placebo	1.3	6.3
	p=0.04	*p=0.05*

p-value <0.05 indicates statistical significance on a 95% or higher confidence level

Multiple other studies in dogs have demonstrated similar beneficial effects, as well as safety and tolerability, in the treatment of canine arthritis. For example, the rate of diarrhea reported in humans treated with diacerein is approximately 40%, as published in a *Cochrane Review* in 2009. However, none of the ten dogs in a study published in *Arthritis and Rheumatism* by Smith in 1999, nor any of the seven dogs in a study published in *Osteoarthritis and Cartilage* by Brandt in 1997, experienced diarrhea, though some loose stools were noted, despite being treated chronically at doses between 30 mg/kg to 40 mg/kg a day, substantially higher than the human dose of approximately 1 mg/kg a day. Liver toxicity in dogs has not been observed, and given the idiosyncratic nature of the side effect in humans, we do not expect this side effect to cross the species boundary.

In rodent models, including a model of spontaneous arthritis, for example as published by Tamura in *Osteoarthritis and Cartilage* in 1999, and Gadotti in *Pharmacology, Biochemistry, and Behavior* in 2012, the

active ingredient in CereKin has been effective in preventing bone destruction and reducing joint lesions associated with osteoarthritis when dosed over time.

Pivotal Trial for CereKin

In August 2013, we initiated enrollment in the pivotal trial of CereKin in dogs for the treatment of osteoarthritis pain and inflammation under a Protocol Concurrence with the FDA. The pivotal trial is a multi-center, randomized double-blind, placebo-controlled study of both safety and efficacy of CereKin. We intend to enroll at least 300 dogs aged one year or older, and test two oral doses of CereKin, 5 mg/kg twice daily and 20 mg/kg twice daily, versus placebo, for eight weeks.

The primary endpoint of the pivotal trial is the change in Canine Brief Pain Inventory, or CBPI, at eight weeks. The CBPI is a validated pain scoring system consisting of ten questions asked of dog owners to evaluate the severity of their dog s pain and how much the pain interferes with the dog s normal behavior. For each question, scores can range from zero to ten, with ten being the most severe. Each dog will be scored on day one and at two-week intervals for eight weeks, with the endpoint measuring the change from day one to week eight. Secondary endpoints will include the change in score on the investigator s Dog Osteoarthritis Scoring Sheet, or DOSS, and CBPI trends over the course of the study, and severity of individual signs of osteoarthritis from the DOSS. DOSS is a six-question investigator scoring system with scores ranging from zero to four, with four being the most severe.

AtoKin

Overview

AtoKin is a high-dose, oral, chewable, beef-flavored formulation of fexofenadine that we are developing for atopic dermatitis in dogs. The active ingredient in AtoKin, a potent and selective antihistamine, is approved for allergic diseases in humans and has a strong track record of safety and efficacy in treating allergic diseases. It has also demonstrated efficacy in treating atopic dermatitis in dogs at the doses we are pursuing. We have been granted a Protocol Concurrence by the FDA for the pivotal trial of AtoKin and expect to initiate the trial by early 2014. We expect to receive data from the pivotal trial in late 2014 and, if positive, we intend to submit a NADA in late 2014, with potential marketing approval in late 2015.

The active ingredient in AtoKin is available as GMP-grade material from several suppliers, and we believe our current manufacturer or other suppliers will be able to provide sufficient quantities for our pivotal trial and potential commercialization.

Canine Atopic Dermatitis Market Opportunity

Atopic dermatitis is a common, potentially chronic, allergic skin disease that affects up to 10% of all dogs. It is the second most common allergic skin condition in dogs, surpassed only by flea allergies. Dogs with atopic dermatitis often suffer from pruritus, or severe itching, hair loss, tearing of the skin from deep scratching, frequent licking of their paws and excessive tear production. Secondary skin problems are also common, including skin infections. The condition can be highly uncomfortable or even debilitating, and in extreme cases, euthanasia is necessary to avoid undue suffering.

The mainstay therapy for pruritus is oral corticosteroids and oral cyclosporine. A recently approved product, Apoquel, a Janus kinase inhibitor, is also available for treating atopic dermatitis. While these drugs are effective, they have significant side effects that can prevent their long-term use. They all suppress the dog s immune system, and can lead

to serious side effects including infections. Corticosteroids also can cause osteoporosis, endocrine problems and cataracts in dogs and tend to cause dogs to eat, drink and urinate frequently, which is typically considered undesirable by pet owners. Because atopic dermatitis in dogs is often a chronic condition, these safety and side effect issues create a significant unmet medical need for a safe and effective long-term treatment.

Our Solution - AtoKin

AtoKin is an oral, chewable, beef-flavored formulation of fexofenadine. The active ingredient in AtoKin has been shown to be as effective as a steroid in the treatment of atopic dermatitis in a placebo-controlled study in dogs.

The active ingredient in AtoKin has an excellent track record of safety in animals and humans. Because it is not an immunosuppressive drug, AtoKin may be utilized both as a first-line therapy and also as a long-term maintenance therapy for chronic atopic dermatitis in dogs without increased risk of infections or other safety concerns associated with currently available therapeutics. In addition, the active ingredient in AtoKin has not been associated with the excessive eating, drinking, and urinating in animals that steroids can cause.

Clinical Data

The active ingredient in AtoKin is widely used to treat allergies in humans and is marketed under the brand name Allegra in the United States. The drug has been used by veterinarians extra-label in dogs and cats for the treatment of allergies, typically at the same low dose used for humans of approximately 2-4 mg/kg/day. Reported results at this lower dosage have been mixed.

In a study published in 2009 in *Slovenian Veterinary Research*, the efficacy of a high-dose of the active ingredient in AtoKin was compared with methylpredisolone, a corticosteroid considered to be the standard of care for atopic dermatitis in dogs. Thirty dogs suffering from atopic dermatitis were randomized, with one group receiving the drug orally at 18 mg/kg/day and the other group receiving methylprednisolone at 0.5 mg/kg daily for five days then every other day for six weeks.

Dogs were analyzed in the initial baseline visit, at week three and at week six using the canine atopic dermatitis extent and severity index, or CADESI, which evaluates the severity of three parameters in dogs at various pre-determined body areas: erythema, or reddening of the skin; lichenification, or thickening and hardening of the skin; and excoriation, or abrasion and wearing of the skin. In addition, dog owners were asked to evaluate the degree of pruritus in their dogs using a visual analog scale from 0-100, with 0 being no pruritus and 100 being intense/incessant pruritus.

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Both the active ingredient in AtoKin and methylprednisolone resulted in statistically significant reductions in CADESI scores from baseline to the second visit at week three. Statistically significant reductions in the CADESI score were also maintained in both groups at the final visit at week six of the study as illustrated in the following table, and in addition, a statistically significant difference in favor of fexofenadine versus methylprednisolone was found at week 6 as measured by CADESI (p=0.012):

Average CADESI Score

Fexofenadine versus Methylprednisolone

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Evaluation of pruritus in both groups showed a similar trend over time, with a reduced itching in both groups. At the final evaluation at week six, both the fexofenadine and methylprednisolone groups had significantly reduced pruritus from baseline as illustrated in the table below:

Average Pruritus Visual Analog Score (0-100)

Fexofenadine versus Methylprednisolone

Pivotal Trial for AtoKin

We have obtained a Protocol Concurrence from the FDA for the pivotal trial to study the safety and efficacy of AtoKin in dogs for the treatment of atopic dermatitis. The pivotal trial is a multi-center, randomized double-blind, placebo-controlled study. We intend to enroll at least 200 dogs one year of age or older with atopic dermatitis. We will test 20 mg/kg oral doses of AtoKin once daily in addition to placebo.

The co-primary endpoints of the pivotal trial are based on the Canine Atopic Dermatitis Lesion Index, or CADLI, and Pruritus Visual Analog Score, or PVAS. The CADLI score is a validated composite index of six clinical symptoms associated with canine atopic dermatitis evaluated in five specified body regions. At each specified body region, each parameter is scored by the investigator from zero to five, with a score of zero defined as no lesion and a score of five defined as a severe/extensive lesions. PVAS is scored by the pet owner using a zero-to-ten analog scale, with a score of zero representing no pruritus/chewing and a score of ten equating to incessant and intense pruritus/chewing.

SentiKin

Overview

We intend to develop SentiKin initially as a therapeutic to manage post-operative pain in dogs, cats and horses. SentiKin is an oral, non-NSAID, non-opioid analgesic formulation of flupirtine. The active ingredient in

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SentiKin is approved for the treatment of pain in humans in multiple countries outside the United States and has demonstrated potency comparable to tramadol. It has also demonstrated efficacy in treating pain in dogs. Due to a rare side effect affecting the liver that is seen only with long-term use, the EMA recently determined that the risk-benefit profile of flupirtine justified its use in humans for short-term indications only. We are developing flupirtine for post-operative pain, which is a short-term indication.

We are currently negotiating a Protocol Concurrence with the FDA for the pivotal trial for SentiKin for post-operative pain in dogs, and intend to initiate the trial by early 2014. We expect to receive data from the trial in late 2014 and, if positive, we intend to submit a NADA in late 2014, with potential marketing approval in late 2015. We are also developing SentiKin for post-operative pain in horses. In the future, we intend to develop SentiKin for post-operative pain in cats, as well as for seizures in both dogs and cats.

The active ingredient in SentiKin is available as GMP-grade material from several suppliers, and we believe our current manufacturer or other suppliers will be able to provide sufficient quantities for our planned pivotal trial and potential commercialization.

Canine Post-Operative Pain Market Opportunity

Approximately 50% of dog surgeries each year are spays and neuters. Other common surgeries include cancer surgery, declawing, cruciate repairs and bone fracture repairs. There is no established protocol for the use of pain medications following these surgeries, and pain management practices have traditionally been based on the veterinarian s views on the level of pain associated with a specific surgical procedure and the perceived pain tolerance of the dogs. As pet owners have increasingly requested medications for their pets post-operative pain, veterinarians have made recent advances in treating pain in pets.

Some drugs used for post-operative pain in dogs have been approved by the FDA, while others are used extra-label. The only systemic drugs approved for treatment of post-operative pain in dogs are NSAIDs, fentanyl, and pentazocine. The most commonly used post-operative pain medication in dogs is the NSAID Rimadyl, which has been approved by the FDA for this use. As previously described in our discussion regarding CereKin for post-operative pain in dogs, NSAIDs have demonstrated serious side effects that result in prescribed ongoing monitoring of dog health during their use. For example, some dogs have a sensitivity that results in kidney toxicity and, in extreme cases, death. Consequently, we believe there is an unmet medical need for a drug for post-operative use that is effective in dogs, but also safer on the liver, gastrointestinal system and kidneys. We believe that development of a potent non-narcotic analgesic addresses an important unmet medical need and may lead to a new standard of care in pain control.

In surgeries associated with the most severe post-operative pain, fentanyl is commonly used. Fentanyl is a controlled narcotic drug, and pets are often kept in the hospital while receiving fentanyl. The majority of fentanyl is dispensed as fentanyl patches, although such use in pets has not been approved. In 2012, Nexcyon received FDA approval for a transdermal fentanyl solution in dogs, but its use in this format has not been widely accepted by veterinarians. Fentanyl is associated with significant sedation and respiratory depression, which are undesirable analgesic effects. It also has potential for diversion and abuse by owners. Pentazocine, also a controlled narcotic drug, is not widely used in dogs and has potential for sedation, respiratory depression and abuse. We believe that there are unmet needs in pets receiving painful surgeries, especially if effective and extended pain relief could be achieved with a non-narcotic medicine.

Our Solution - SentiKin

We believe that, if approved, SentiKin will provide pain relief that is superior to NSAIDs and comparable to some opioids, without the potential for opioid addiction or the risk of possible diversion and abuse by pet owners.

The active ingredient in SentiKin is a centrally acting non-opioid, non-NSAID, and non-steroidal analgesic that has been approved for use in humans. Its mechanism of action is believed to be via selective opening of the

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potassium channel in cells that makes neurons less susceptible to activation. The active ingredient in SentiKin has been used in humans for various pain management indications, including post-operative pain, trauma, dental extractions, painful muscle spasms, cancer pain, degenerative joint disease, migraine headaches and dysmenorrhea. It has been used by millions of human patients in many countries. Due to a rare side effect affecting the liver, the EMA recently determined that the risk-benefit profile of flupirtine justified its use only for short-term indications. While we believe these side effects are idiosyncratic and specific to humans, we cannot assure you that these same side effects will not occur in dogs. Because detection of these rare side effects would require testing of millions of dogs, we will not be able to rule out this risk until well after commercial launch of the product.

Clinical Data

In multiple animal studies, including one in dogs, the active ingredient in SentiKin has been demonstrated to have potent analgesic effects, or pain relief.

At least eight trials have been conducted in humans to evaluate the efficacy of the active ingredient in SentiKin. In most of these studies that compared these products, pain relief was as good as or better than diclofenac (a NSAID) or tramadol (an opioid analgesic). In another study, orthopedic surgery patients received either pentazocine (an opioid analgesic) or flupirtine and 80% to 95% of flupirtine treated patients experienced satisfaction to treatment as compared to 67% to 79% of patients receiving pentazocine.

In a dog study of the tooth pulp stimulation to induce pain, the active ingredient in SentiKin demonstrated effectiveness in reducing the effect of the stimulation.

In one study of 209 patients with lower back pain, published in *Current Medical Research and Opinion* in 2008, the active ingredient of SentiKin was shown to have efficacy similar to tramadol in controlling pain in patients following five to seven days of dosing.

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Other Product Candidates

In addition to small molecules, we have a pipeline of several promising biologics. Our current biologic product candidates include: KIND-502, a new biologic that targets the canine counterpart of the human target for Xolair, for allergic and immune-mediated diseases; KIND-506, a new biologic that targets the canine counterpart of the human target for Enbrel, for inflammatory and autoimmune diseases; KIND-507, a new biologic that targets the canine counterpart of the human target for Orencia, for immune-mediated diseases; KIND-504, a cancer vaccine, in which the active ingredient has demonstrated efficacy in certain types of cancers in humans and in dogs; and KIND-501, an antiangiogenic biologic for cancer in dogs.

Members of our management have extensive experience with biologics, including antibodies such as Lucentis, Tysabri, Xolair and Rituxan. Antibody discovery technologies perform differently in different targets, and some technologies that work well for one target do not work for other targets. For this reason, we are pursuing multiple strategies for generation of dog, cat and horse antibodies. For example, we have internal expertise, outside consultants and service providers that enable us to convert antibodies such as mouse and rabbit antibodies into dog (caninize), cat (felinize), and horse (equinize) forms. Because rabbit antibodies usually have much higher affinity than mouse antibodies, we anticipate that smaller quantities of our antibodies may be sufficient to produce clinical efficacy, which we believe would reduce our cost of goods compared to other more traditionally caninized, felinized, and equinized antibodies.

In addition, we are pursuing strategies to produce 100% dog, cat and horse antibodies, which do not have any mouse or other exogenous amino acids. We believe the fully canine, feline, and equine antibodies may be less immunogenic than antibodies that have been caninized, felinized or equinized via more traditional methods, since those typically are composed of 10% or greater mouse amino acids.

Some of our other small molecule product candidates include: KIND-007, an inhibitor of Bruton s tyrosine kinase, an enzyme important in certain lymphomas and immune-mediated human diseases; and KIND-006, a promotility agent for gastrointestinal diseases in cats.

We also have identified over 30 additional pre-INAD product candidates, including small molecules and biologics, for potential future development.

Product Launches and Commercialization

Our executive management team has extensive experience with product launches. Richard Chin, M.D., and Denise Bevers, our co-founders and Chief Executive Officer and Chief Operating Officer, respectively, have each been involved in the launch of numerous products in humans, including such drugs as Tysabri and Xolair. Kevin Schulz, D.V.M., Ph.D., our Chief Scientific Officer, has been involved in the launch of over 20 products for animals, including such products as Frontline Plus and Previcox.

If our product candidates are approved by the FDA, we intend to launch and commercialize our products in the United States with a direct sales force eventually numbering approximately 50 sales representatives, which we believe will be sufficient to reach the top quartile of the highest prescribing veterinary clinics. We also intend to selectively utilize distributors, which we believe will enable us to expand our commercial reach to a majority of all veterinarians in the United States. Since even large veterinary pharmaceutical companies have sales forces of only approximately 50 to 200 sales representatives, we believe we can compete effectively with a combination of our own direct sales force and complementary distributors.

Our direct sales force will sell products directly to veterinarians, who typically mark up the pet therapeutics they prescribe for pet owners. According to industry sources, approximately one-third of pet veterinary practice revenue comes from prescription drug sales, vaccinations and non-prescription medicines. We believe veterinarians are self-motivated to prescribe innovative therapeutics that are safe, effective and supported by reliable clinical data and regulatory approval in order to improve the health of pets, while also generating additional revenue.

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Animal health companies commonly use wholesale veterinary distributors to inventory, sell, bill and ship products to independent veterinarians. We estimate that the top three national distributors are responsible for fulfillment of approximately 70% of U.S. pet sales by veterinarians. Each of these distributor organizations has a sales team of approximately 275 field sales representatives, 175 telesales representatives and a dozen distribution centers geographically placed throughout the United States. We intend to grow our direct sales force incrementally if and as our product candidates are approved for marketing, and to utilize national and regional distributors to augment our sales force.

Manufacturing

We have no internal manufacturing capabilities. To ensure dependable and high quality supply of the API in our toxicology studies and pivotal trials, we rely on GMP-compliant contract manufacturers for small molecules rather than devote capital and resources toward developing or acquiring our own manufacturing facilities. Our selection process for small molecule products takes into account the availability of established and cost-effective GMP manufacturing before proceeding to INAD filing. We believe that contract manufacturers can manufacture these supplies more cheaply than we could on our own.

We have a sufficient supply of formulated drugs to conduct our pivotal trials of CereKin and AtoKin, as well as our currently planned toxicology studies. We also have identified multiple contract manufacturers to provide commercial supplies of the formulated drug product candidates if they are approved for marketing. We intend to secure contract manufacturers with established track records of quality product supply and significant experience with regulatory requirements of the FDA and the EMA.

For biologics, we intend to collaborate with established manufacturers for U.S. Department of Agriculture, or USDA, regulated biologics products, as well as other third parties who have novel manufacturing technologies that can potentially achieve substantial reductions in our cost of goods. The USDA regulates the manufacture of pet biologics under standards that are less stringent than those for human biologics, which may reduce the cost of goods of our biologic product candidates relative to human biologics.

While we and our contract manufacturers have historically been able to obtain supplies of the API for development of our product candidates, neither we nor our contract manufacturers have long-term supply agreements with the API manufacturers. We also have no agreements for commercial-scale supply of the API or manufacture of any of our product candidates. As a result, we and our contract manufacturers may be unable to procure API in a timely manner on commercially reasonable terms, or at all.

Competition

While there are fewer competitors in the pet therapeutics industry than in the human pharmaceutical industry, the development and commercialization of new animal health medicines is highly competitive, and we expect considerable competition from major pharmaceutical, biotechnology and specialty animal health medicines companies.

Our potential competitors include large animal health companies, which currently derive the majority of their revenue from livestock medications. For example, in 2012 livestock accounted for 65%, and pets 35%, of sales for Zoetis, a large company focused on animal health. Within the pet therapeutics market, vaccines and parasiticides are currently the greatest sources of revenue.

Large animal health companies include Merck Animal Health, the animal health division of Merck & Co., Inc.; Merial, the animal health division of Sanofi S.A.; Elanco, the animal health division of Eli Lilly and Company; Bayer Animal Health, the animal health division of Bayer AG; Novartis Animal Health, the animal health division of Novartis AG; Boehringer Ingelheim Animal Health, the animal health division of Boehringer Ingelheim GmbH; and Zoetis, Inc. We will also compete against several animal health companies in Europe,

such as the Virbac Group, Ceva Animal Health and Dechra Pharmaceuticals PLC. We are also aware of several smaller early stage companies that are developing products for use in the pet therapeutics market, including Aratana Therapeutics, Inc.

At the product level, we will face competition for CereKin and SentiKin (for pain) from Rimadyl, Deramaxx, Previcox, Equioxx and Metacam, as well as potentially from additional products in development. We will face competition for AtoKin and KIND-502 from Atopica, Apoquel, and steroids, as well as potentially from additional products in development. For our other products, we may face competition from various products including additional products in development. Our products will also face competition from generic medicines and products approved for use in humans that are used extra-label for pets. For example, AtoKin, our second product candidate, will face competition from fexofenadine, a human generic available in the United States. Some of our other products also may face competition from their human generic equivalents in countries where such equivalents are available.

Many of our competitors and potential competitors have substantially more financial, technical and human resources than we do. Many also have far more experience than we have in the development, manufacture, regulation and worldwide commercialization of animal health medicines, including pet therapeutics. In addition, these and other potential competing products may benefit from greater brand recognition and brand loyalty than any that our product candidates may achieve. Accordingly, there is no assurance that we and our products can compete effectively.

Intellectual Property

We intend to rely primarily upon a combination of regulatory exclusivity, proprietary know-how, and confidentiality agreements to protect our product formulations, processes, methods and other technologies and to preserve any trade secrets and operate without infringing on the proprietary rights of other parties, both in the United States and in other countries. We currently have no issued patents and have only provisional patent applications. Because most of our current product candidates, including all of our current small molecule product candidates, are based on generic human drugs, there is little, if any, composition-of-matter patent protection available for the API in such product candidates. Where feasible, however, we intend to pursue the broadest intellectual property protection possible for our current compounds and any future compounds and any proprietary technology through enhanced formulations of our products, both in the United States and abroad. For example, we are developing slow release oral formulations of some of our products, and we intend to develop combination therapies and slow release parenteral formulations of some of our products. However, even intellectual property protection, if available to us, may not afford us with complete protection against competitors. See Risk Factors-Risks Related to Intellectual Property.

We depend upon the skills, knowledge and experience of our management personnel, as well as that of our other employees, advisors, consultants and contractors, none of which are patentable. To help protect our know-how, and any inventions for which patents may be difficult to obtain or enforce, we require all of our employees, consultants, advisors and other contractors to enter into customary confidentiality and inventions agreements that prohibit the disclosure of confidential information and, where applicable, require disclosure and assignment to us of the ideas, developments, discoveries and inventions important to our business.

Regulatory

The development, approval and sale of animal health products are governed by the laws and regulations of each country in which we intend to sell our products. To comply with these regulatory requirements, we have established processes and resources to provide oversight of the development and launch of our products and their maintenance in the market.

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United States

Three federal regulatory agencies regulate the health aspects of animal health products in the United States: the FDA; the USDA; and the Environmental Protection Agency, or the EPA. In addition, the Drug Enforcement Administration, or DEA, regulates animal therapeutics that are classified as controlled substances.

The FDA Center for Veterinary Medicine, or CVM, regulates animal pharmaceuticals under the Federal Food, Drug and Cosmetic Act. The USDA Center for Veterinary Biologics, or CVB, regulates veterinary vaccines and certain biologics pursuant to the Virus, Serum, Toxin Act. The EPA Office of Pesticide Programs, or OPP, regulates veterinary pesticides under the Federal Insecticide, Fungicide and Rodenticide Act. Many topical products used for treatment of flea and tick infestations are regulated by the EPA.

All of our current product candidates are animal pharmaceuticals or biologics regulated by the CVM or the CVB, respectively. Manufacturers of animal health pharmaceuticals and biologics, including us, must show their products to be safe, effective and produced by a consistent method of manufacture. We will also be required to conduct post-approval monitoring of products and to submit reports of product quality defects, adverse events or unexpected results, and be subject to regulatory inspection from time to time. In addition, for our controlled substance product candidates, we will be required to comply with the Controlled Substances Act, or CSA, and related state laws regarding manufacturing, labeling, packaging, testing, dispensing, production and procurement quotas, recordkeeping, reporting, handling, shipment and disposal.

Requirements for Approval of Veterinary Pharmaceuticals for Pets

As a condition to regulatory approval for sale of animal products, regulatory agencies worldwide generally require that a product to be used for pets be demonstrated to:

- be safe for the intended use in the intended species;
- have substantial evidence of effectiveness for the intended use;
- have a defined manufacturing process that ensures that the product can be made with high quality consistency; and
- be safe for humans handling the product and for the environment.

Safety. To determine that a new veterinary drug is safe for use, most regulatory authorities will require us to provide data from a safety study generated in laboratory cats and dogs tested at doses higher than the intended label dose, over a period of time determined by the intended length of dosing of the product. In the case of the FDA, the design and review of the safety study and the study protocol can be completed prior to initiation of the study to help assure that the data generated will meet FDA requirements. These studies are conducted under rigorous quality control, including GLP, to assure integrity of the data. They are designed to clearly define a safety margin, identify any potential safety concerns, and establish a safe dose for the product. In addition, safety data from pivotal field studies conducted under GCP standards are evaluated to assure that the product will be safe in the target population. Furthermore, because safety and effectiveness studies must conform to VICH guidelines, which are established under an international

program aimed at harmonizing technical requirements for veterinary product registration, they can be utilized by regulatory bodies in the European Union, Japan, Canada, New Zealand and Australia.

Effectiveness. Early pilot studies may be conducted in laboratory cats or dogs to establish effectiveness and the dose range for each product. Data on how well the drug is absorbed when dosed by different routes of administration and the relationship of the dose to the effectiveness are studied. When an effective dose is established, a study protocol to test the product in real world conditions is developed prior to beginning the study. In the case of the FDA, the pivotal effectiveness field study protocol can be submitted for review and concurrence prior to study initiation, to help assure that the data generated will meet requirements.

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The pivotal field effectiveness study must be conducted with the formulation of the product that is intended to be commercialized, and is a multi-site, randomized, controlled study, generally with a placebo control. To reduce bias in the study, individuals doing the assessment are not told whether the subject is in the group receiving the treatment being tested or the placebo group. In both the United States and the European Union, the number of subjects enrolled in pivotal field effectiveness studies is required to be approximately 100 to 150 animal subjects treated with the test product and a comparable number of subjects in the control group that receive the placebo. In many cases, a pivotal field study may be designed with clinical sites in both the European Union and the United States, and this single study may satisfy regulatory requirements in both jurisdictions.

Chemistry, Manufacturing and Controls, or CMC. To assure that the product can be manufactured consistently, regulatory agencies will require us to provide documentation of the process by which the API is made and the controls applicable to that process that assure the API and the formulation of the final commercial product meet certain criteria, including quality, purity and stability. After a product is approved, we will be required to communicate with the regulatory bodies any changes in the procedures or manufacturing site. Both API and commercial formulations are required to be manufactured at facilities that practice pharmaceutical GMP.

Environmental and Human Safety. We will not be required under United States law to provide an environmental impact statement for products currently in development if the products are given at the home of the pet s owner or in a veterinary hospital. If products might result in some type of environmental exposure or release, the environmental impact must be assessed. For approval in the EU, a risk assessment for potential human exposure will be required.

Labeling, All Other Information, and Freedom of Information Summary. We also will be required to submit the intended label for the product, and also any information regarding additional research that has been conducted with the drug, to the CVM and other regulatory bodies for review. We will draft, and submit for regulatory review, the Freedom of Information Summary for use in the United States. This summary outlines the studies and provides substantial information that the FDA uses to assess the drug s safety and effectiveness and then publishes on its website.

Regulatory Process at the FDA

To begin the development process for products in the United States, we must file an Investigational New Animal Drug, or INAD, submission with the FDA. We will then usually hold a pre-development meeting with the FDA to reach a general agreement on the plans for providing the data necessary to fulfill requirements for an NADA. During development, we will usually submit pivotal protocols to the FDA for review and concurrence prior to conducting the required studies. We will gather and submit data on manufacturing, safety and effectiveness to the FDA for review, and this review will be conducted according to timelines specified in the Animal Drug User Fee Act. Once all data have been submitted and reviewed for each technical section - safety, effectiveness and CMC - the FDA will issue us a technical section complete letter as each section review is completed, and when the three letters have been issued, we will compile a draft of the Freedom of Information Summary, the proposed labeling, and all other relevant information, and submit these for FDA review. An administrative NADA is a NADA that is submitted after all of the technical sections that fulfill the requirements for the approval of the new animal drug have been reviewed by CVM and CVM has issued a technical section complete letter for each of those technical sections. Although this process is not required and submission of a non-administrative NADA is also acceptable, we plan to take advantage of the administrative NADA process to obtain a more timely, phased review. Because CVM has already reviewed the individual technical sections before the administrative NADA is filed, CVM is committed under its user fee agreements to reviewing and acting on 90% of administrative NADAs within 60 days after submission. The CVM user fee goal is to review and act on 90% of non-administrative NADAs within 180 days after submission. After approval, we will be required to collect reports of adverse events and submit them on a regular basis to the FDA.

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Regulatory Process at the USDA

To begin the development process for veterinary biologics products in the United States, we typically file an Application for United States Veterinary Biological Product License with the USDA. For the biologics products that we develop, we may then meet with the USDA to reach a general agreement on the plans for providing the data necessary to fulfill requirements for an approval. During development, we gather and submit data on manufacturing, purity and potency for the USDA for review. Once all data has been submitted and reviewed, the USDA will issue its decision. Unlike the FDA, there are no timelines specified by law for the USDA s review.

In some cases, it may be unclear whether our product candidates meet the definition of a biological product subject to regulation by the USDA or a drug subject to regulation by the FDA. The USDA s Center for Veterinary Biologics and the FDA s Center for Veterinary Medicine have a memorandum of understanding concerning their joint responsibilities for resolving jurisdictional issues over products of this nature. Under the memorandum of understanding, animal products are to be regulated by the USDA as biologics if they are intended for use to diagnose, cure, mitigate, treat, or prevent disease in animals and they work primarily through an immune process, or by the FDA as drugs, if they are intended for use in the diagnosis, cure, mitigation, treatment, or prevention of animal disease if the primary mechanism of action is not immunological or is undefined.

Regulatory Process at the EMA

The EMA is responsible for coordinating scientific evaluation of applications for marketing approval for pet therapeutics in the EU. Its veterinary review section is distinct from the review section for human drugs. To perform these evaluations the EMA established a specific scientific committee, the CVMP. The CVMP considers applications submitted by companies for the marketing approval of individual pet therapeutics and evaluates whether or not the medicines meet the necessary quality, safety and efficacy requirements. Assessments conducted by the CVMP are based on scientific criteria and are intended to ensure that pet therapeutics reaching the marketplace have a positive benefit-risk balance in the pet population for which they are intended. Based on the CVMP s recommendation, a centralized marketing authorization is granted by the EMA, which allows the product to be marketed in any of the EU states, Norway, Lichtenstein and Iceland. The CVMP is also responsible for various post-authorization and maintenance activities, including the assessment of modifications or extensions to an existing marketing authorization.

To obtain authorization from the EMA, we must submit a marketing authorization application called a dossier. The dossier is the EMA s equivalent of the FDA s NADA and includes data from studies showing the quality, safety and efficacy of the product. The CVMP reviews and evaluates the dossier. For any dossier, a rapporteur and co-rapporteur are appointed from the members of the CVMP. Their role is to lead the scientific evaluation and prepare the assessment report. The rapporteur can utilize experts to assist it in performing its assessment. The report is critiqued by the co-rapporteur and other members of the CVMP before the CVMP makes its determination. The final opinion of the CVMP is generally given within 210 days of the submission of a dossier, but the EMA makes the final decision on the approval of products. In general, the requirements for regulatory approval of an animal health product in the EU are similar to those in the United States, requiring demonstrated evidence of purity, safety, efficacy and consistency of manufacturing processes.

Alternatively, product approval applications may be submitted directly to the regulatory authority in each country rather than by centralized approval by the EMA.

Regulatory Processes at the DEA

The DEA regulates controlled substances as Schedule I, II, III, IV or V substances. Schedule I substances by definition have no established medicinal use, and may not be marketed or sold in the United States. An animal drug may be listed as Schedule II, III, IV or V, with Schedule II substances considered to present the highest risk

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of abuse and Schedule V substances the lowest relative risk of abuse among such substances. Certain of our product candidates are likely to be scheduled as controlled substances under the CSA. Consequently, their manufacture, shipment, storage, sale and use will be subject to a high degree of regulation.

Annual registration is required for any facility that manufactures, distributes, dispenses, imports or exports any controlled substance. The registration is specific to the particular location, activity and controlled substance schedule. For example, separate registrations are needed for import and manufacturing, and each registration will specify which schedules of controlled substances are authorized.

The DEA typically inspects a facility to review its security measures prior to issuing a registration. Security requirements vary by controlled substance schedule, with the most stringent requirements applying to Schedule I and Schedule II substances. Required security measures include background checks on employees and physical control of inventory through measures such as cages, surveillance cameras and inventory reconciliations. Records must be maintained for the handling of all controlled substances, and periodic reports made to the DEA, for example distribution reports for Schedule II controlled substances, Schedule III substances that are narcotics, and other designated substances. Reports must also be made for thefts or losses of any controlled substance, and to obtain authorization to destroy any controlled substance. In addition, special authorization and notification requirements apply to imports and exports.

In addition, a DEA quota system controls and limits the availability and production of controlled substances in Schedule I or II. Distributions of any Schedule I or II controlled substance must also be accompanied by special order forms, with copies provided to the DEA. The DEA may adjust aggregate production quotas and individual production and procurement quotas from time to time during the year, although the DEA has substantial discretion in whether or not to make such adjustments.

Other Regulatory Considerations

Regulatory rules relating to human food safety, food additives, or drug residues in food will not apply to the products we currently are developing because our products are not intended for use in food animals or food production animals, with the exception of horses, which qualify as food animals in Europe and Canada.

Advertising and promotion of animal health products is controlled by regulations in the United States and other countries. These rules generally restrict advertising and promotion to those claims and uses that have been reviewed and authorized by the applicable agency. We will conduct a review of advertising and promotional material for compliance with the local and regional requirements in the markets where we sell pet therapeutics.

Our small molecule product candidates, if approved, may eventually face generic competition in the United States and in the EU. In the United States, a generic animal drug may be approved pursuant to an Abbreviated New Animal Drug Application, or ANADA. Instead of demonstrating the drug s safety and effectiveness in the target species as required in a NADA, a generic applicant must only show that the proposed generic product is the same as, and bioequivalent to, the approved brand name product. However, if our product candidates are the first approved by the FDA or the EMA as applicable for use in animals, they will be eligible for five years of regulatory exclusivity in the United States and ten years in the EU. There is no comparable pathway for approval of a generic veterinary biologic regulated by the USDA.

Employees

As of November 11, 2013, we had nine employees, including five employees with D.V.M., M.D. or Ph.D. degrees. Of our employees, eight including Dr. Chin and Ms. Bevers are engaged in one or more aspects of our research and development activities. Dr. Chin and Ms. Bevers also are engaged in corporate and administrative activities, as is Mr. Galliker. None of our employees are represented by labor unions or covered by collective bargaining agreements.

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Properties

Our corporate headquarters are located in Burlingame, California, where we lease and occupy approximately 300 square feet of office space pursuant to a month-to-month lease.

Legal Proceedings

We are not currently a party to any legal proceedings.

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MANAGEMENT

Executive Officers and Directors

The following table sets forth the name, age and position of each of our executive officers and directors as of November 11, 2013:

Name	Age	Position
Richard Chin, M.D.	47	President, Chief Executive Officer and Director
Kevin Schultz, D.V.M., Ph.D.	62	Chief Scientific Officer and Head of Research and Development
Stephen Sundlof, D.V.M., Ph.D.	62	Senior Vice President of Regulatory Affairs
Denise Bevers	46	Chief Operating Officer and Secretary
Stephen S. Galliker	67	Chief Financial Officer
Ernest Mario, Ph.D.	75	Director
Ervin Veszprémi	54	Director
Oleg Nodelman	36	Director
Raymond Townsend, Pharm.D.	68	Director

Executive Officers

Richard Chin, M.D., is one of our co-founders and has served as our President and Chief Executive Officer since October 2012. From October 2008 until December 2011, he was Chief Executive Officer of OneWorld Health, a Bill and Melinda Gates Foundation-funded nonprofit organization engaged in developing drugs for neglected diseases. From July 2006 until October 2008, Dr. Chin was President and Chief Executive Officer of Oxigene, a biotechnology company. From June 2004 to July 2006, he served at Elan Pharmaceuticals, initially as Senior Vice President of Medical Affairs, and then as Senior Vice President of Global Development. From March 1999 to June 2004, Dr. Chin served in various roles at Genentech, Inc., now a Division of Roche Group, culminating in his last position as the Head of Clinical Research for Biotherapeutics Unit, overseeing clinical development of all Genentech products except for oncology products. Dr. Chin currently serves as an adjunct professor at the University of California at San Francisco. He also currently serves on the board of Galena Biopharma, Inc. and ImmunoCellular Therapeutics Ltd. Dr. Chin received his M.D. from Harvard University and also holds a law degree from Oxford University, where he studied as a Rhodes Scholar. Through his experience and knowledge of our operations, and his experience in drug development, and his experience serving on public company boards of directors, Dr. Chin is well-suited to serve as a member of our board of directors.

Kevin Schultz, D.V.M., Ph.D., has been our Chief Scientific Officer since July 1, 2013. Dr. Schultz previously served from May 2000 until his retirement in July 2008 as the Chief Scientific Officer and Head of Research and Development for Merial, the animal health division of Sanofi S.A., one of the largest veterinary pharmaceutical companies in the world. In 1997, Dr. Schultz was one of the founding executives to combine the Animal Health Division of Merck with Rhone Merieux to form Merial, a 50% joint Animal Health venture between Merck and Rhone Poulenc. From July 2008 until the present, Dr. Schultz has served as the President of his personal services company, Kevin Schultz Consulting LLC, which provides consulting services for human and animal health research and development. From November 2010 to April 2011, he served as Chief Science Officer of TyraTech, Inc., a public company listed on the AIM - London Stock Exchange, engaged in natural products research and development for people, animals and the environment, and from May 2011 until April 2012, he served as a non-executive board member of TyraTech, Inc. He is also a Venture Fellow with Georgia Research Alliance. Dr. Schultz served as a Professor at the University of Wisconsin before joining Merck. He received his D.V.M. from Purdue University,

where he trained in immunology, oncology, and dermatology, and earned a Ph.D. from the University of Florida Medical School before joining Harvard Medical School and Harvard School of Public Health as a Fellow in Cancer Biology.

Stephen Sundlof, D.V.M., Ph.D., was appointed our Senior Vice President of Regulatory Affairs on August 26, 2013. Dr. Sundlof served as the Director of the Center for Veterinary Medicine at the FDA from 1994 to 2008, where he oversaw all veterinary products regulated by the FDA, and retired as the Director of the Center

for Food Safety and Applied Nutrition in 2010. Dr. Sundlof began his career in 1980 on the faculty of the University of Florida s College of Veterinary Medicine. He received his D.V.M. from the University of Illinois, College of Veterinary Medicine, and earned a Ph.D. in Veterinary Toxicology from the University of Illinois, College of Veterinary Medical Sciences. Dr. Sundlof also holds a B.S. in Zoology from Southern Illinois University and an M.S. in Veterinary Toxicology from the University of Illinois, College of Veterinary Medical Sciences.

Denise Bevers is one of our co-founders and has served as our Chief Operating Officer since October 2012. On November 11, 2013, she was appointed as our corporate Secretary. Ms. Bevers co-founded and served as the President and Chief Executive Officer of SD Scientific, Inc., a privately held, full-service medical affairs and communications company, from August 2005 to June 2013. She has over 20 years of human pharmaceutical and research experience and is an expert in clinical operations, medical affairs, and scientific communications. Ms. Bevers has managed dozens of human drug development programs from Phase I through Phase IV at pharmaceutical companies Elan Pharmaceuticals and Skyepharma, and at Quintiles, a contract research organization. She began her clinical research career in 1989 as the Division Lead of the Urology Department at Scripps Clinic and Research Foundation, a non-profit medical research foundation, where she was integral in implementing the policies and procedures for the organization s clinical research programs. Ms. Bevers earned an M.B.A. from Keller Graduate School of Management and a B.S. in Ecology, Behavior, and Evolution from the University of California San Diego, Revelle College.

Stephen S. Galliker, C.P.A., has served as our Chief Financial Officer since September 10, 2013. Mr. Galliker served as the Executive Vice President, Finance and Administration, and Chief Financial Officer of Dyax Corp., a biopharmaceutical company focused on advancing novel biotherapeutics for unmet medical needs, from 1999 until his retirement in July 2008. From 1996 to 1999, Mr. Galliker was the Chief Financial Officer of Excel Switching Corporation, a developer and manufacturer of open switching platforms for telecommunications networks, and was Excel s Vice President, Finance and Administration from 1997 to 1999. He currently serves as a director of Galena Biopharma, Inc., a public biopharmaceutical company. Mr. Galliker was also a director of Osteotech, Inc., a formerly public medical device company, until its merger into Medtronic, Inc. in November 2010. Mr. Galliker received a B.S. from Georgetown University and an M.B.A. from the University of Chicago, and is a member of the American Institute of Certified Public Accountants and the Massachusetts Society of Certified Public Accountants.

Non-Employee Directors

Ernest Mario, Ph.D., has been a member of our board of directors since February 15, 2013. Dr. Mario served as Deputy Chairman of Glaxo Holdings plc from 1992 to 1993 and as Chief Executive Officer from 1989 to 1993. From 1993 until 2001, he was Chairman and Chief Executive Officer of ALZA Corporation, a drug delivery technology company acquired by Johnson & Johnson in 2001. From 2003 until 2007, Dr. Mario served as Chairman and Chief Executive Officer of Reliant Pharmaceuticals, which was acquired by GlaxoSmithKline. He currently is Chairman and Chief Executive Officer of Capnia, a private pharmaceutical company developing novel therapeutic products to treat migraine and allergic rhinitis. He is also a Venture Partner with Pappas Ventures and serves on a number of corporate boards, including the following public companies: Boston Scientific Corporation, Celgene Corporation, Chimerix Inc., Tonix Pharmaceuticals Holding Corporation, and XenoPort Inc. Dr. Mario earned a B.S. in pharmacy at Rutgers University and his M.S. and Ph.D. in physical sciences at the University of Rhode Island. He holds honorary doctorates from the University of Rhode Island and Rutgers University. In 2007 he was awarded the Remington Medal by the American Pharmacists Association, pharmacy s highest honor. Because of his extensive experience in the pharmaceutical industry and his extensive experience serving on public company boards of directors, Dr. Mario is well qualified to serve on our board.

Ervin Veszprémi has been a member of our board of directors since February 15, 2013. He has served as the Chief Executive Officer of Medichem, a leading active pharmaceutical product manufacturer, since 2003, and has nearly 30

years of experience in the pharmaceutical industry, including 15 years in the animal health sector.

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Mr. Veszprémi served as the former Vice President and Global Head of Marketing for Novartis Animal Health, one of the largest veterinary companies in the world, from 1998 to 2002. Mr. Veszprémi holds a physiology degree from the University of British Columbia and has studied management at Harvard Business School and Stanford University. Because of his extensive experience in the veterinary pharmaceutical industry, his extensive experience in commercialization, and his knowledge of the European market, Mr. Veszprémi is well qualified to serve on our board.

Oleg Nodelman was appointed to our board of directors on November 11, 2013. He founded and has served as Managing Director of EcoR1 Capital, a San Francisco-based, value-oriented healthcare private investment fund, since October 2012. Prior to founding EcoR1, from 2001 to 2012, Mr. Nodelman was a portfolio manager at BVF Partners L.P., one of the oldest dedicated biotechnology hedge funds in the United States. Prior to joining BVF, Mr. Nodelman was a consultant with Mercer Management Consulting (now Oliver Wyman), a consulting firm focused on strategy, operations, risk management, organizational transformation and leadership development. Mr. Nodelman is on the Board of Addex Therapeutics, a clinical-stage biopharma company listed on the Swiss Exchange, and is a member of the President s Council at the Gladstone Institute. He holds a Bachelor of Science degree in Foreign Service with a concentration in Science and Technology from Georgetown University. Mr. Nodelman s extensive management consulting experience, experience investing in biotechnology companies and services as a director of other public companies make him well-qualified to serve on our board.

Raymond Townsend, Pharm.D., was appointed to our board of directors on November 11, 2013. He has served since 2001 as the President of Wasatch Health Outcomes, Inc., his personal consulting firm engaged in providing support for pharmaceutical product development, pricing and commercialization. From 1978 to 1988, Dr. Townsend was employed in various positions at the Upjohn Company, where he pioneered the first modern pharmacoeconomic research department within the pharmaceutical industry. Between 1988 and 1997, he served in various positions at Glaxo (now GlaxoSmithKline), culminating in the positions of Worldwide Director and Vice President, Outcomes, Epidemiology and Policy Research. Between 1998 and 2001, he was co-founder and Chief Executive Officer of Strategic Outcomes Services, Inc. From 2004 to 2009, he was Senior Vice President, Pharmacoeconomic & Epidemiology Outcomes Research, at Elan Pharmaceuticals, Inc. Dr. Townsend earned a B.A. in Economics at California State University and his Doctor of Pharmacy degree from the University of California, San Francisco. Dr. Townsend is well qualified to serve as a director because of his extensive experience in senior management roles in the pharmaceutical industry.

Composition of the Board of Directors

Director Independence

Our board of directors currently consists of five members. Dr. Chin is not considered an independent director, because he serves as our President and Chief Executive Officer. Our board of directors has determined that each of our other directors is an independent director in accordance with the listing requirements of The NASDAQ Stock Market. Pursuant to NASDAQ rules, our board must consist of a majority of independent directors. The NASDAQ independence definition includes a series of objective tests, including that the director is not, and has not been for at least three years, one of our employees and that neither the director nor any of his family members has engaged in various types of business dealings with us. In addition, as required by NASDAQ rules, our board of directors has made a subjective determination as to each independent director that no relationships exist, which, in the opinion of our board of directors, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In making these determinations, our board of directors reviewed and discussed information provided by the directors and us with regard to each director s business and personal activities and relationships as they may relate to us and our management. There are no family relationships among any of our directors or executive officers.

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Classified Board of Directors

In accordance with our amended and restated certificate of incorporation that will go into effect immediately prior to the consummation of this offering, our board of directors will be divided into three classes with staggered, three-year terms. At each annual meeting of stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. Effective upon the closing of this offering, our directors will be divided among the three classes as follows:

- the Class I directors will be Ernest Mario and Oleg Nodelman, and their terms will expire at our first annual meeting of stockholders following this offering;
- the Class II directors will be Raymond Townsend and Ervin Veszprémi, and their terms will expire at our second annual meeting of stockholders following this offering; and
- the Class III directors will be Richard Chin, and his term will expire at the third annual meeting of stockholders following this offering.

Our board of directors has not appointed a Chairman of the Board, and Dr. Chin, our President and Chief Executive Officer, generally chairs meetings of our board. Our amended and restated certificate of incorporation that will go into effect immediately prior to the completion of this offering will provide that the authorized number of directors may be changed only by resolution of the board of directors. 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. The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control of our company.

Leadership Structure of the Board

Our directors may be removed only for cause by the affirmative vote of the holders of at least two-thirds of our outstanding voting stock entitled to vote in the election of directors. Our amended and restated bylaws and corporate governance guidelines provide our board of directors with flexibility in its discretion to combine or separate the positions of Chairman of the Board and Chief Executive Officer. As a general policy, our board of directors believes that separation of the positions of Chairman and Chief Executive Officer reinforces the independence of the board of directors from management, creates an environment that encourages objective oversight of management s performance and enhances the effectiveness of the board of directors as a whole. We expect and intend the positions of Chairman of the Board of Directors and Chief Executive Officer to be held by two individuals in the future.

Role of Board in Risk Oversight Process

Risk assessment and oversight are an integral part of our governance and management processes. Our board of directors encourages management to promote a culture that incorporates risk management into our corporate strategy and day-to-day business operations. Management discusses strategic and operational risks at regular management meetings and conducts specific strategic planning and review sessions during the year that include a focused discussion and analysis of the risks we face. Throughout the year, senior management reviews these risks with the board of directors at regular board meetings as part of management presentations that focus on particular business functions, operations or strategies, and presents the steps taken by management to mitigate or eliminate such risks.

Our board of directors does not have a standing risk management committee, but rather administers this oversight function directly through the board of directors as a whole, as well as through standing committees of the board of directors that will be established upon completion of this offering and that will address risks inherent in their respective areas of oversight. In particular, our audit committee will be responsible for overseeing our major financial risk exposures and the steps our management has taken to monitor and control these exposures. The audit committee also will monitor compliance with legal and regulatory requirements and,

upon the listing of our common stock on The NASDAQ Stock Market, will consider and approve or disapprove any related-person transactions. Upon the listing of our common stock on The NASDAQ Stock Market, our nominating and governance committee will monitor the effectiveness of the corporate governance guidelines that we will adopt in connection with this offering. Our compensation committee will assess and monitor whether any of our compensation policies and programs has the potential to encourage excessive risk-taking by our management.

Board Committees

Our board has established three standing committees-audit, compensation, and nominating and corporate governance-each of which operates under a written charter that has been approved by our board. Upon the completion of this offering, each committee charter will be posted on the Corporate Governance section of our website at *www.kindredbio.com*. The reference to our website address does not constitute incorporation by reference of the information contained at or available through our website, and you should not consider it to be a part of this prospectus.

Audit Committee

The audit committee s responsibilities include:

- appointing, approving the compensation of, and assessing the independence of our registered public accounting firm;
- overseeing the work of our registered public accounting firm, including through the receipt and consideration of reports from such firm;
- reviewing and discussing with management and the registered public accounting firm our annual and quarterly financial statements and related disclosures;
- monitoring our internal control over financial reporting, disclosure controls and procedures and code of business conduct and ethics;
- discussing our risk management policies;
- establishing policies regarding hiring employees from the registered public accounting firm and procedures for the receipt and retention of accounting related complaints and concerns;
- meeting independently with our internal auditing staff, if any, registered public accounting firm and management;

reviewing and approving or ratifying any related person transactions; and

preparing the audit committee report required by SEC rules.

The members of our audit committee are Dr. Mario and Messrs. Nodelman and Veszprémi, and Dr. Mario serves as the chairperson of the committee. Our board of directors has determined that each of Dr. Mario and Messrs. Nodelman and Veszprémi is an independent director under NASDAQ rules and under Rule 10A-3. All members of our audit committee meet the requirements for financial literacy under the applicable rules and regulations of the SEC and NASDAQ. Our board of directors has determined that Dr. Mario is an audit committee financial expert as defined by applicable SEC rules and has the requisite financial sophistication as defined under the applicable NASDAQ rules and regulations.

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Compensation Committee

The compensation committee s responsibilities include:

- annually reviewing and approving corporate goals and objectives relevant to CEO compensation;
- determining our CEO s compensation;
- reviewing and approving, or making recommendations to our board with respect to, the compensation of our other executive officers;
- overseeing an evaluation of our senior executives;
- overseeing and administering our cash and equity incentive plans;
- reviewing and making recommendations to our board with respect to director compensation;
- reviewing and discussing annually with management our Compensation Discussion and Analysis ; and
- preparing the annual compensation committee report required by SEC rules.

The members of our compensation committee are Dr. Mario and Messrs. Nodelman and Veszprémi, and Mr. Nodelman serves as the chairperson of the committee. Our board has determined that each of Dr. Mario and Messrs. Nodelman and Veszprémi is independent under the applicable NASDAQ rules and regulations, is a non-employee director as defined in Rule 16b-3 promulgated under the Exchange Act and is an outside director as that term is defined in Section 162(m) of the Internal Revenue Code of 1986, as amended.

Nominating and Corporate Governance Committee

The nominating and corporate governance committee s responsibilities include:

- identifying individuals qualified to become board members;
- recommending to our board the persons to be nominated for election as directors and to each of the board s committees;

reviewing and making recommendations to the board with respect to management succession planning;

developing and recommending to the board corporate governance principles; and

overseeing an annual evaluation of the board.

The members of our nominating and corporate governance committee are Drs. Chin and Townsend and Mr. Veszprémi, and Mr. Veszprémi serves as the chairperson of the committee. Under applicable NASDAQ rules, we are permitted to phase in our compliance with the independent nominating and corporate governance committee requirements of NASDAQ as follows: (1) one independent member at the time of listing, (2) a majority of independent members within 90 days of listing and (3) all independent members within one year of listing. Our board has determined that each of Dr. Townsend and Mr. Veszprémi is independent under the applicable NASDAQ rules and regulations, and that Dr. Chin is not independent. We will comply with the phase-in requirements of the NASDAQ rules and within one year of our listing on the NASDAQ Stock Market, all members of our nominating and corporate governance committee will be independent under the applicable NASDAQ rules.

Compensation Committee Interlocks and Insider Participation

None of our executive officers served as a director or a member of a compensation committee (or other committee serving an equivalent function) of any other entity, one of whose executive officers served as a director or member of our compensation committee during the period from September 25, 2012 (inception) through December 31, 2012.

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Code of Ethics and Business Conduct

We have adopted a written code of ethics and business conduct that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller and persons performing similar functions. Upon completion of this offering, our code of ethics and business conduct will be available under the Corporate Governance section of our website at *www.kindredbio.com*. In addition, we intend to post on our website all disclosures that are required by law or the listing standards of The NASDAQ Stock Market concerning any amendments to, or waivers from, any provision of the code. The reference to our website address does not constitute incorporation by reference of the information contained at or available through our website, and you should not consider it to be a part of this prospectus.

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EXECUTIVE AND DIRECTOR COMPENSATION

Compensation of Executive Officers

The following table sets forth the compensation for services paid in all capacities for the fiscal year ended December 31, 2012 to Richard Chin, M.D., our President and Chief Executive Officer. There were no other executive officers who received compensation in 2012. The principal terms of our present employment agreements with Dr. Chin and our other executive officers are described under the caption Employment Agreements below in this section of this prospectus.

Summary Compensation Table

Name and Principal Position	Year	Salary ($)	Bonus ($)	Option Awards ($)	All Other Compensation ($)[1]	Total ($)
Richard Chin, M.D.						
President and Chief Executive Officer	2012	$ 62,500[2]	$	$	$	$ 62,500

(1) Does not include perquisites and other personal benefits, unless the aggregate amount of such perquisites and other personal benefits exceeded $10,000.
(2) Reflects the prorated amount of the $250,000 annual base salary provided pursuant to our initial employment agreement with Dr. Chin, whose employment with us commenced on October 1, 2012.

Employment Agreements

Richard Chin, M.D.

In October 2012, we entered into a written employment agreement with Dr. Chin pursuant to which he serves as our President and Chief Executive Officer for an unspecified term. In September 2013, Dr. Chin s employment agreement was amended and restated. The amended and restated employment agreement provides for an annual base salary of $300,000. His base salary will be increased by 10% upon our raising financing of $20 million or more, including the gross proceeds of this offering. Dr. Chin is also eligible for an annual cash bonus of 50% of his then-current base salary based on achievement of both his individual and company goals established on annual basis by our board of directors within 30 days of the beginning of the fiscal year. In conjunction with entering into his original employment agreement in October 2012, Dr. Chin was awarded an option to purchase up to 400,000 shares of our common stock at an exercise price of $0.36 per share, which option will vest as to 100,000 of the option shares on the one-year anniversary of the original employment date and as to the remaining option shares in equal monthly installments of approximately 8,334 shares thereafter until fully vested, subject to his remaining in our continuous employ through each such vesting date. Moreover, on an annual basis we will grant to Dr. Chin additional options to purchase shares of our common stock as follows: (i) if Dr. Chin s annual salary is less than $300,000, we will grant him options equivalent to 2.5% our then-outstanding shares; (ii) if his annual salary is equal to or greater than $300,000 but less than $400,000, we will grant him options equivalent to 1.75% of our then-outstanding shares; and (iii) if his salary is $400,000 or greater, we will grant him options equivalent to 1% of our then-outstanding shares.

Under the terms of Dr. Chin s employment agreement, if his employment is terminated by us without cause, or as a result of Dr. Chin s death or disability, within the twelve-month period following a change in control, or he resigns for good reason, then, subject to his execution of a general release of claims, Dr. Chin will be entitled to receive 24 months of his annual base salary payable within seven days of termination, reimbursement for up to 18 months of insurance premiums for continuation coverage under our group health plans and accelerated vesting of all of his outstanding stock options and any other equity awards.

Cause for purposes of Dr. Chin s employment agreement means Dr. Chin has: (i) been grossly negligent in the performance of his duties; (ii) been convicted of or pleaded guilty or *nolo contendre* to a felony; (iii) committed a criminal act relating to Dr. Chin s employment or the company involving, in the good faith

judgment of our board of directors, fraud or theft, but excluding any conviction which results solely from Dr. Chin s title or position with our company and is not based on his personal conduct; (iv) committed a breach of any material provision of his employment agreement or of any nondisclosure or non-competition agreement which remains uncured or 60 days following receipt of notice; or (v) intentionally breached a material provision of any code of conduct or ethics policy in effect at our company.

Good reason for purposes of Dr. Chin s employment agreement means Dr. Chin has suffered: (i) a material reduction in title, status or responsibilities; or (ii) a material reduction in total compensation.

Change of control for purposes of Dr. Chin s employment agreement means: (i) a merger or consolidation of capital stock by existing holders of our capital stock that results in a change in ownership of more than 50% of the combined voting power of our or our successor s then-outstanding capital stock; or (ii) our stockholders approve an agreement for the sale or disposition of all or substantially all of our assets.

Kevin Schultz, D.V.M., Ph.D.

Dr. Schultz has served as our Chief Scientific Officer and Head of Research and Development since July 22, 2013. Dr. Schultz currently receives a base salary at the annual rate of $220,000. His base salary will be increased by 10% upon our raising financing of $20 million or more, including the gross proceeds of this offering. He also is eligible for an annual cash bonus of up to 30% of his then-current annual base salary as determined by our Chief Executive Officer and board of directors in their discretion. Dr. Shultz was awarded an option to purchase up to 50,000 shares of our common stock at an exercise price of $1.37 per share, which option will vest as to 12,500 of the option shares on the one-year anniversary of the employment date and as to the remaining option shares in equal monthly installments of approximately 1,042 shares thereafter until fully vested, subject to his remaining in our continuous employ through each such vesting date. In addition, Dr. Schultz is eligible for annual stock option grants up to 0.1% to 0.3% of the outstanding stock.

Under the terms of Dr. Schultz s employment agreement, if his employment is terminated by us without cause, or he resigns for good reason, then, subject to his execution of a general release of claims, Dr. Schultz will be entitled to receive six months of his annual base salary payable within seven days of termination, reimbursement for up to 18 months of insurance premiums for continuation coverage under our group health plans and accelerated vesting of all of his outstanding stock options and any other equity awards. In addition, if we terminate his employment within the twelve-month period following a change in control, any unvested options or restricted stock shall vest and be immediately exercisable by Dr. Schultz.

Cause for purposes of Dr. Schultz s employment agreement means Dr. Schultz has: (i) been grossly negligent in the performance of his duties; (ii) been convicted of or pleaded guilty or *nolo contendre* to a felony; (iii) committed a criminal act relating to Dr. Schultz s employment or the company involving, in the good faith judgment of our board of directors, fraud or theft, but excluding any conviction which results solely from Dr. Schultz s title or position with our company and is not based on his personal conduct; (iv) committed a breach of any material provision of his employment agreement or of any nondisclosure or non-competition agreement which remains uncured or 60 days following receipt of notice; (v) intentionally breached a material provision of any code of conduct or ethics policy in effect at our company; (vi) failed to perform any of his material obligations under his employment agreement or failed to execute and perform any directions of our Chief Executive Officer or (vii) been unable or unwilling to relocate to the San Francisco area, if in the good faith judgment of our Chief Executive Officer Dr. Schultz s relocation is necessary to meet business needs.

Good reason for purposes of Dr. Schultz s employment agreement means Dr. Schultz has suffered a material reduction in total compensation.

Change of control for purposes of Dr. Schultz s employment agreement means: (i) a merger or consolidation of capital stock by existing holders of our capital stock that results in a change in ownership of more than 50% of the combined voting power of our or our successor s then-outstanding capital stock; or (ii) our stockholders approve an agreement for the sale or disposition of all or substantially all of our assets.

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Stephen Sundlof, D.V.M., Ph.D.

Dr. Sundlof has served as our Senior Vice President of Regulatory Affairs since August 26, 2013. Dr. Sundlof currently receives a base salary at the annual rate of $220,000. His base salary will be increased by 10% upon our raising financing of $20 million or more, including the gross proceeds of this offering. He also is eligible for an annual cash bonus of up to 30% of his then-current annual base salary as determined by our Chief Executive Officer and board of directors in their discretion. Dr. Sundlof was awarded an option to purchase up to 50,000 shares of our common stock at an exercise price of $1.37 per share, which option will vest as to 12,500 of the option shares on the one-year anniversary of the employment date and as to the remaining option shares in equal monthly installments of approximately 1,042 shares thereafter until fully vested, subject to his remaining in our continuous employ through each such vesting date. In addition, Dr. Sundlof is eligible for annual stock option grants up to 0.3% of the outstanding stock.

Under the terms of Dr. Sundlof s employment agreement, if his employment is terminated by us without cause, or he resigns for good reason, then, subject to his execution of a general release of claims, Dr. Sundlof will be entitled to receive six months of his annual base salary payable within seven days of termination, reimbursement for up to 18 months of insurance premiums for continuation coverage under our group health plans and accelerated vesting of all of his outstanding stock options and any other equity awards. In addition, if we terminate his employment within the twelve-month period following a change in control, any unvested options or restricted stock shall vest and be immediately exercisable by the Executive.

Cause for purposes of Dr. Sundlof s employment agreement means Dr. Sundlof has: (i) been grossly negligent in the performance of his duties; (ii) been convicted of or pleaded guilty or *nolo contendre* to a felony; (iii) committed a criminal act relating to Dr. Sundlof employment or the company involving, in the good faith judgment of our board of directors, fraud or theft, but excluding any conviction which results solely from Dr. Sundlof s title or position with our company and is not based on his personal conduct; (iv) committed a breach of any material provision of his employment agreement or of any nondisclosure or non-competition agreement which remains uncured or 60 days following receipt of notice; (v) intentionally breached a material provision of any code of conduct or ethics policy in effect at our company; or (vi) failed to perform any of his material obligations under his employment agreement or failed to execute and perform any directions of our Chief Executive Officer.

Good reason for purposes of Dr. Sundlof s employment agreement means Dr. Sundlof has suffered a material reduction in total compensation.

Change of control for purposes of Dr. Sundlof s employment agreement means: (i) a merger or consolidation of capital stock by existing holders of our capital stock that results in a change in ownership of more than 50% of the combined voting power of our or our successor s then-outstanding capital stock; or (ii) our stockholders approve an agreement for the sale or disposition of all or substantially all of our assets.

Denise Bevers

Ms. Bevers has served full-time as our Chief Operating Officer since July 1, 2013. Prior to that date, Ms. Bevers served as Acting Chief Operating Officer. She currently receives an annual base salary of $220,000. Her base salary will be increased by 10% upon our raising financing of $20 million or more, including the gross proceeds of this offering. Ms. Bevers also is eligible for an annual cash bonus of up to 30% of her then-current annual base salary as determined by our Chief Executive Officer and board of directors in their discretion. Ms. Bevers was awarded options to purchase a total of up to 96,092 shares of our common stock at exercise prices of $1.37 per share, which option will vest as to 24,023 of the option shares on the one-year anniversary of the employment date and as to the remaining

option shares in equal monthly installments of approximately 2,002 shares thereafter until fully vested, subject to her remaining in our continuous employ through each such vesting date. In addition, on an annual basis, we will grant to Ms. Bevers stock options to purchase the number of shares

of our common stock determined as follows: (i) the number of shares equivalent to 0.5% of our then-outstanding shares if her annual salary at the time of grant is less than $200,000; and (ii) the number of shares equivalent to 0.3% of our then-outstanding shares if her annual salary at the time of grant is greater than or equal to $200,000.

Under the terms of Ms. Bevers employment agreement, if her employment is terminated by us without cause, or she resigns for good reason, then, subject to her execution of a general release of claims, Ms. Bevers will be entitled to receive six months of her annual base salary payable within seven days of termination, reimbursement for up to 18 months of insurance premiums for continuation coverage under our group health plans and accelerated vesting of all of her outstanding stock options and any other equity awards. In addition, if we terminate her employment within the twelve-month period following a change in control, any unvested options or restricted stock shall vest and be immediately exercisable by the Executive.

Cause for purposes of Ms. Bevers employment agreement means Ms. Bevers has: (i) been grossly negligent in the performance of her duties; (ii) been convicted of or pleaded guilty or *nolo contendre* to a felony; (iii) committed a criminal act relating to Ms. Bevers employment or the company involving, in the good faith judgment of our board of directors, fraud or theft, but excluding any conviction which results solely from Ms. Bevers title or position with our company and is not based on her personal conduct; (vi) committed a breach of any material provision of her employment agreement or of any nondisclosure or non-competition agreement which remains uncured or 60 days following receipt of notice; (vii) intentionally breached a material provision of any code of conduct or ethics policy in effect at our company; or (viii) failed to perform any of her material obligations under her employment agreement or failed to execute and perform any directions of our Chief Executive Officer.

Good reason for purposes of Ms. Bevers employment agreement means Ms. Bevers has suffered a material reduction in total compensation.

Change of control for purposes of Ms. Bevers employment agreement means: (i) a merger or consolidation of capital stock by existing holders of our capital stock that results in a change in ownership of more than 50% of the combined voting power of our or our successor s then-outstanding capital stock; or (ii) our stockholders approve an agreement for the sale or disposition of all or substantially all of our assets.

Stephen S. Galliker

Mr. Galliker has served as our Chief Financial Officer since September 10, 2013. Mr. Galliker currently receives a base salary at the annual rate of $220,000. His base salary will be increased by 10% upon our raising financing of $20 million or more, including the gross proceeds of this offering. He also is eligible for an annual cash bonus of up to 30% of his then-current annual base salary as determined by our Chief Executive Officer and board of directors in their discretion. Mr. Galliker was awarded an option to purchase up to 25,000 shares of our common stock at an exercise price of $1.37 per share, which options will vest as to 8,250 of the option shares on the one-year anniversary of the employment date and as to the remaining option shares in equal monthly installments of approximately 695 shares thereafter until fully vested, subject to his remaining in our continuous employ through each such vesting date. However, all of the options will vest within one year of his employment commencement date or the consummation of this offering, whichever is sooner. In addition, Mr. Galliker is eligible for annual stock option grants up to 0.3% of the outstanding stock.

Under the terms of Mr. Galliker s employment agreement, if his employment is terminated by us without cause, or he resigns for good reason, then, subject to his execution of a general release of claims, Mr. Galliker will be entitled to receive 6 months of his annual base salary payable within seven days of termination, reimbursement for up to 18 months of insurance premiums for continuation coverage under our group health plans and accelerated vesting of all

of his outstanding stock options and any other equity awards. In addition, if we terminate his employment within the twelve-month period following a change in control, any unvested options or restricted stock shall vest and be immediately exercisable by the Executive.

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Cause for purposes of Mr. Galliker s employment agreement means Mr. Galliker has: (i) been grossly negligent in the performance of his duties; (ii) been convicted of or pleaded guilty or *nolo contendre* to a felony; (iii) committed a criminal act relating to Mr. Galliker employment or the company involving, in the good faith judgment of our board of directors, fraud or theft, but excluding any conviction which results solely from Mr. Galliker s title or position with our company and is not based on his personal conduct; (iv) committed a breach of any material provision of his employment agreement or of any nondisclosure or non-competition agreement which remains uncured or 60 days following receipt of notice; (v) intentionally breached a material provision of any code of conduct or ethics policy in effect at our company; or (vi) failed to perform any of his material obligations under his employment agreement or failed to execute and perform any directions of our Chief Executive Officer.

Good reason for purposes of Mr. Galliker s employment agreement means Mr. Galliker has suffered a material reduction in total compensation.

Change of control for purposes of Mr. Galliker s employment agreement means: (i) a merger or consolidation of capital stock by existing holders of our capital stock that results in a change in ownership of more than 50% of the combined voting power of our or our successor s then-outstanding capital stock; or (ii) our stockholders approve an agreement for the sale or disposition of all or substantially all of our assets.

Our employment agreements with Dr. Chin and each of our other executive officers also each contain our standard confidential information and invention assignment provisions.

Outstanding Equity Awards at Year Ended December 31, 2012

The executive officer named in the Summary Compensation Table above held no unexercised options, unvested stock or equity incentive plan awards as of December 31, 2012.

Compensation Discussion

Equity Compensation

We offer stock options to our employees, including our executive officers, as the long-term incentive component of our compensation program. We expect to grant equity awards to new hires upon their commencing employment with us. Our stock options allow employees to purchase shares of our common stock at a price per share equal to the fair market value of our common stock on the date of grant and may or may not be intended to qualify as incentive stock options for U.S. federal income tax purposes. In the past, our board of directors has determined the fair market value of our common stock based upon a variety of factors as described elsewhere in this prospectus, including third-party valuations when available. Generally, the stock options we grant to employees vest as to 25% of the total number of option shares on the first anniversary of the date of grant and as to the remaining option shares in equal monthly installments over the ensuing 36 months, subject to the employee s continued employment with us on the vesting date.

We also offer stock options and stock awards to our consultants in lieu of cash. We typically grant equity awards to consultants on a quarterly basis, based on number of hours they have worked in the prior quarter multiplied by their hourly rate. Our stock options allow consultants to purchase shares of our common stock at a price per share equal to the fair market value of our common stock on the date of grant and are not be intended to qualify as incentive stock options for U.S. federal income tax purposes. Generally, the stock options we grant to consultants for prior services rendered vest in full on the grant date.

Stock options and stock awards granted to our executive officers may be subject to accelerated vesting in certain circumstances. For additional discussion, please see Employment Agreements above and Other Elements of Compensation-Change in Control Benefits below.

As described above under the caption Employment Agreements, all of our executive officers received stock option awards in conjunction with their employment by us. In August 2013, we granted to Ms. Bevers a

stock option to purchase 96,092 shares of our common stock and granted to each of Dr. Schultz and Dr. Sundlof a stock option to purchase 50,000 shares of our common stock, in each case, at an exercise price of $1.37 per share. In September 2013, we granted to Mr. Galliker a stock option to purchase 25,000 shares of our common stock at an exercise price of $1.37 per share. In November 2013, we granted to each of Mr. Shultz and Dr. Sundlof a stock option to purchase 50,000 shares and granted to Mr. Galliker a stock option to purchase 25,000 shares, in each case, at an exercise price of $3.83 per share. All of the foregoing options will vest as to 25% of the option shares on the first anniversary of the grant date and as to the balance of the option shares in 36 equal monthly installments thereafter until fully vested, subject to the executive remaining in our continuous employ through each such vesting date.

Other Elements of Compensation

Retirement Plans

Following this offering, we may establish a 401(k) retirement savings plan that will allow eligible employees to defer a portion of their compensation, within limits prescribed by the Internal Revenue Code, on a pre-tax basis through contributions to the plan. Our executive officers will be eligible to participate in the 401(k) plan on the same terms as other full-time employees generally. We may elect to match contributions made by participants in the 401(k) plan up to a specified percentage, and any matching contributions may, or may not be, fully vested as of the date on which the contribution is made. We believe that providing a vehicle for tax-deferred retirement savings though our 401(k) plan, and making matching contributions, may enhance our executive compensation package and afford appropriate incentives our employees, including our executive officers, consistent with the interests of our stockholders.

Employee Benefits and Perquisites

Our executive officers are eligible to participate in our health and welfare plans to the same extent as all other full-time employees generally. We do not provide our named executive officers with perquisites or other personal benefits.

No Tax Gross-Ups

We do not make gross-up payments to cover our executive officers personal income taxes that may pertain to any of the compensation paid or provided by our company.

Change in Control Benefits

As described under the caption Employment Agreements above in this section, our executive officers may become entitled to continued benefits or enhanced benefits in connection with a change in control of our company. Among other things, the employment agreements entitle them to accelerated vesting of all outstanding equity awards if his or her employment is terminated by us within 12 months following a change of control of our company.

2012 Equity Incentive Plan

General

On November 4, 2012, our board of directors adopted the Kindred Biosciences, Inc. 2012 Equity Incentive Plan, which we refer to as the 2012 Plan. The 2012 Plan was amended by our board of directors on June 3, 2013 and on August 27, 2013. The 2012 Plan and amendments were approved by our stockholders on November 4, 2012, June 16, 2013, and August 27, 2013 respectively.

The amended 2012 Plan provides for awards of incentive stock options, non-statutory stock options, rights to acquire restricted stock and stock appreciation rights, or SARs. Subject to the provisions of the 2012 Plan

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relating to adjustments upon changes in our common stock, an aggregate of 4,000,000 shares of common stock have been reserved for issuance under the 2012 Plan, including shares issued to date and shares underlying stock options granted to date.

Purpose

Our board adopted the 2012 Plan to provide a means by which our employees, directors and consultants may be given an opportunity to benefit from increases in the value of our common stock, to assist in attracting and retaining the services of such persons, to bind the interests of eligible recipients more closely to our company s interests by offering them opportunities to acquire shares of our common stock and to afford such persons stock-based compensation opportunities that are competitive with those afforded by similar businesses.

Administration

Unless it delegates administration to a committee of the board, our board administers the 2012 Plan. Subject to the provisions of the 2012 Plan, our board has the power to determine in its discretion: (a) to grant options and SARs and grant or sell restricted stock; (b) to determine the fair market value of the shares of common stock subject to options or other awards; (c) to determine the exercise price of options granted, which shall be no less than the fair market value of any common stock on the date of grant, the economic terms of SARs granted, which shall provide for a benefit of the appreciation on common stock over not less than the value of our common stock on the date of grant, or the offering price of restricted stock; (d) to determine the persons to whom, and the time or times at which, options or SARs shall be granted or restricted stock granted or sold, and the number of shares subject to each option or SAR or the number of shares of restricted stock granted or sold; (e) to construe and interpret the terms and provisions of the Plan, of any applicable agreement and all options and SARs granted under the Plan, and of any restricted stock award under the Plan; (f) to prescribe, amend, and rescind rules and regulations relating to the Plan; (g) to determine the terms and provisions of each option and SAR granted and award of restricted stock (which need not be identical), including but not limited to, the time or times at which options and SARs shall be exercisable or the time at which the restrictions on restricted stock shall lapse; (h) with the consent of the Grantee, to rescind any award or exercise of an option or SAR; (i) to modify or amend the terms of any option, SAR or restricted stock (with the consent of the grantee or holder of the restricted stock if the modification or amendment is adverse to the grantee or holder); (j) to reduce the purchase price of restricted stock or exercise price of any option or base price of any SAR; (k) to accelerate or defer (with the consent of the Grantee) the exercise date of any option or SAR or the date on which the restrictions on restricted stock lapse; (l) to issue shares of restricted stock to an optionee in connection with the accelerated exercise of an option by such optionee; (m) to authorize any person to execute on behalf of our company any instrument evidencing the grant of an option, SAR or award of restricted stock; (n) to determine the duration and purposes of leaves of absence which may be granted to participants without constituting a termination of their employment for the purpose of the Plan; and (o) to make all other determinations deemed necessary or advisable for the administration of the Plan, any applicable agreement, option, SAR or award of restricted stock.

Eligibility

Incentive stock options may be granted under the 2012 Plan only to employees of our company and its affiliates. Employees, directors and consultants of our company and its affiliates are eligible to receive all other types of awards under the 2012 Plan.

Terms of Options and SARs

The exercise price of incentive stock options may not be less than the fair market value of our common stock subject to the option on the date of the grant and, in some cases, may not be less than 110% of such fair market value. The exercise price of nonstatutory options also may not be less than the fair market value of our common stock on the date of grant.

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Options granted under the 2012 Plan may be exercisable in increments, or vest, as determined by our board. Our board has the power to accelerate the time as of which an option may vest or be exercised, with the consent of the optionee. The maximum term of options and SARs under the 2012 Plan is ten years, except that in certain cases the maximum term is five years. Options and SARs awarded under the 2012 Plan generally will terminate 90 days after termination of the participant s service, subject to certain exceptions.

A recipient may not transfer an incentive stock option otherwise than by will or by the laws of descent and distribution. During the lifetime of the recipient, only the recipient may exercise an option or SAR. Our board may grant nonstatutory stock options and SARs that are transferable to the extent provided in the applicable written agreement.

Terms of Restricted Stock Awards

Our board may issue shares of restricted stock under the 2012 Plan as a grant or for such consideration, including services, and, subject to the Sarbanes-Oxley Act of 2002, promissory notes, as determined in its sole discretion.

Shares of restricted stock acquired under a restricted stock purchase or grant agreement may, but need not, be subject to forfeiture to us or other restrictions that will lapse in accordance with a vesting schedule to be determined by our board. In the event a recipient s employment or service with our company terminates, any or all of the shares of common stock held by such recipient that have not vested as of the date of termination under the terms of the restricted stock agreement may be forfeited to our company in accordance with such restricted stock agreement.

Rights to acquire shares of common stock under the restricted stock purchase or grant agreement shall be transferable by the recipient only upon such terms and conditions as are set forth in the restricted stock agreement, as our board shall determine in its discretion, so long as shares of common stock awarded under the restricted stock agreement remain subject to the terms of such agreement.

Adjustment Provisions

If our common stock is changed by reason of a stock split, reverse stock split, stock dividend, recapitalization, combination or reclassification, then the number and class of shares of stock subject to each option and SAR outstanding under the Plan, and the exercise price of each outstanding option and the base value of SAR, will be automatically and proportionately adjusted, except that our company will not be required to issue fractional shares as a result of any such adjustments. Such adjustment in any outstanding option or SAR will be made without change in the total price applicable to the unexercised portion of the option or SAR, but with a corresponding adjustment in the price for each share covered by the unexercised portion of the option or SAR.

Effect of Certain Corporate Events

Except as otherwise provided in the applicable agreement, in the event of (i) a liquidation or dissolution of our company, (ii) a merger or consolidation of our company with or into another corporation or entity (other than a merger with a wholly-owned subsidiary), or (iii) a sale of all or substantially all of the assets of our company in a single transaction or a series of related transactions, all options and SARs will terminate upon consummation of the transaction unless our board determines that they will survive. If our board determines that outstanding options and SARs will survive, and if our company will not be the surviving entity in the transaction, our board will provide that the outstanding options and SARs will be assumed or an equivalent option or SAR substituted by an applicable successor entity or any affiliate of the successor entity. If outstanding options and SARs are to terminate upon consummation of the corporate transaction, any options or SARs outstanding immediately prior to the consummation

of the corporate transaction will be deemed fully vested and exercisable immediately prior to the consummation of the corporate transaction (provided that the option or SAR has not expired by its terms and that the grantee takes all steps necessary to exercise the option or SAR prior to the corporate transaction as required by the agreement evidencing the option or SAR).

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Duration, Amendment and Termination

Our board may suspend or terminate the 2012 Plan without stockholder approval or ratification, subject to certain restrictions, at any time or from time to time. Unless sooner terminated, the 2012 Plan will terminate ten years from the date of its adoption by our board, or on November 4, 2022.

Our board may also amend the 2012 Plan at any time, and from time to time. However, except as relates to adjustments upon changes in common stock, no amendment will be effective unless approved by our stockholders to the extent stockholder approval is necessary to preserve incentive stock option treatment for federal income tax purposes. Our board may submit any other amendment to the 2012 Plan for stockholder approval in its discretion.

As of the date of this prospectus, we have awarded or granted under the 2012 Plan options to purchase a total of 1,356,139 shares of our common stock at exercise prices of $0.32, $0.36, $0.90, $1.37 or $3.83 per share, and 2,643,861 shares of our common stock remain available for issuance under the 2012 Plan. We expect to grant options to purchase 45,000 shares of our common stock at an exercise price per share equal to the initial public offering price in this offering in conjunction with the pricing of this offering.

2012 Director Compensation

For the period September 25, 2012 (inception) through December 31, 2012 no compensation was awarded to, earned by or paid to our non-employee directors who served on our board of directors during 2012, and no non-employee director held any stock options as of December 31, 2012.

In August 2013, we granted to each of Dr. Mario and Mr. Veszprémi stock options to purchase 20,000 shares of our common stock at an exercise price of $1.37 per share. We expect to grant to each of Mr. Nodelman and Dr. Townsend stock options to purchase 20,000 shares of our common stock at an exercise price per share equal to the initial public offering price in this offering in conjunction with the pricing of this offering. All of the foregoing options will vest as to 25% of the option shares on the first anniversary of the grant date and as to the balance of the option shares in 36 equal monthly installments thereafter until fully vested subject to the director s continuous service as a director.

Following the effectiveness of this offering, we intend to adopt a compensation program for our non-employee directors that is expected to consist of annual cash retainer fees and initial and annual stock option grants in amounts that have not yet been determined.

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CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

The following summarizes transactions by us since our inception in September 2012 in which any of our directors, executive officers or, to our knowledge, beneficial owners of more than 5% of our capital stock or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than equity and other compensation, termination, change in control and other arrangements, which are described under Executive and Director Compensation above.

Transactions with Directors and Officers

Co-Founders

From our inception, Richard Chin, M.D. has been our President and Chief Executive Officer and a director of our Company and the beneficial owner of more than 5% of the outstanding shares of our common stock. In connection with the formation of our company, in September and October 2012 we issued and sold to Dr. Chin an aggregate of 3,000,000 shares of our common stock for nominal consideration.

Denise Bevers has been our Chief Operating Officer since shortly after our inception. From August 2012 until June 30, 2013, SD Scientific, Inc., of which Ms. Bevers is the co-founder and a 50% stockholder, served as a consultant to our company. In consideration of consulting services rendered, we granted SD Scientific, Inc. in February 2013 options to purchase 28,525 shares of our common stock at an exercise price of $0.32 per share. In May 2013 and August 2013, respectively, we granted SD Scientific, Inc. additional stock options to purchase 49,613 shares of our common stock at an exercise price of $0.32 per share and 20,400 shares of our common stock at an exercise price $0.90 per share.

Stock Option Grants to Management

Our stock option grants to our directors and executive officers are described under the captions Executive and Director Compensation Employment Agreements, Executive and Director Compensation Compensation Discussion and Executive and Director Compensation 2012 Director Compensation of this prospectus.

Loans from Directors and Officers

On October 10, 2012, Dr. Chin loaned our Company $10,000 pursuant to a non-interest bearing promissory note of that date. The promissory note was payable on demand, and in November 2012 was exchanged for 10,000 shares of our series AA convertible preferred stock and canceled.

Common Stock and Preferred Stock Financings

Common Stock Financings. In conjunction with the formation of our company, in September and October 2012, we issued and sold to our co-founder, Richard Chin, M.D., an aggregate of 3,000,000 shares of our common stock for a total purchase price of $500.

Series AA Convertible Preferred Stock Financing. In November 2012, we issued and sold to investors an aggregate of 990,000 shares of our Series AA convertible preferred stock at a purchase price of $1.00 per share, or a total of $990,000.

Series A-1 and A-1A Convertible Preferred Stock Financings. Between June and August 2013, we issued and sold to investors an aggregate of 1,850,204 shares of our Series A-1 convertible preferred stock at a purchase price of $3.17 per share, or a total of $5,865,147. In August 2013, we issued and sold to investors an aggregate of 1,650,396 shares of our series A-1A convertible preferred stock at a purchase price of $3.17 per share, or a total of $5,231,755.

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In June 2013, we issued 5,000 shares of the Series A-1 Preferred Stock valued at $15,850 on the date of issuance for partial payment of the Series A-1 offering costs.

In August 2013, we issued 5,000 shares and 24,606 shares of Series A-1 and Series A-1A convertible preferred stock, respectively, valued at $3.17 per share, or a total of $93,850, as payment for legal fees and a finder s fee relating to our convertible preferred stock offerings.

The participants in these convertible preferred stock financings included the following holders of more than 5% of our capital stock or entities affiliated with them. The following table presents the number of shares issued to these related parties in these financings. Each share of Series AA convertible preferred stock, Series A-1 convertible preferred stock and Series A-1A convertible preferred stock is convertible into one share of our common stock.

Participants[1]	Series AA Convertible Preferred Stock	Series A-1 Convertible Preferred Stock	Series A-1A Convertible Preferred Stock
Adage Capital Partners LP			946,372
EcoR1 Capital 1 Fund, L.P.		473,187	
Richard Chin, M.D.	100,000	31,546	
The David T. Chang and Gloria Lowe Chang Revocable Trust of 2009	100,000	200,000	108,093
Mario Family Partners, L.P.[2]	50,000	31,546	15,773

(1) Additional details regarding these stockholders and their equity holdings are provided in the Security Ownership of Certain Beneficial Owners and Management section of this prospectus.

(2) Mario Family Partners, L.P., a Delaware limited partnership (MFP), has three limited partners Christopher Mario, Gregory Mario and Jeremy Mario, each of whom is a son of Ernest Mario, Ph.D., one of our directors. The general partner of MFP is Melmotte, LLC, a Delaware limited liability company (Melmotte), the members of which are Christopher Mario, Gregory Mario and Jeremy Mario. Christopher Mario is the sole manager of Melmotte. Dr. Mario owns no interest in MFP. or Melmotte.

Investors Rights Agreements

We have entered into investors rights agreements with the holders of our convertible preferred stock. The investors rights agreements provide for a right of first refusal in favor of certain holders of our convertible preferred stock, which first refusal rights do not extend to this offering and will terminate upon consummation of this offering.

Indemnification Agreements

We will enter into indemnification agreements with each of our directors and executive officers prior to the closing of this offering. These agreements, among other things, will require us to indemnify each director and executive officer to the fullest extent permitted by Delaware law, including indemnification of expenses such as attorneys fees, judgments, fines and settlement amounts incurred by the director or executive officer in any action or proceeding, including any action or proceeding by or in right of us, arising out of the person s services as a director or executive officer.

Policies and Procedures for Related-Person Transactions

The audit committee of our board of directors has been delegated responsibility for reviewing and approving transactions between us and our directors, officers or beneficial owners of 5% or more of our voting securities or their respective affiliates. Such related-person transactions will include, with certain exceptions set forth in Item 404 of Regulation S-K under the Securities Act, any transaction, arrangement or relationship, or any series

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of similar transactions, arrangements or relationships, in which we were or are to be a participant, where the amount involved exceeds $120,000 in any fiscal year and a related person had, has or will have a direct or indirect material interest. In reviewing and approving any such transactions, our audit committee will be tasked to consider all relevant facts and circumstances, including, but not limited to, whether the transaction is on terms comparable to those that could be obtained in an arm s length transaction and the extent of the related person s interest in the transaction. All of the transactions described in this section occurred prior to the adoption of this policy.

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SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The table below sets forth certain information with respect to beneficial ownership of our securities as of November 11, 2013 on an actual basis and after giving pro forma effect to this offering by:

- persons known by us to be the beneficial owners of more than 5% of our issued and outstanding common stock;
- each of our executive officers and directors; and
- all of our executive officers and directors as a group.

The number of shares beneficially owned by each stockholder is determined in accordance with SEC rules. Under these rules, beneficial ownership includes any shares as to which a person has sole or shared voting power or investment power. Percentage ownership is based on 7,589,631 shares of our common stock outstanding on November 11, 2013, assuming conversion of all currently outstanding shares of convertible preferred stock. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, shares of common stock subject to convertible preferred stock, stock options, warrants or other rights held by such person that are currently convertible or exercisable or will become convertible or exercisable within 60 days of November 11, 2013 are considered outstanding, although these shares are not considered outstanding for purposes of computing the percentage ownership of any other person.

Unless otherwise stated, the address of each 5% or greater beneficial holder is c/o Kindred Bioscience, Inc., 1499 Bayshore Highway, Suite 226, Burlingame, California 94010. We believe, based on information provided to us, that each of the stockholders listed below has sole voting and investment power with respect to the shares beneficially owned by the stockholder unless noted otherwise, subject to community property laws where applicable.

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned Before Offering	Percentage of Shares Beneficially Owned After Offering
Named Executive Officers and Directors			
Richard Chin, M.D.[1]	3,256,546	42.21%	21.4%
Stephen S. Galliker	65,773	*	*
Kevin Schultz, D.V.M., Ph.D.			
Stephen Sundlof, D.V.M., Ph.D.			
Denise Bevers[2]	98,538	1.28%	*
Ernest Mario, Ph.D.[3]	11,667	*	*
Ervin Veszprémi[3]	10,000	*	*
Oleg Nodelman[4]	523,187	6.89%	3.47%
Raymond Townsend, Pharm.D.			
All executive officers, directors as a group (nine persons)[5]	3,965,711	50.62%	25.86%

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Name and Address of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned Before Offering	Percentage of Shares Beneficially Owned After Offering
5% or Greater Stockholders			
Adage Capital Partners, L.P.(6)	946,372	12.47%	6.27%
EcoR1 Capital Fund, L.P.(7)	473,187	6.23%	3.14%
The David T. Chang and Gloria Lowe Chang Revocable Trust of 2009(8)	408,093	5.38%	2.70%

* Less than 1%.

(1) Includes 125,000 shares of common stock subject to stock options exercisable within 60 days of November 11, 2013.

(2) Consists of shares of common stock issuable upon exercise of stock options held by SD Scientific, Inc., a corporation in which Ms. Bevers is a co-director and co-stockholder and, as such, is deemed to beneficially own such shares.

(3) Consists of shares of common stock subject to stock options exercisable within 60 days of November 11, 2013.

(4) The shares shown include 473,187 shares held by EcoR1 Capital Fund, L.P. and 50,000 shares held by Mr. Nodelman. The sole general partner of EcoR1 Capital Fund, L.P. is EcoR1 Capital, LLC, of which Mr. Nodelman is the sole managing member. As such, Mr. Nodelman is deemed to be the beneficial owner of the securities held by EcoR1 Capital Fund, L.P.

(5) Includes 245,205 shares of common stock subject to stock options exercisable within 60 days of November 11, 2013.

(6) Adage Capital Partners GP, L.L.C., a Delaware limited liability company, or ACPGP, serves as the general partner of Adage Capital Partners, L.P., a Delaware limited partnership, or the Fund, and as such has discretion over the portfolio securities beneficially owned by the Fund. Adage Capital Advisors, L.L.C., a Delaware limited liability company, or ACA, is the managing member of ACPGP and directs ACPGP s operations. Robert Atchinson and Phillip Gross are the managing members of ACPGP and ACA and general partners of the Fund. ACPGP, ACA, Robert Atchinson and Phillip Gross disclaim beneficial ownership of the reported securities except to the extent of their respective pecuniary interests therein.

(7) The sole general partner of EcoR1 Capital Fund, L.P. is EcoR1 Capital LLC, of which Mr. Nodelman is the sole managing member. As such, Mr. Nodelman is deemed to be the beneficial owner of the securities held by EcoR1 Capital Fund, L.P.

(8) The David T. Chang and Gloria Lowe Chang Revocable Trust of 2009 is a revocable family trust of which David T. Chang and his wife, Gloria Lowe Chang, are co-trustees. As such, Dr. and Mrs. Chang may be deemed to beneficially own the shares shown.

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DESCRIPTION OF CAPITAL STOCK

The following summary of certain material provisions of our common stock and preferred stock does not purport to be complete. You should refer to the forms of our amended and restated certificate of incorporation and our amended and restated bylaws, which are included as exhibits to the registration statement relating to this offering filed by us with the SEC. The summary below is also qualified by reference to the provisions of the Delaware General Corporation Law, or DGCL.

General

Upon completion of this offering, our authorized capital stock will consist of 110,000,000 shares, as follows:

100,000,000 shares of common stock, par value $0.0001 per share, and

10,000,000 shares of preferred stock, par value $0.0001 per share.

As of November 11, 2013, there were 7,589,631 shares of common stock outstanding held by 92 stockholders of record, assuming conversion of all outstanding shares of our convertible preferred stock. We have no outstanding preferred stock other than our outstanding convertible preferred stock.

Common Stock

Each holder of our common stock is entitled to one vote for each share of common stock held on all matters submitted to a vote of stockholders. Common stockholders are not entitled to cumulative voting in the election of directors by our certificate of incorporation. This means that the holders of a majority of the shares voted will be able to elect all of the directors then standing for election. Subject to preferences that may apply to shares of preferred stock outstanding at the time, the holders of outstanding shares of our common stock are entitled to receive dividends out of assets legally available at the times and in the amounts that our board of directors may determine from time to time.

Upon our liquidation, dissolution or winding-up, the holders of our common stock will be entitled to share ratably in all assets remaining after payment of all liabilities and the liquidation preferences of any series of capital stock ranking senior to the common stock upon liquidation. Holders of common stock have no preemptive or conversion rights or other subscription rights. There will be no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are fully paid and nonassessable, and the shares of common stock to be issued under this prospectus, when they are paid for, will be fully paid and nonassessable.

Preferred Stock

Upon completion of this offering, our board of directors will be authorized, subject to any limitations prescribed by law, without further vote or action by the stockholders, to issue from time to time any of the remaining authorized shares of preferred stock in one or more series without stockholder approval. Each such series of preferred stock shall have such number of shares, designations, preferences, voting powers, qualifications, and special or relative rights or privileges as shall be determined by our board of directors, which may include, among others, dividend rights, voting rights, liquidation preferences, conversion rights and preemptive rights.

The authority possessed by our board to issue preferred stock could potentially be used to discourage attempts by third parties to obtain control of our company through a merger, tender offer, proxy contest or otherwise by making such attempts more difficult or more costly. Our board may issue preferred stock with voting rights or conversion rights that, if exercised, could adversely affect the voting power of the holders of common stock. We have no current agreements or understandings with respect to the issuance of preferred stock.

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Options

As of November 11, 2013, options to purchase 1,321,914 shares of our common stock were outstanding under our 2012 Equity Incentive Plan, of which 503,905 were vested and exercisable as of such date.

Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws

Certain provisions of Delaware law and our amended and restated certificate of incorporation and amended and restated bylaws that will be effective at the completion of this offering contain provisions that could have the effect of delaying or discouraging another party from acquiring control of us. These provisions, which are summarized below, are designed to discourage certain types of takeover proposals that are considered coercive or inadequate. These provisions are also intended to encourage anyone seeking to acquire control of us to first negotiate with our board of directors. We believe that protecting our ability to negotiate with any unsolicited and potentially unfriendly acquirer outweigh the disadvantages of discouraging such proposals, including those that may be priced at a premium above the market price of our common stock, because, among other reasons, we may be able to improve the terms of any such proposals by negotiation.

Certificate of Incorporation and Bylaws

Our restated certificate of incorporation and amended and restated bylaws that will be effective at the completion of this offering include provisions that:

- authorize our board of directors to issue, without further action by the stockholders, up to 10,000,000 shares of undesignated preferred stock;
- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;
- specify that special meetings of our stockholders can be called only by our board of directors, our Chairman of the Board, our Chief Executive Officer or our President;
- establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors;
- provide that directors may be removed only for cause and only by the affirmative vote of the holders of at least two-thirds in voting power of the outstanding stock entitled to vote;
- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum;

establish that our board of directors is divided into three classes, Class I, Class II, and Class III, with each class serving staggered three-year terms;

specify that no stockholder is permitted to cumulate votes at any election of the board of directors; and

require a super majority of votes to amend certain of the above-mentioned provisions.

Our amended and restated bylaws also provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for:

any derivative action or proceeding brought on our behalf;

any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of the company to us or our stockholders;

any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law; or

any action asserting a claim governed by the internal affairs doctrine.

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Our amended and restated bylaws further provide that any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of the company is deemed to have notice of and consented to the foregoing provision.

Delaware Anti-Takeover Statute

We are subject to the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers. In general, Section 203 prohibits a publicly-held Delaware corporation from engaging, under certain circumstances, in a business combination with an interested stockholder for a period of three years following the date the person became an interested stockholder unless:

- prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that 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, excluding for purposes of determining the voting stock outstanding, but not for determining the outstanding voting stock owned by the interested stockholder, (1) shares owned by persons who are directors and also officers of the corporation, and (2) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- at or subsequent to the date of the transaction, the business combination is approved by the board of directors of the corporation and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 ⅔% of the outstanding voting stock which is not owned by the interested stockholder.

In this context, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation s outstanding voting stock. The provisions of Section 203 may have an anti-takeover effect with respect to transactions that are not approved in advance by our board of directors. We also anticipate, however, that Section 203 may discourage business combinations that might result in a premium over the market price of our common stock.

The provisions of Delaware law and our amended and restated certificate of incorporation and amended and restated bylaws that will be effective at the completion of this offering could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in our management. It is possible that these provisions could discourage or make it more difficult to accomplish transactions that our stockholders may otherwise deem to be in their best interests.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock will be American Stock Transfer & Trust Company, 40 Wall Street, New York, New York 10005.

The NASDAQ Stock Market

Our common stock has been approved for listing on the NASDAQ Capital Market under the symbol KIN, subject to official notice of issuance.

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SHARES ELIGIBLE FOR FUTURE SALE

Upon completion of this offering, based on shares outstanding as of September 30, 2013, we will have outstanding an aggregate of 15,047,881 shares of our common stock, or 16,172,881 shares if the underwriters exercise their option to purchase additional shares in full. The 7,500,000 shares, or 8,625,000 shares if the underwriters exercise their option to purchase additional shares and the over-allotment option is exercised in full, issued in this offering, will be freely tradable without restriction or further registration under the Securities Act unless the shares are owned by our affiliates as that term is defined in Rule 144 under the Securities Act.

Substantially all of the remaining outstanding shares of our common stock will be restricted securities as that term is defined in Rule 144 under the Securities Act. These restricted securities are eligible for public sale only if they are registered under the Securities Act or if they qualify for an exemption from registration under Rules 144 or 701 under the Securities Act, which are explained below. We expect that all of these shares will be subject to the 180-day lock-up period under the lock-up agreements described below.

Lock-Up Agreements

We and each of our directors and executive officers and holders of substantially all of our outstanding capital stock, who collectively owned beneficially 7,547,881 shares of our common stock outstanding as of September 30, 2013, have agreed that, without the prior written consent of BMO Capital Markets Corp. and Guggenheim Securities, LLC on behalf of the underwriters, we and they will not, subject to limited exceptions that are described in Underwriting below, during the period ending 180 days after the date of this prospectus:

- offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for common stock; or

- enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of our common stock,

whether any transaction described above is to be settled by delivery of our common stock or such other securities, in cash or otherwise.

Upon the expiration of the applicable lock-up periods, substantially all of the shares subject to such lock-up restrictions will become eligible for sale, subject to the limitations discussed above.

Rule 144

In general, under Rule 144 of the Securities Act as currently in effect, a person who is not deemed to have been one of our affiliates for purposes of the Securities Act at any time during 90 days preceding a sale and who has beneficially owned the restricted shares proposed to be sold for at least six months, including the holding period of any prior owner other than our affiliates, is entitled to sell such shares without complying with the manner of sale, volume limitation or notice provisions of Rule 144, subject to our compliance with the public information requirements of Rule 144. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than our affiliates, such person is entitled to sell such shares without

complying with any of the requirements of Rule 144.

In general, under Rule 144, as currently in effect, our affiliates or persons selling shares on behalf of our affiliates are entitled to sell within any three-month period (after satisfying the six-month holding period described above with respect to restricted shares) a number of shares of common stock that does not exceed the greater of:

1% of the number of shares of common stock then outstanding; or

the average weekly trading volume of our common stock during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

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Rule 701

In general, under Rule 701, any of an issuer s employees, directors, officers, consultants or advisors who purchases shares from the issuer in connection with a compensatory stock or option plan or other written agreement before the effective date of a registration statement under the Securities Act is entitled to sell such shares 90 days after such effective date in reliance on Rule 144. An affiliate of the issuer can resell shares in reliance on Rule 144 without having to comply with the holding period requirement, and non-affiliates of the issuer can resell shares in reliance on Rule 144 without having to comply with the current public information and holding period requirements.

The Securities and Exchange Commission has indicated that Rule 701 will apply to typical stock options granted by an issuer before it becomes subject to the reporting requirements of the Exchange Act, along with the shares acquired upon exercise of such options, including exercises after an issuer becomes subject to the reporting requirements of the Exchange Act.

Options and Equity Incentive Plan

As of November 11, 2013, we had outstanding options under our 2012 Plan to purchase an aggregate of 1,321,914 shares of our common stock at a weighted-average exercise price of $1.11 per share.

We currently expect to file a registration statement on Form S-8 under the Securities Act to register up to approximately 3,992,525 shares of common stock issued or issuable under our 2012 Plan. Shares issued under the 2012 Plan after the effective date of such registration statement, other than shares issued to affiliates, generally will be freely tradable without further registration under the Securities Act.

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MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS OF OUR COMMON STOCK

The following discussion is a summary of the material U.S. federal income tax consequences to non-U.S. holders (as defined below) of the purchase, ownership and disposition of our common stock issued pursuant to this offering, but does not purport to be a complete analysis of all potential tax effects. The effects of other U.S. federal tax laws, such as estate and gift tax laws, and any applicable state, local or foreign tax laws are not discussed. This discussion is based on the Internal Revenue Code of 1986, as amended, or the Code, Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service, or IRS, in effect as of the date of this offering. These authorities may change or be subject to differing interpretations. Any such change may be applied retroactively in a manner that could adversely affect a non-U.S. holder of our common stock. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance the IRS or a court will not take a contrary position regarding the tax consequences of the purchase, ownership and disposition of our common stock.

This discussion is limited to non-U.S. holders that hold our common stock as a capital asset within the meaning of Section 1221 of the Code (property held for investment). This discussion does not address all U.S. federal income tax consequences relevant to a non-U.S. holder s particular circumstances, including the impact of the unearned income Medicare contribution tax. In addition, it does not address consequences relevant to non-U.S. holders subject to particular rules, including, without limitation:

- U.S. expatriates and certain former citizens or long-term residents of the United States;
- persons subject to the alternative minimum tax;
- persons holding our common stock as part of a hedge, straddle or other risk reduction strategy or as part of a conversion transaction or other integrated investment;
- banks, insurance companies, and other financial institutions;
- real estate investment trusts or regulated investment companies;
- brokers, dealers or traders in securities;
- controlled foreign corporations, passive foreign investment companies, and corporations that accumulate earnings to avoid U.S. federal income tax;

S corporations, partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes;

tax-exempt organizations or governmental organizations;

persons deemed to sell our common stock under the constructive sale provisions of the Code;

persons who hold or receive our common stock pursuant to the exercise of any employee stock option or otherwise as compensation; and

tax-qualified retirement plans.

If a partnership (or other entity treated as a partnership for U.S. federal income tax purposes) holds our common stock, the tax treatment of a partner in the partnership will depend on the status of the partner, the activities of the partnership and certain determinations made at the partner level. Accordingly, partnerships holding our common stock and the partners in such partnerships should consult their tax advisors regarding the U.S. federal income tax consequences to them.

THIS DISCUSSION IS FOR INFORMATION PURPOSES ONLY AND IS NOT INTENDED AS TAX ADVICE. INVESTORS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS

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WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Definition of a Non-U.S. Holder

For purposes of this discussion, a non-U.S. holder is any beneficial owner of our common stock that is neither a U.S. person nor a partnership for United States federal income tax purposes. A U.S. person is any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) created or organized under the laws of the United States, any state thereof, or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust that (1) is subject to the primary supervision of a U.S. court and the control of one or more United States persons (within the meaning of Section 7701(a)(30) of the Code), or (2) has made a valid election under applicable Treasury Regulations to continue to be treated as a United States person.

Distributions

As described in the section entitled Dividend Policy in this prospectus, we do not anticipate declaring or paying dividends to holders of our common stock in the foreseeable future. However, if we do make distributions on our common stock, such distributions of cash or property on our common stock will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and first be applied against and reduce a non-U.S. holder s adjusted tax basis in its common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below in the section relating to the sale or disposition of our common stock.

Subject to the discussion below on backup withholding and foreign accounts, dividends paid to a non-U.S. holder of our common stock that are not effectively connected with the non-U.S. holder s conduct of a trade or business within the United States will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends (or such lower rate specified by an applicable income tax treaty).

Non-U.S. holders will be entitled to a reduction in or an exemption from withholding on dividends as a result of either (a) an applicable income tax treaty or (b) the non-U.S. holder holding our common stock in connection with the conduct of a trade or business within the United States and dividends being paid in connection with that trade or business. To claim such a reduction in or exemption from withholding, the non-U.S. holder must provide the applicable withholding agent with a properly executed (a) IRS Form W-8BEN claiming an exemption from or reduction of the withholding tax under the benefit of an income tax treaty between the United States and the country in which the non-U.S. holder resides or is established, or (b) IRS Form W-8ECI stating that the dividends are not

subject to withholding tax because they are effectively connected with the conduct by the non-U.S. holder of a trade or business within the United States, as may be applicable. These certifications must be provided to the applicable withholding agent prior to the payment of dividends and must be updated periodically. Non-U.S. holders that do not timely provide the applicable withholding agent with the required certification, but that qualify for a reduced rate under an applicable income tax treaty, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS.

Subject to the discussion below on backup withholding and foreign accounts, if dividends paid to a non-U.S. holder are effectively connected with the non-U.S. holder s conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the non-U.S. holder maintains a permanent

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establishment in the United States to which such dividends are attributable), then, although exempt from U.S. federal withholding tax (provided the non-U.S. holder provides appropriate certification, as described above), the non-U.S. holder will be subject to U.S. federal income tax on such dividends on a net income basis at the regular graduated U.S. federal income tax rates. In addition, a non-U.S. holder that is a corporation may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on its effectively connected earnings and profits for the taxable year that are attributable to such dividends, as adjusted for certain items. Non-U.S. holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

Sale or Other Taxable Disposition

Subject to the discussions below on backup withholding and foreign accounts, a non-U.S. holder will not be subject to U.S. federal income tax on any gain realized upon the sale or other disposition of our common stock unless:

- the gain is effectively connected with the non-U.S. holder s conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the non-U.S. holder maintains a permanent establishment in the United States to which such gain is attributable);
- the non-U.S. holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the disposition and certain other requirements are met; or
- our common stock constitutes a U.S. real property interest, or USRPI, by reason of our status as a U.S. real property holding corporation, or USRPHC, for U.S. federal income tax purposes.

Gain described in the first bullet point above will generally be subject to U.S. federal income tax on a net income basis at the regular graduated U.S. federal income tax rates. A non-U.S. holder that is a foreign corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) of a portion of its effectively connected earnings and profits for the taxable year, as adjusted for certain items.

A non-U.S. holder described in the second bullet point above will be subject to U.S. federal income tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on any gain derived from the disposition, which may be offset by certain U.S. source capital losses of the non-U.S. holder (even though the individual is not considered a resident of the United States) provided the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses.

With respect to the third bullet point above, we believe we are not currently and do not anticipate becoming a USRPHC. Because the determination of whether we are a USRPHC depends on the fair market value of our USRPIs relative to the fair market value of our other business assets and our non-U.S. real property interests, however, there can be no assurance we are not a USRPHC or will not become one in the future. Even if we are or were to become a USRPHC, gain arising from the sale or other taxable disposition by a non-U.S. holder of our common stock will not be subject to U.S. federal income tax if such class of stock is regularly traded, as defined by applicable Treasury Regulations, on an established securities market, and such non-U.S. holder owned, actually or constructively, 5% or less of such class of our stock throughout the shorter of the five-year period ending on the date of the sale or other disposition or the non-U.S. holder s holding period for such stock.

Non-U.S. holders should consult their tax advisors regarding potentially applicable income tax treaties that may provide for different rules.

Information Reporting and Backup Withholding

Subject to the discussion below on foreign accounts, a non-U.S. holder will not be subject to backup withholding with respect to payments of dividends on our common stock we make to the non-U.S. holder,

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provided the applicable withholding agent does not have actual knowledge or reason to know such holder is a United States person and the holder certifies its non-U.S. status, such as by providing a valid IRS Form W-8BEN or W-8ECI, or other applicable certification. However, information returns will be filed with the IRS in connection with any dividends on our common stock paid to the non-U.S. holder, regardless of whether any tax was actually withheld. Copies of these information returns may also be made available under the provisions of a specific treaty or agreement to the tax authorities of the country in which the non-U.S. holder resides or is established.

Information reporting and backup withholding may apply to the proceeds of a sale of our common stock within the United States, and information reporting may (although backup withholding generally will not) apply to the proceeds of a sale of our common stock outside the United States conducted through certain U.S.-related financial intermediaries, in each case, unless the beneficial owner certifies under penalty of perjury that it is a non-U.S. holder on IRS Form W-8BEN or other applicable form (and the payor does not have actual knowledge or reason to know that the beneficial owner is a U.S. person) or such owner otherwise establishes an exemption.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a non-U.S. holder s U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

Additional Withholding Tax on Payments Made to Foreign Accounts

Withholding taxes may be imposed under the Foreign Account Tax Compliance Act, or FATCA, on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends on, or gross proceeds from the sale or other disposition of, our common stock paid to a foreign financial institution or a non-financial foreign entity (each as defined in the Code), unless (1) the foreign financial institution undertakes certain diligence and reporting obligations, (2) the non-financial foreign entity either certifies it does not have any substantial United States owners (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (1) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain specified United States persons or United States-owned foreign entities (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on payments to non-compliant foreign financial institutions and certain other account holders.

The withholding provisions described above will generally apply to payments of dividends made on or after July 1, 2014 and to payments of gross proceeds from a sale or other disposition of stock on or after January 1, 2017. Because we may not know the extent to which a distribution is a dividend for U.S. federal income tax purposes at the time it is made, for purposes of these withholding rules we may treat the entire distribution as a dividend. Prospective investors should consult their tax advisors regarding these withholding provisions.

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UNDERWRITING

BMO Capital Markets Corp. and Guggenheim Securities, LLC are acting as representatives of each of the underwriters named below. Subject to the terms and conditions of an underwriting agreement among us and the underwriters, we have agreed to sell to the underwriters, and each underwriter has agreed, severally and not jointly, to purchase from us, the number of shares of common stock shown opposite its name in the table below:

Underwriter	Number of Shares
BMO Capital Markets Corp.	3,656,250
Guggenheim Securities, LLC	3,656,250
Roth Capital Partners, LLC	187,500
Total	7,500,000

The underwriting agreement provides that the obligations of the underwriters are subject to certain conditions precedent including approval of certain legal matters by their counsel. The underwriting agreement provides that the underwriters will purchase all of the shares of common stock if any of them are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated. We have agreed to indemnify the underwriters and certain of their controlling persons against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the shares of common stock subject to their acceptance of the shares of common stock from us and subject to prior sale. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part. In addition, the underwriters have advised us that they do not intend sales to discretionary accounts to exceed 5% of the total number of shares of common stock being offered.

Option to Purchase Additional Shares

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase, from time to time, in whole or in part, up to an aggregate of 1,125,000 shares from us at the public offering price set forth on the cover page of this prospectus, less underwriting discounts and commissions. The underwriters may exercise this option solely for the purpose of covering over-allotments, if any, made in connection with the offering of the shares of common stock offered by this prospectus. If the underwriters exercise this option, each underwriter will be obligated, subject to specified conditions, to purchase a number of additional shares proportionate to that underwriter s initial purchase commitment as indicated in the table above.

Commission and Expenses

The underwriters have advised us that they propose to offer the shares of common stock to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers, which may include the underwriters, at that price less a concession not in excess of $0.294 per share of common stock. After the offering, the offering price and concession to dealers may be varied from time to time by the representatives.

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The following table shows the public offering price, the underwriting discounts and proceeds, before expenses, to us in connection with this offering. These amounts are shown assuming both no exercise and full exercise of the underwriters option to purchase additional shares.

	Per Share	Total Without Option to Purchase Additional Shares	Total With Option to Purchase Additional Shares
Public offering price	$ 7.00	$ 52,500,000	$ 60,375,000
Underwriting discounts and commissions paid by us	$ 0.49	$ 3,675,000	$ 4,226,250
Proceeds to us, before expenses	$ 6.51	$ 48,825,000	$ 56,148,750

We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately $1,052,000, which includes legal, accounting and printing costs and various other fees associated with the registration and listing of our common stock. We have also agreed to reimburse the underwriters for certain of their expenses in an amount up to $20,000.

No Sales of Similar Securities

We, our officers, directors and all of our stockholders have agreed, subject to specified exceptions, not to directly or indirectly, for a period of 180 days after the date of this prospectus, without the prior written consent of the representatives of the underwriters:

- sell, offer, contract or grant any option to sell (including any short sale), pledge, transfer, establish an open put equivalent position within the meaning of Rule 16a-l(h) under the Securities Exchange Act of 1934, as amended, or
- otherwise dispose of any shares of common stock, options or warrants to acquire shares of common stock, or securities exchangeable or exercisable for or convertible into shares of common stock, currently or hereafter owned either of record or beneficially, or
- publicly announce an intention to do any of the foregoing or make any demand or exercise any right with respect to the registration of any shares of our common stock or any security convertible into or exchangeable for our common stock.

However, in the case of our officers, directors and stockholders, these lock-up restrictions will not apply to, subject to certain restrictions:

- bona fide gifts made by the holder;

the surrender or forfeiture of shares of common stock to us to satisfy tax withholding obligations upon exercise or vesting of stock options or equity awards;

transfers of common stock or any security convertible into or exercisable for common stock to an immediate family member, an immediate family member of a domestic partner or a trust for the benefit of the undersigned, a domestic partner or an immediate family member;

transfers of shares of common stock or any security convertible into or exercisable for common stock to any corporation, partnership, limited liability company or other entity all of the beneficial ownership interests of which are held exclusively by the holder, a domestic partner and/or one or more family members of the holder or the holder s domestic partner in a transaction not involving a disposition for value;

transfers of shares of common stock or any security convertible into or exercisable for common stock upon death by will or intestate succession;

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distributions of shares of common stock or securities convertible into or exercisable for common stock to members, partners or stockholders of the holder;

securities transferred to one or more affiliates of the holder and distributions of securities to partners, members or stockholders of the holder;

transactions relating to securities acquired in open market transactions after the date of this prospectus;

the entry into a trading plan established pursuant to Rule 10b5-1 under the Securities Exchange Act, provided that such plan does not provide for any sales or other dispositions of shares of common stock during the 180-day restricted period;

any shares purchased by the holder in this offering; or

securities transferred pursuant to a bona fide third party tender offer, merger, consolidation or other similar transaction made to all holders of our common stock and involving a change of control.

The representatives may, in their sole, joint discretion and at any time or from time to time before the termination of the 180-day period, release all or any portion of the securities subject to lock-up agreements. There are no existing agreements between the underwriters and any of our stockholders who will execute a lock-up agreement, providing consent to the sale of shares prior to the expiration of the lock-up period.

Directed Share Program

At our request, the underwriters have reserved up to 5% of the shares to be offered in this offering for sale at the initial public offering price to certain of our directors, officers, existing stockholders, employees, business associates and related persons. Any directed shares not purchased will be offered by the underwriters to the general public on the same basis as all other shares offered.

Listing

Our common stock has been approved for listing on the NASDAQ Capital Market under the symbol KIN, subject to official notice of issuance. In order to meet the requirements for listing on that exchange, the underwriters have undertaken to sell a minimum number of shares to a minimum number of beneficial owners as required by that exchange.

Prior to this offering, there has been no public market for our common stock. The initial public offering price will be determined through negotiations between us and the representative. In determining the initial public offering price, we and the representative expect to consider a number of factors, including:

the information set forth in this prospectus and otherwise available to the underwriters;

our prospects for future earnings;

our prospects and the history and prospects of the industry in which we compete;

an assessment of our management;

the present state of our development;

the general condition of the securities markets at the time of this offering; and

the recent market prices of, and demand for, publicly traded common stock of generally comparable companies.

We and the underwriters cannot assure you that an active trading market for the shares will develop or that shares will trade in the public market at or above the initial public offering price after this offering.

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Stabilization

The underwriters have advised us that they may engage in short sale transactions, stabilizing transactions, syndicate covering transactions or the imposition of penalty bids in connection with this offering. These activities may have the effect of stabilizing or maintaining the market price of the common stock at a level above that which might otherwise prevail in the open market. Establishing short sales positions may involve either covered short sales or naked short sales. Covered short sales are sales made in an amount not greater than the underwriters option to purchase additional shares of our common stock in this offering. The underwriters may close out any covered short position by either exercising their option to purchase additional shares of our common stock or purchasing shares of our common stock 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 to purchase additional shares. Naked short sales are sales in excess of the option to purchase additional shares of our common stock. 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 the shares of our common stock in the open market after pricing that could adversely affect investors who purchase in this offering. A penalty bid is an arrangement permitting the underwriters to reclaim the selling concession otherwise accruing to a syndicate member in connection with the offering if the common stock originally sold by such syndicate member are purchased in a syndicate covering transaction and therefore have not been effectively placed by such syndicate member.

Similar to other purchase transactions, the underwriter s 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 Stock Market, in the over-the-counter market or otherwise.

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. The underwriters are not obligated to engage in these activities and, if commenced, any of the activities may be discontinued at any time.

Electronic Distribution

A prospectus in electronic format may be made available by e-mail or through online services maintained by one or more of the underwriters or their affiliates. In those cases, prospective investors may view offering terms online and may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of shares of common stock for sale to online brokerage account holders. Any such allocation for online distributions will be made by the underwriters on the same basis as other allocations. Other than the prospectus in electronic format, the information on the underwriters web sites and any information contained in any other web site maintained by any of the underwriters is not part of this prospectus, has not been approved and/or endorsed by us or the underwriters and should not be relied upon by investors.

Other Activities and 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. The underwriters and certain of their affiliates may in the future perform, various commercial and investment banking and financial advisory services for us and our affiliates, for which they received or will receive customary fees and expenses.

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Disclaimers About Non-U.S. Jurisdictions

European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a Relevant Member State) an offer to the public of any shares of our common stock may not be made in that Relevant Member State, except that an offer to the public in that Relevant Member State of any shares of our common stock may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

(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 representatives for any such offer; or

(c) in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of shares of our common stock shall result in a requirement for the publication by us or any underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an offer to the public in relation to any shares of our common stock 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 any shares of our common stock to be offered so as to enable an investor to decide to purchase any shares of our common stock, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression Prospectus Directive means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State), and includes any relevant implementing measure in the Relevant Member State, and the expression 2010 PD Amending Directive means Directive 2010/73/EU.

United Kingdom

Each underwriter has represented and agreed that:

(a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000 (the FSMA)) received by it in connection with the issue or sale of the shares of our common stock in circumstances in which Section 21(1) of the FSMA does not apply to us; and

(b) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares of our common stock in, from or otherwise involving the United Kingdom.

Canada

The common shares may be sold only to purchasers purchasing as principal that are both accredited investors as defined in National Instrument 45-106 Prospectus and Registration Exemptions and permitted clients as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the common shares must be made in accordance with an exemption from the prospectus requirements and in

compliance with the registration requirements of applicable securities laws.

Notice to Residents of Germany

Each person who is in possession of this prospectus is aware of the fact that no German securities prospectus (wertpapierprospekt) within the meaning of the securities prospectus act (wertpapier-prospektgesetz,

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the act) of the federal republic of Germany has been or will be published with respect to the shares of our common stock. In particular, each underwriter has represented that it has not engaged and has agreed that it will not engage in a public offering in the federal republic of Germany (ôffertliches angebot) within the meaning of the act with respect to any of the shares of our common stock otherwise than in accordance with the act and all other applicable legal and regulatory requirements.

Hong Kong

The common shares may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong), or (ii) to professional investors within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a prospectus within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong) and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to common shares which are or are intended to be disposed of only to persons outside Hong Kong or only to professional investors within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

Notice to Residents of the Netherlands

The offering of the shares of our common stock is not a public offering in The Netherlands. The shares of our common stock may not be offered or sold to individuals or legal entities in The Netherlands unless (i) a prospectus relating to the offer is available to the public, which has been approved by the Dutch Authority for the Financial Markets (Autoriteit Financiële Markten) or by the competent supervisory authority of another state that is a member of the European Union or party to the Agreement on the European Economic Area, as amended or (ii) an exception or exemption applies to the offer pursuant to Article 5:3 of The Netherlands Financial Supervision Act (Wet op het financieel toezicht) or Article 53 paragraph 2 or 3 of the Exemption Regulation of the Financial Supervision Act, for instance due to the offer targeting exclusively qualified investors (gekwalificeerde beleggers) within the meaning of Article 1:1 of The Netherlands Financial Supervision Act.

Notice to Residents of Japan

The underwriters will not offer or sell any of the shares of our common stock directly or indirectly in Japan or to, or for the benefit of, any Japanese person or to others, for re-offering or re-sale directly or indirectly in Japan or to any Japanese person, except in each case pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Law of Japan and any other applicable laws and regulations of Japan. For purposes of this paragraph, Japanese person means any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the common shares may not be circulated or distributed, nor may the common shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289

of Singapore (the SFA), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to compliance with conditions set forth in the SFA.

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Where the common shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor, shares, debentures and units of shares and debentures of that corporation or the beneficiaries rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the common shares pursuant to an offer made under Section 275 of the SFA except:

(1) to an institutional investor (for corporations, under Section 274 of the SFA) or to a relevant person defined in Section 275(2) of the SFA, or to any person pursuant to an offer that is made on terms that such shares, debentures and units of shares and debentures of that corporation or such rights and interest in that trust are acquired at a consideration of not less than S$200,000 (or its equivalent in a foreign currency) for each transaction, whether such amount is to be paid for in cash or by exchange of securities or other assets, and further for corporations, in accordance with the conditions specified in Section 275 of the SFA;

(2) where no consideration is or will be given for the transfer; or

(3) where the transfer is by operation of law.

Switzerland

The common shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (the SIX) or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the common shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, or the common shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of common shares will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA, and the offer of common shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes (CISA). Accordingly, no public distribution, offering or advertising, as defined in CISA, its implementing ordinances and notices, and no distribution to any non-qualified investor, as defined in CISA, its implementing ordinances and notices, shall be undertaken in or from Switzerland, and the investor protection afforded to acquirers of interests in collective investment schemes under CISA does not extend to acquirers of common shares.

United Arab Emirates

This offering has not been approved or licensed by the Central Bank of the United Arab Emirates (the UAE), Securities and Commodities Authority of the UAE and/or any other relevant licensing authority in the UAE including any licensing authority incorporated under the laws and regulations of any of the free zones established and operating

in the territory of the UAE, in particular the Dubai Financial Services Authority (DFSA), a regulatory authority of the Dubai International Financial Centre (DIFC). The offering does not constitute a public offer of securities in the UAE, DIFC and/or any other free zone in accordance with the Commercial Companies Law, Federal Law No 8 of 1984 (as amended), DFSA Offered Securities Rules and NASDAQ Dubai Listing Rules, accordingly, or otherwise. The common shares may not be offered to the public in the UAE and/or any of the free zones.

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The common shares may be offered and issued only to a limited number of investors in the UAE or any of its free zones who qualify as sophisticated investors under the relevant laws and regulations of the UAE or the free zone concerned.

France

This prospectus (including any amendment, supplement or replacement thereto) is not being distributed in the context of a public offering in France within the meaning of Article L. 411-1 of the French Monetary and Financial Code (Code monétaire et financier).

This prospectus has not been and will not be submitted to the French Autorité des marchés financiers (the AMF) for approval in France and accordingly may not and will not be distributed to the public in France.

Pursuant to Article 211-3 of the AMF General Regulation, French residents are hereby informed that

1. the transaction does not require a prospectus to be submitted for approval to the AMF;

2. persons or entities referred to in Point 2°, Section II of Article L.411-2 of the Monetary and Financial Code may take part in the transaction solely for their own account, as provided in Articles D. 411-1, D. 734-1, D. 744-1, D. 754-1 and D. 764-1 of the Monetary and Financial Code; and

3. the financial instruments thus acquired cannot be distributed directly or indirectly to the public otherwise than in accordance with Articles L. 411-1, L. 411-2, L. 412-1 and L. 621-8 to L. 621-8-3 of the Monetary and Financial Code.

This prospectus is not to be further distributed or reproduced (in whole or in part) in France by the recipients of this prospectus. This prospectus has been distributed on the understanding that such recipients will only participate in the issue or sale of our common stock for their own account and undertake not to transfer, directly or indirectly, our common stock to the public in France, other than in compliance with all applicable laws and regulations and in particular with Articles L. 411-1 and L. 411-2 of the French Monetary and Financial Code.

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LEGAL MATTERS

The validity of the common stock offered by this prospectus will be passed upon by TroyGould PC, Los Angeles, California. As of the date of the prospectus, TroyGould PC and certain of its attorneys owned in the aggregate 127,500 shares of our convertible preferred stock, which will be converted automatically into 127,500 shares of our common stock immediately prior to the completion of the offering. Certain legal matters in connection with this offering will be passed upon for the underwriters by Latham & Watkins LLP, Costa Mesa, California.

EXPERTS

Our financial statements as of December 31, 2012 and for the period from September 25, 2012 (inception) through December 31, 2012 included in this prospectus have been audited by KMJ Corbin & Company LLP, an independent registered public accounting firm, as stated in their report appearing in this prospectus. Such financial statements are included in this prospectus in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC under the Securities Act a registration statement on Form S-1 with respect to the common stock offered by this prospectus. This prospectus, which constitutes part of the registration statement, does not contain all the information set forth in the registration statement or the exhibits and schedules which are part of the registration statement, portions of which are omitted as permitted by the rules and regulations of the SEC. Statements made in this prospectus regarding the contents of any contract or other document are summaries of the material terms of the contract or document. With respect to each contract or document filed as an exhibit to the registration statement, reference is made to the corresponding exhibit. For further information pertaining to us and the common stock offered by this prospectus, reference is made to the registration statement, including the exhibits and schedules thereto, copies of which may be inspected without charge at the public reference facilities of the SEC at 100 F Street, NE., Room 1580, Washington, D.C. 20549, as may the other reports, statements and information we file with the SEC. Copies of all or any portion of the registration statement may be obtained from the SEC at prescribed rates. Information on the public reference facilities may be obtained by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains a website that contains reports, proxy and information statements and other information that is filed through the SEC s EDGAR System. The website can be accessed at http.//www.sec.gov.

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Kindred Biosciences, Inc.

(A Development Stage Company)

INDEX TO FINANCIAL STATEMENTS

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Kindred Biosciences, Inc.

(A Development Stage Company)

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of

Kindred Biosciences, Inc.

We have audited the accompanying balance sheet of Kindred Biosciences, Inc. (a development stage company) (the Company) as of December 31, 2012, and the related statements of operations and comprehensive loss, changes in convertible preferred stock and stockholders deficit and cash flows for the period from September 25, 2012 (inception) through December 31, 2012. These financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit on its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Kindred Biosciences, Inc. as of December 31, 2012, and the results of its operations and comprehensive loss and its cash flows for the period from September 25, 2012 (inception) through December 31, 2012 in conformity with accounting principles generally accepted in the United States of America.

/s/ KMJ Corbin & Company LLP

Costa Mesa, California

October 1, 2013

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Kindred Biosciences, Inc.

(A Development Stage Company)

Balance Sheets

	December 31, 2012	September 30, 2013 (unaudited)	Pro Forma September 30, 2013 (unaudited)
ASSETS			
Current assets:			
Cash and cash equivalents	$ 937,516	$ 10,991,682	$ 10,991,682
Prepaid expenses and other	504	360,880	360,880
Total current assets	938,020	11,352,562	11,352,562
Property and equipment, net		12,384	12,384
Total assets	$ 938,020	$ 11,364,946	$ 11,364,946
LIABILITIES, CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS EQUITY (DEFICIT)			
Current liabilities:			
Accounts payable	$ 5,499	$ 124,077	$ 124,077
Due to related party	5,122	4,534	4,534
Accrued expenses	59,660	678,071	678,071
Total liabilities	70,281	806,682	806,682
Commitments and contingencies (Note 8)			
Series AA convertible preferred stock; $0.0001 par value; 1,000,000 and 1,015,000 shares authorized at December 31, 2012 and September 30, 2013 (unaudited), respectively; 1,000,000 shares issued and outstanding at December 31, 2012 and September 30, 2013 (unaudited); (liquidation preference of $1,000,000 at December 31, 2012 and September 30, 2013 (unaudited)); no shares issued or outstanding pro forma at September 30, 2013 (unaudited)	987,050	987,050	
Series A-1 convertible preferred stock; $0.0001 par value; no shares and 2,000,000 shares authorized at December 31, 2012 and September 30, 2013 (unaudited), respectively; no shares and 1,860,204 shares issued and outstanding at December 31, 2012 and September 30, 2013 (unaudited), respectively; (liquidation preference of $0 and $5,896,847 at December 31,		5,875,026	

2012 and September 30, 2013 (unaudited), respectively); no shares issued or outstanding pro forma at September 30, 2013 (unaudited)			
Series A-1A convertible preferred stock; $0.0001 par value; no shares and 2,000,000 shares authorized at December 31, 2012 and September 30, 2013 (unaudited), respectively; no shares and 1,675,002 shares issued and outstanding at December 31, 2012 and September 30, 2013 (unaudited), respectively; (liquidation preference of $0 and $5,309,756 at December 31, 2012 and September 30, 2013 (unaudited), respectively); no shares issued or outstanding pro forma at September 30, 2013 (unaudited)		5,221,876	
Stockholders equity (deficit):			
Common stock; $0.0001 par value; 22,000,000 and 50,000,000 shares authorized at December 31, 2012 and September 30, 2013 (unaudited), respectively; 3,000,000 and 3,012,675 shares issued and outstanding at December 31, 2012 and September 30, 2013 (unaudited), respectively; 7,547,881 shares issued and outstanding pro forma at September 30, 2013 (unaudited)	300	301	755
Additional paid-in capital		423,292	12,506,790
Deficit accumulated during the development stage	(119,611)	(1,949,281)	(1,949,281)
Total stockholders equity (deficit)	(119,311)	(1,525,688)	10,558,264
Total liabilities, convertible preferred stock and stockholders equity (deficit)	$ 938,020	$ 11,364,946	$ 11,364,946

The accompanying notes are an integral part of these financial statements.

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Kindred Biosciences, Inc.

(A Development Stage Company)

Statements of Operations and Comprehensive Loss

	For The Period From September 25, 2012 (Inception) Through December 31, 2012	Nine Months Ended September 30, 2013 (unaudited)	Cumulative Period From September 25, 2012 (Inception) Through September 30, 2013 (unaudited)
Operating expenses:			
Research and development	$ 74,772	$ 1,394,547	$ 1,469,319
General and administrative	44,864	437,737	482,601
Total operating expenses	119,636	1,832,284	1,951,920
Loss from operations	(119,636)	(1,832,284)	(1,951,920)
Other income (expense):			
Interest income	25	2,662	2,687
Interest expense		(48)	(48)
Total other income, net	25	2,614	2,639
Net loss and comprehensive loss	$ (119,611)	$ (1,829,670)	$ (1,949,281)
Net loss per share attributable to common stockholders, basic and diluted	$ (0.06)	$ (0.61)	
Weighted average common shares outstanding, basic and diluted	2,112,520	3,001,286	
Pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited)	$ (0.04)	$ (0.39)	
Weighted average shares used in computing pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited)	2,718,082	4,713,320	

The accompanying notes are an integral part of these financial statements.

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Kindred Biosciences, Inc.

(A Development Stage Company)

Statement of Changes in Convertible Preferred Stock and Stockholders Deficit

	Series AA Preferred Stock		Series A-1 Preferred Stock		Series A-1A Preferred Stock		Common Stock		Additional Paid-in Capital	Deficit Accumulated During the Development Stage	St
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount			
5,											
		$		$		$		$	$	$	$
ck											
s	990,000	977,050									
A											
ck											
	10,000	10,000									
ck r er											
nd 2							3,000,000	300			
										(119,611)	
	1,000,000	987,050					3,000,000	300		(119,611)	

,							
ck							
, g							
	1,850,204	5,843,326					
ck							
or	10,000	31,700					
ck							
, g							
			1,650,396	5,143,876			
ck							
			24,606	78,000			
k							
					5,200		11,804
ck					7,475	1	2,391

n									409,097		
										(1,829,670)	
0,											
	1,000,000	$ 987,050	1,860,204	$ 5,875,026	1,675,002	$ 5,221,876	3,012,675	$ 301	$ 423,292	$ (1,949,281)	$

The accompanying notes are an integral part of these financial statements.

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Kindred Biosciences, Inc.

(A Development Stage Company)

Statements of Cash Flows

	For The Period From September 25, 2012 (Inception) Through December 31, 2012	Nine Months Ended September 30, 2013 (unaudited)	Cumulative Period From September 25, 2012 (Inception) Through September 30, 2013 (unaudited)
Cash flows from operating activities:			
Net loss	$ (119,611)	$ (1,829,670)	$ (1,949,281)
Adjustments to reconcile net loss to net cash used in operating activities:			
Stock-based compensation expense	11,340	503,562	514,902
Depreciation expense		1,276	1,276
Changes in operating assets and liabilities:			
Prepaid expenses and other	(504)	(360,376)	(360,880)
Accounts payable	5,499	118,578	124,077
Due to related party	5,122	(588)	4,534
Accrued expenses	35,370	535,750	571,120
Net cash used in operating activities	(62,784)	(1,031,468)	(1,094,252)
Cash flows used in investing activities:			
Purchase of property and equipment		(13,660)	(13,660)
Cash flows from financing activities:			
Proceeds from issuance of Series AA convertible preferred stock	990,000		990,000
Proceeds from issuance of Series A-1 convertible preferred stock		5,865,147	5,865,147
Proceeds from issuance of Series A-1A convertible preferred stock		5,231,755	5,231,755
Proceeds from note payable to related party	10,000		10,000
Exercise of stock options		2,392	2,392
Proceeds from sale of common stock to founder	300		300
Net cash provided by financing activities	1,000,300	11,099,294	12,099,594
Net increase in cash and cash equivalents	937,516	10,054,166	10,991,682

Cash and cash equivalents at beginning of period			937,516	
Cash and cash equivalents at end of period	$ 937,516	$ 10,991,682	$	10,991,682
Supplemental disclosure of cash flow information:				
Cash paid for interest during the period	$	$ 48	$	48
Cash paid for income taxes during the period	$	$ 800	$	800
Supplemental disclosure of non-cash financing activities:				
Conversion of note payable into Series AA convertible preferred stock	$ 10,000	$	$	10,000
Offering costs in connection with Series AA convertible preferred stock recorded in accrued expenses	$ 12,950	$	$	12,950
Issuance of stock options for accrued consulting expenses	$	$ 329,049	$	329,049
Issuance of Series A-1 convertible preferred stock for settlement of offering costs and other legal fees	$	$ 31,700	$	31,700
Issuance of common stock for accrued consulting expenses	$	$ 11,804	$	11,804
Issuance of Series A-1A convertible preferred stock for settlement of offering costs	$	$ 78,000	$	78,000

The accompanying notes are an integral part of these financial statements.

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Kindred Biosciences, Inc.

(A Development Stage Company)

Notes to Financial Statements

(Information As of and For The Nine Months Ended September 30, 2013 is Unaudited)

1. Organization and Description of Business

Kindred Biosciences, Inc. (the Company) was incorporated on September 25, 2012 (inception) in the State of Delaware. The Company is a development stage biopharmaceutical company focused on saving and improving the lives of pets. The Company s activities since inception have consisted principally of raising capital, establishing facilities, recruiting management and technical staff and performing research and development. The Company is headquartered in Burlingame, California.

The Company is subject to risks common to companies in the biotechnology and pharmaceutical industries. There can be no assurance that the Company s research and development will be successfully completed, that adequate protection for the Company s technology will be obtained, that any products developed will obtain necessary government regulatory approval or that any approved products will be commercially viable. The Company operates in an environment of substantial competition from other animal health companies. In addition, the Company is dependent upon the services of its employees and consultants, as well as third-party contract research organizations and manufacturers.

Liquidity

The Company has experienced losses since its inception and had a deficit accumulated during the development stage of $1,949,281 as of September 30, 2013 (unaudited). For the foreseeable future, management expects the Company to continue to incur losses and negative cash flows, which will increase significantly from historical levels as the Company expands its product development activities, seeks regulatory approvals for its product candidates and begins to commercialize any approved products. To date, the Company has been funded primarily through sales of convertible preferred stock. The Company will require additional capital until such time the Company can generate operating revenue in excess of operating expenses. Management believes the Company s cash and cash equivalents of $10,991,682 at September 30, 2013 are sufficient to fund its operations for at least the next 12 months.

If the Company requires additional funding for operations, it may seek such funding through public or private equity or debt financings or other sources, such as corporate collaborations and licensing arrangements. The Company may not be able to obtain financing on acceptable terms, or at all, and the Company may not be able to enter into corporate collaborations or licensing arrangements. The terms of any financing may adversely affect the holding or the rights of the Company s stockholders. If the Company is unable to obtain funding, the Company could be forced to delay, reduce or eliminate its research and development programs or commercialization efforts, which could adversely affect its business prospects.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP).

Development-Stage Company

The Company is a development-stage company as defined under Financial Accounting Standards Board (FASB) guidance. The Company is devoting substantially all of its present efforts to establish a new business, and its planned principal operations have not yet commenced. All losses accumulated since inception have been considered as part of the Company s development-stage activities.

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Kindred Biosciences, Inc.

(A Development Stage Company)

Notes to Financial Statements

(Information As of and For The Nine Months Ended September 30, 2013 is Unaudited)

Use of Estimates

The preparation of financial statements and related disclosures in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the reporting periods. Significant estimates and assumptions reflected in these financial statements include, but are not limited to, the valuation of common stock and stock-based awards, the realization of deferred tax assets and the accrual of research and development expenses. Estimates are periodically reviewed in light of changes in circumstances, facts and experience. Actual results could differ from those estimates.

Unaudited Interim Financial Information

The accompanying balance sheet at September 30, 2013, statements of operations and comprehensive loss, changes in convertible preferred stock and stockholders deficit and of cash flows for the nine months ended September 30, 2013 and the cumulative period from September 25, 2012 (inception) through September 30, 2013, are unaudited. The interim unaudited financial statements have been prepared on the same basis as the audited financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for the fair presentation of the Company s financial position as of September 30, 2013 and the results of its operations and comprehensive loss and its cash flows for the nine months ended September 30, 2013 and the cumulative period from September 25, 2012 (inception) through September 30, 2013. The financial data and other information disclosed in these notes related to the nine months ended September 30, 2013 and the cumulative period from September 25, 2012 (inception) through September 30, 2013 are unaudited. The results for the nine months ended September 30, 2013 are not necessarily indicative of the results to be expected for the year ending December 31, 2013, any other interim periods, or any future year or period. The results of operations for the period from September 25, 2012 (inception) through September 30, 2012 are not presented as they were insignificant.

Unaudited Pro Forma Information

The Company has filed a registration statement on Form S-1 with the U.S. Securities and Exchange Commission in connection with a proposed initial public offering of its common stock. If the offering is consummated, the Company s outstanding convertible preferred stock will automatically convert into shares of common stock of the Company on a one-for-one basis. The accompanying unaudited pro forma balance sheet as of September 30, 2013 has been prepared to give effect to the automatic conversion of all outstanding shares of the Company s convertible preferred stock into 4,535,206 shares of the Company s common stock, as though the proposed initial public offering had occurred on September 30, 2013. In the accompanying statements of operations, unaudited pro forma basic and diluted net loss per share attributable to common stockholders for the period from September 25, 2012 (inception) through December 31, 2012 and the nine months ended September 30, 2013 has been prepared to give effect to the automatic conversion of all outstanding shares of the Company s convertible preferred stock into shares of the Company s common stock, as

though the proposed initial public offering had occurred on the issuance date of the convertible preferred stock.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with an original maturity of three months or less at the date of acquisition to be cash equivalents. As of December 31, 2012, the Company s cash and cash

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Kindred Biosciences, Inc.

(A Development Stage Company)

Notes to Financial Statements

(Information As of and For The Nine Months Ended September 30, 2013 is Unaudited)

equivalents consisted of cash deposited in a business operating account. As of September 30, 2013, the Company s cash and cash equivalents consisted of cash deposited in a business operating account and a money market account. Cash and cash equivalents are recorded at face value or cost, which approximates fair market value.

Concentration of Credit Risk and of Significant Suppliers

The Company s financial instrument that potentially subjects the Company to concentrations of credit risk is cash and cash equivalents. From time to time, the Company maintains cash balances in excess of amounts insured by the Federal Deposit Insurance Corporation (FDIC). At December 31, 2012 and September 30, 2013 (unaudited), the Company had approximately $687,000 and $10,742,000, respectively, in cash deposits in excess of the FDIC limits. The Company does not believe that it is subject to unusual credit risk beyond the normal credit risk associated with commercial banking relationships.

The Company is dependent on third-party manufacturers to supply products for research and development activities in its programs. In particular, the Company relies on a small number of manufacturers to supply it with its requirements for the active pharmaceutical ingredients, or API, and formulated drugs related to some of these programs. These programs would be adversely affected by a significant interruption in the supply of API.

Fair Value Measurements

Certain assets and liabilities are carried at fair value under U.S. GAAP. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. A fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last is considered unobservable, is used to measure fair value:

Level 1:	Quoted prices in active markets for identical assets or liabilities.
Level 2:	Observable inputs (other than Level 1 quoted prices) such as quoted prices in active markets for similar assets or liabilities, quoted prices in markets that are not active for identical or similar assets or liabilities, or other inputs that are observable or can be corroborated by observable market data.
Level 3:	Unobservable inputs that are supported by little or no market activity and that are significant to determining the fair value of the assets or liabilities, including pricing models, discounted cash flow methodologies and similar techniques.

The carrying amount of the Company s financial instruments, including cash and cash equivalents, accounts payable, accrued expenses and amounts due to related party, approximate fair value due to the short maturities of these financial instruments.

At December 31, 2012 and September 30, 2013 (unaudited), the Company does not have any financial assets or liabilities which are measured on a recurring basis.

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Deferred Offering Costs

The Company capitalizes certain legal, accounting and other third-party fees that are directly associated with pending equity financings as prepaid expenses and other assets until such financings are consummated. After consummation of the equity financing, these costs are recorded in stockholders deficit as a reduction of additional paid-in capital resulting from the offering. As of September 30, 2013 (unaudited), the Company recorded deferred offering costs of $288,524 in prepaid expenses and other assets in the accompanying balance sheet in contemplation of the proposed initial public offering in 2013. Should completion of the initial public offering no longer be considered probable, the deferred offering costs would be expensed immediately as a charge to operating expenses. The Company had no deferred offering costs as of December 31, 2012.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. Depreciation expense is recognized using the straight-line method over the following estimated useful lives:

Office equipment: 2-5 years

Expenditures for repairs and maintenance of assets are charged to expense as incurred. Costs of major additions and betterments are capitalized and depreciated on a straight-line basis over their useful lives. Upon retirement or sale, the cost and related accumulated depreciation of assets disposed of are removed from the accounts and any resulting gain or loss is included in income (loss) from operations.

Licenses

The costs incurred for the rights to use licensed technologies in the research and development process, including licensing fees and milestone payments, are charged to research and development expense as incurred in situations where we have not identified an alternative future use for the acquired rights, and are capitalized in situations where we have identified an alternative future use. No costs associated with the use of licensed technologies have been capitalized to date.

Impairment of Long-Lived Assets

The Company reviews long-lived assets, including property and equipment, for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable. Factors that the Company considers in deciding when to perform an impairment review include significant underperformance of the business in relation to expectations, significant negative industry or economic trends, and significant changes or planned changes in the use of the assets. If an impairment review is performed to evaluate a

long-lived asset for recoverability, the Company compares forecasts of undiscounted cash flows expected to result from the use and eventual disposition of the long-lived asset to its carrying value. An impairment loss would be recognized when estimated undiscounted future cash flows expected to result from the use of an asset are less than its carrying amount. The impairment loss would be based on the excess of the carrying value of the impaired assets over its fair value, determined based on discounted cash flows. To date, the Company has not recorded any impairment losses on long-lived assets.

Revenue Recognition

The Company is a development-stage enterprise and has not generated any revenue since inception.

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Research and Development Costs

Research and development costs are expensed as incurred. Included in research and development costs are wages, stock-based compensation and employee benefits, and other operational costs related to the Company s research and development activities, including costs of toxicology studies and pivotal trials.

Patent Costs

All patent-related costs incurred in connection with filing patent applications are recorded in research and development expenses when incurred, as recoverability of such expenditures is uncertain.

Stock-Based Compensation

The Company s stock-based compensation plan (see Note 7) provides for the grant of stock options, restricted common stock and stock appreciation rights. The fair values of stock option grants are determined as of the date of grant using the Black-Scholes option pricing model. This method incorporates the fair value of the Company s common stock at the date of each grant and various assumptions such as the risk-free interest rate, expected volatility based on the historic volatility of publicly-traded peer companies, expected dividend yield, and expected term of the options. The fair values of restricted stock awards are determined based on the fair value of the Company s common stock, as determined by the board of directors, on the date of grant. To date, the Company has not granted any restricted common stock or stock appreciation rights. The fair values of stock-based awards, including the effect of estimated forfeitures, are expensed over the requisite service period, which is generally the awards vesting period. The Company classifies stock-based compensation expense in the statement of operations and comprehensive loss in the same manner in which the award recipient s payroll costs are classified.

The Company s accounting policy for equity instruments issued to consultants and vendors in exchange for goods and services follows FASB guidance. All transactions in which goods or services are the consideration received for the issuance of equity instruments are accounted for based on the fair value of the consideration received or the fair value of the equity instrument issued, whichever is more reliably measurable. The measurement date of the fair value of the equity instrument issued is the earlier of the date on which the counterparty s performance is complete or the date on which it is probable that performance will occur. For transactions that the fair value of the equity instrument issued to non-employees is the more reliable measurement and a measurement date has not been reached, the fair value is re-measured at each reporting date using the Black-Scholes option pricing model. Compensation expense for these share-based awards is recognized over the term of the consulting agreement or until the award is approved and settled.

Income Taxes

The Company accounts for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the financial statements or in the Company s tax returns. Deferred taxes are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. Changes in deferred tax assets and liabilities are recorded in the provision for income taxes. The Company assesses the likelihood that its deferred tax assets will be recovered from future taxable income and, to the extent it believes, based upon the weight of available

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evidence, that it is more likely than not that all or a portion of deferred tax assets will not be realized, a valuation allowance is established through a charge to income tax expense. Potential for recovery of deferred tax assets is evaluated by estimating the future taxable profits expected and considering prudent and feasible tax planning strategies.

The Company accounts for uncertainty in income taxes recognized in the financial statements by applying a two-step process to determine the amount of tax benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon external examination by the taxing authorities. If the tax position is deemed more-likely-than-not to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the financial statements. The amount of the benefit that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. The provision for income taxes includes the effects of any resulting tax reserves, or unrecognized tax benefits, that are considered appropriate as well as the related net interest and penalties.

Comprehensive Loss

Comprehensive loss is defined as changes in stockholders equity (deficit) exclusive of transactions with owners (such as capital contributions and distributions). For the period September 25, 2012 (inception) through December 31, 2012, the nine months ended September 30, 2013 (unaudited), and the cumulative period from September 25, 2012 (inception) through September 30, 2013 (unaudited), there was no difference between net loss and comprehensive loss.

Segment Data

The Company manages its operations as a single segment for the purposes of assessing performance and making operating decisions. The Company is a veterinary biotechnology company focusing on developing therapies for pets. All assets are held in the United States.

Basic and Diluted Net Loss Per Common Share

Basic net loss per common share is computed by dividing net loss attributable to common stockholders for the period by the weighted average number of common shares outstanding during the period. Diluted net loss per share is computed by dividing the net loss attributable to common stockholders for the period by the weighted average number of common shares, including potential dilutive shares of common stock assuming the dilutive effect of potentially dilutive securities. For periods in which the Company has reported a net loss, diluted net loss per common share is the same as basic net loss per common share, since their impact would be anti-dilutive to the calculation of net loss per common share. Diluted net loss per common share is the same as basic net loss per common share for the period from September 25, 2012 (inception) through December 31, 2012 and the nine months ended September 30, 2013

(unaudited) (see Note 11).

Recently Issued Accounting Pronouncements

Comprehensive Income - Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income: In February 2013, the FASB issued guidance requiring entities to report the effect of significant reclassifications out of accumulated other comprehensive income on the respective line items in net income if the amount is required to be reclassified under U.S. GAAP. For amounts that are not required to be reclassified in

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their entirety to net income, an entity is required to cross-reference to other disclosures that provide additional details about those amounts. This guidance revised the previous guidance issued in June 2011 that was deferred. This guidance was applied by the Company for all interim and annual periods beginning on January 1, 2013. The Company had no differences between net loss and comprehensive loss for all periods presented; therefore, adoption of this guidance had no impact on the Company s financial condition, results of operations or cash flows.

Fair Value Measurement - Amendments to Achieve Common Fair Value Measurements and Disclosure Requirements in U.S. GAAP and IFRS: In May 2011, the FASB issued guidance which represents the converged guidance of FASB and the IASB on fair value measurement and disclosures. In particular, the new guidance: (1) requires the disclosure of the level within the fair value hierarchy level for financial instruments that are not measured at fair value but for which the fair value is required to be disclosed; (2) expands level 3 fair value disclosures about valuation process and sensitivity of the fair value measurement to changes in unobservable inputs; (3) permits an exception to measure fair value of a net position for financial assets and financial liabilities managed on a net position basis; and (4) clarifies that the highest and best use measurement is only applicable to nonfinancial assets. This guidance was applied prospectively for interim and annual periods beginning in 2012. The adoption of this guidance did not have a material effect on the Company s financial condition, results of operations or cash flows.

3. Property and Equipment, Net

Property and equipment consisted of the following as of December 31, 2012 and September 30, 2013 (unaudited):

	December 31, 2012	September 30, 2013 (unaudited)
Office equipment	$	$ 13,660
Less accumulated depreciation		(1,276)
Property and equipment, net	$	$ 12,384

Depreciation expense was $0 and $1,276 for the period from September 25, 2012 (inception) through December 31, 2012 and the nine months ended September 30, 2013 (unaudited), respectively.

4. Accrued Expenses

Accrued expenses consist of the following:

	December 31, 2012	September 30, 2013 (unaudited)
Accrued payroll and related expenses	$ 32,553	$ 184,881
Accrued consulting	11,340	94,001
Accrued research and development costs	2,642	86,703
Accrued offering costs	12,950	259,900
Accrued other	175	52,586
	$ 59,660	$ 678,071

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5. Convertible Preferred Stock

The Company s Certificate of Incorporation, as amended and restated, authorizes the Company to issue 15,000,000 shares of $0.0001 par value preferred stock. The Company has issued Series AA convertible preferred stock (Series AA Preferred Stock), Series A-1 convertible preferred stock (Series A-1 Preferred Stock) and Series A-1A convertible preferred stock (Series A-1A Preferred Stock) (collectively, the Preferred Stock).

Preferred Stock consisted of the following as of December 31, 2012:

	Preferred Stock Authorized	Preferred Stock Issued and Outstanding	Liquidation Preference	Carrying Value	Common Stock Issuable Upon Conversion
Series AA convertible preferred stock	1,000,000	1,000,000	$ 1,000,000	$ 987,050	1,000,000

Preferred Stock consisted of the following as of September 30, 2013 (unaudited):

	Preferred Stock Authorized	Preferred Stock Issued and Outstanding	Liquidation Preference	Carrying Value	Common Stock Issuable Upon Conversion
Series AA convertible preferred stock	1,015,000	1,000,000	$ 1,000,000	$ 987,050	1,000,000
Series A-1 convertible preferred stock	2,000,000	1,860,204	5,896,847	5,875,026	1,860,204
Series A-1A convertible preferred stock	2,000,000	1,675,002	5,309,756	5,221,876	1,675,002
	5,015,000	4,535,206	$ 12,206,603	$ 12,083,952	4,535,206

Issuances

During November 2012, the Company issued 990,000 shares of Series AA Preferred Stock at an issuance price equal to $1.00 per share and received gross proceeds of $990,000. In connection with the Series AA Preferred Stock financing, the Company incurred offering costs of $12,950, which were recorded as a reduction of the gross proceeds.

As of December 31, 2012, the offering costs of $12,950 were included in accrued expenses in the accompanying balance sheet.

In November 2012, the co-founder and current President and Chief Executive Officer (CEO) of the Company exchanged a $10,000 note payable owed to him by the Company (see Note 9) into 10,000 shares of the Company s Series AA Preferred Stock.

In connection with the Series AA Preferred Stock offering, each holder of at least 10,000 shares of Series AA Preferred Stock or shares of the Company s common stock issued upon conversion of the Series AA Preferred Stock was granted the right of first refusal to purchase his pro rata share of new securities (any capital stock, including common stock and preferred stock, convertible securities, options or warrants to purchase capital stock) which the Company may, from time to time, propose to sell and issue. Certain securities transactions are excluded from this right as provided in the Series AA Investors Rights Agreement.

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In June 2013, the Company commenced an offering for the sale and issuance of up to 2,000,000 shares of Series A-1 Preferred Stock at an issuance price equal to $3.17 per share. As of September 30, 2013 (unaudited), the Company received gross proceeds of $5,865,147 related to the issuance of 1,850,204 shares of the Series A-1 Preferred Stock. In connection with the Series A-1 Preferred Stock financing, the Company incurred offering costs of $21,821 which were recorded as a reduction of the gross proceeds. In June 2013 (unaudited), the Company issued 5,000 shares of the Series A-1 Preferred Stock valued at $15,850 on the date of issuance for partial payment of the Series A-1 Preferred Stock offering costs. In August 2013 (unaudited), the Company issued an additional 5,000 shares of the Series A-1 Preferred Stock valued at $15,850 on the date of issuance for payment of the remaining Series A-1 Preferred Stock offering costs and other legal fees.

In connection with the sale and issuance of the Series A-1 Preferred Stock, the holders of the Series AA Preferred Stock waived their right of first refusal under the Series AA Investors Rights Agreement with respect to any sale by the Company of a proposed future series of preferred stock (Series A-2 Preferred Stock) on or before June 30, 2014. To date, no Series A-2 Preferred Stock has been authorized by the Company. Additionally, each holder of at least 10,000 shares of Series A-1 Preferred Stock or shares of the Company s common stock issued upon conversion of the Series A-1 Preferred Stock was granted the right of first refusal to purchase his pro rata share of new securities (any capital stock, including common stock and preferred stock, convertible securities, options or warrants to purchase capital stock) which the Company may, from time to time, propose to sell and issue. Certain securities transactions are excluded from this right as provided in the Series A-1 Investors Rights Agreement.

Pursuant to the terms of the Series A-1 Preferred Stock Purchase Agreement, if shares of the Series A-2 Preferred Stock are issued prior to June 30, 2014, and the rights, preferences, or privileges of the Series A-2 Preferred Stock are more favorable to the holders of those shares than the terms of the Series A-1 Preferred Stock, then the rights, preferences and privileges of the Series A-1 Preferred Stock will be amended to be substantially the same of those of the Series A-2 Preferred Stock. In addition, if shares of the Series A-2 Preferred Stock are issued prior to June 30, 2014 and the purchase price of the Series A-2 Preferred Stock is such that the purchase price of the Series A-1 Preferred Stock is not at least 10% lower than the purchase price of the Series A-2 Preferred Stock, then additional shares of Series A-1 Preferred Stock shall be issued to the Series A-1 Preferred Stockholders so that the effective price of the Series A-1 Preferred Stock is at least 10% lower than Series A-2 Preferred Stock. The Company has determined that the value of these embedded derivative features is not significant.

In August 2013 (unaudited), the Company commenced an offering for the sale and issuance of up to 2,000,000 shares of Series A-1A Preferred Stock at an issuance price equal to $3.17 per share. As of September 30, 2013 (unaudited), the Company received gross proceeds of $5,231,755 related to the issuance of 1,650,396 shares of the Series A-1A Preferred Stock. In connection with the Series A-1A Preferred Stock financing, the Company incurred offering costs of $87,879 which were recorded as a reduction of the gross proceeds. In August 2013 (unaudited), the Company issued 24,606 shares of the Series A-1A Preferred Stock valued at $78,000 on the date of issuance for payment of certain Series A-1A offering costs.

In connection with the Series A-1A Preferred Stock offering, each holder of at least 10,000 shares of Series A-1A Preferred Stock or shares of the Company s common stock issued upon conversion of the Series A-1A Preferred Stock was granted the right of first refusal to purchase his pro rata share of new securities (any capital stock, including common stock and preferred stock, convertible securities, options or warrants to purchase capital stock) which the Company may, from time to time, propose to sell and issue. Certain securities

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transactions are excluded from this right as provided in the Series A-1A Investors Rights Agreement. In addition, holders of the Series A-1A Preferred Stock waived their right of first refusal under the Series A-1A Investors Rights Agreement with respect to any sale by the Company of Series A-2 Preferred Stock on or before June 30, 2014. To date, no Series A-2 Preferred Stock has been authorized by the Company.

Pursuant to the terms of the Series A-1A Preferred Stock Purchase Agreement, if shares of the Series A-2 Preferred Stock are issued prior to June 30, 2014, and the rights, preferences, or privileges of the Series A-2 Preferred Stock are more favorable to the holders of those shares than the terms of the Series A-1A Preferred Stock, then the rights, preferences and privileges of the Series A-1A Preferred Stock will be amended to be substantially the same of those of the Series A-2 Preferred Stock. In addition, if shares of the Series A-2 Preferred Stock are issued prior to June 30, 2014 and the purchase price of the Series A-2 Preferred Stock is such that the purchase price of the Series A-1A Preferred Stock is not at least 10% lower than the purchase price of the Series A-2 Preferred Stock, then additional shares of Series A-1A Preferred Stock shall be issued to the Series A-1A Preferred Stockholders so that the effective price of the Series A-1A Preferred Stock is at least 10% lower than Series A-2 Preferred Stock. The Company has determined that the value of these embedded derivative features is not significant.

The holders of the Preferred Stock have the following rights and preferences:

Voting Rights

Except as otherwise provided in the Company s Certificate of Incorporation, as amended and restated, or as required by law, holders of the Preferred Stock shall vote together and not as a separate class. Each holder of the Preferred Stock shall be entitled to the number of votes equal to the number of shares of common stock into which the shares of the Preferred Stock held by such holder could be converted as of the record date. The holders of shares of the Preferred Stock shall be entitled to vote on all matters on which the common stock shall be entitled to vote.

Holders of the Preferred Stock shall be entitled to notice of any stockholders meeting in accordance with the Bylaws of the Company. Fractional votes shall not, however, be permitted and any fractional voting rights resulting from the above formula (after aggregating all shares into which shares of Preferred Stock held by each holder could be converted), shall be disregarded.

Liquidation Preference

In the event of any liquidation, dissolution or winding up of the Company, either voluntary or involuntary, the holder of the Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Company to the holders of the common stock by reason of their ownership of such stock, an amount per share equal to $1 per share for the Series AA Preferred Stock and $3.17 per share for the Series A-1 Preferred Stock and Series A-1A Preferred Stock, or such lesser amount as may be approved by the holders of the majority of the outstanding shares of

the Preferred Stock. If upon liquidation, dissolution or winding up of the Company, the assets of the Company legally available for distribution to the holders of the Preferred Stock are insufficient to permit the payment in full of the liquidation preference above, then the entire assets of the Company legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive.

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After the payment or setting aside for payment to the holders of Preferred Stock of the full amounts of the liquidation preferences, the entire remaining assets of the Company legally available for distribution shall be distributed pro rata to holders of the common stock of the Company in proportion to the number of shares of common stock held by them.

Conversion Rights

Optional Conversion

The shares of Preferred Stock are convertible into shares of common stock, at the option of the holder, at any time after the date of issuance. Each share of Preferred Stock will be converted into shares of common stock at the applicable Series AA, Series A-1 and Series A-1A Preferred Stock conversion rate then in effect, which is calculated by dividing the original issue price by the respective conversion price. The conversion prices for the Series AA, Series A-1 and Series A-1A Preferred Stock are equal to $1.00 per share, $3.17 per share and $3.17 per share, respectively, and are subject to adjustment as set forth in the Company s Certificate of Incorporation, as amended and restated. At December 31, 2012 and September 30, 2013 (unaudited), the shares of the Series AA, Series A-1 and Series A-1A Preferred Stock were all convertible into shares of common stock on a 1-for-1 basis.

Automatic Conversion

Each share of Preferred Stock will automatically be converted into shares of common stock: (i) immediately upon the Company becoming a public company, or (ii) upon the receipt by the Company of a written request for such conversion from the holders of a majority of the Preferred Stock then outstanding (voting as a single class and on an as-converted basis), or, if later, the effective date for conversion specified in such requests. The conversion prices and rates for each series of Preferred Stock are the same in the event of an automatic conversion as they would be in the event of an optional conversion.

Redemption Rights

There are no redemption rights afforded the holders of Preferred Stock. Upon certain change in control events that are outside of the Company s control, including liquidation, sale or transfer of control of the Company, holders of the Preferred Stock can cause its redemption. Therefore, the Preferred Stock has been classified outside of stockholders equity (deficit) in accordance with authoritative guidance for the classification and measurement of potentially redeemable securities.

Reissuance

Any shares of Preferred Stock that are converted into common stock will be canceled and will not be reissued by the Company.

6. Common Stock

The Company s Certificate of Incorporation, as amended and restated, authorizes the Company to issue 50,000,000 shares of $0.0001 par value common stock.

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Each share of common stock entitles the holder to one vote on all matters submitted to a vote of the Company s stockholders, provided, however, that, except as otherwise required by law, holders of common stock shall not be entitled to vote on any amendment to the Certificate of Incorporation that relates solely to the terms of one or more outstanding shares of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other series, to vote thereon pursuant to the Certificate of Incorporation or pursuant to the Delaware General Corporation Law.

In September and October 2012, the Company issued an aggregate of 3,000,000 shares of common stock to the co-founder and current President and CEO for total cash consideration of $500.

In June 2013, the Company amended its Certificate of Incorporation to increase the number of authorized shares of common stock to 50,000,000, increase the number of authorized shares of Series AA Preferred Stock to 1,015,000, authorize the issuance of 2,000,000 shares of $0.0001 par value Series A-1 Preferred Stock, and increase the authorized shares of undesignated preferred stock to 11,985,000. In August 2013, the Company s Board of Directors authorized the issuance of up to 2,000,000 shares of $0.0001 par value Series A-1A Preferred Stock.

In August 2013 (unaudited), the Company issued 5,200 shares of common stock at a price of $2.27 per share to a consultant for services rendered.

In September 2013 (unaudited), the Company issued 7,475 shares of common stock upon exercise of stock options by a consultant at a price of $0.32 per share for total proceeds of $2,392.

As of September 30, 2013 (unaudited), the Company had reserved 1,000,000 shares, 1,860,204 shares and 1,675,002 shares of common stock for the conversion of the Series AA, Series A-1 and Series A-1A Preferred Stock, respectively, (see Note 5) and 1,165,423 shares of common stock for the exercise of outstanding common stock options (see Note 7).

7. Stock-Based Awards

On November 4, 2012, the Company s board of directors adopted the Kindred Biosciences, Inc. 2012 Equity Incentive Plan (the 2012 Plan). The 2012 Plan provides for the Company s board of directors to grant incentive stock options or non-qualified stock options for the purchase of common stock, to issue or sell shares of restricted common stock and to grant stock appreciation rights (SARs) to employees, directors, consultants and advisers of the Company. Pursuant to the terms of the 2012 Plan, no options or SARs shall be granted under the 2012 Plan after 10 years from the date of adoption of the 2012 Plan. The Company has reserved 4,000,000 shares of its common stock for issuance under the 2012 Plan. As of September 30, 2013 (unaudited), 2,827,102 shares of common stock remained available for issuance under the 2012 Plan.

Retrospective Reassessment of the Fair Value of Common Stock

As required by the 2012 Plan, the exercise price for awards granted is not to be less than the fair market value of the Company s common stock as of the date of grant. The Company values its shares of common stock by taking into consideration its most recently available valuation of common stock performed by management and the board of directors, as well as additional factors which may have changed since the date of the most recent contemporaneous valuations through the date of grant. On February 4, 2013, May 9, 2013, August 29, 2013 and September 12, 2013, the board of directors granted stock options for the purchase of 576,525 shares, 154,793

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shares, 412,580 shares, and 29,000 shares, respectively, of the Company s common stock with weighted-average exercise prices of $0.35 per share, $0.32 per share, $0.90 per share and $0.90 per share, respectively. On November 11, 2013, the Company s board of directors, with the consent of the affected employee and director option holders, approved an increase from $0.90 per share to $1.37 per share in the exercise price of 285,092 employee and director options granted in August and September 2013 (see Note 12). The fair value of the Company s common stock on the February 4, 2013 and May 9, 2013 grant dates was $0.32 per share, and on the August 29, 2013 and September 12, 2013 grant dates was $1.37 per share, as determined by the Company s board of directors. The Company is currently pursuing a proposed initial public offering of its common stock. As a result, in connection with the preparation of the Company s financial statements for the nine months ended September 30, 2013 (unaudited), the Company reexamined, for financial reporting purposes only, the fair value of its common stock during the nine months ended September 30, 2013. In connection with the reexamination, the Company determined that retrospective valuations of the fair value of common stock as of February 4, 2013, May 9, 2013, August 29, 2013 and September 12, 2013 were appropriate due to acceleration of the timeframe to a potential liquidity event and the proposed initial public offering, which had not been contemplated in the determination of the original fair value on these dates. Based on this analysis, the fair value of common stock remained unchanged for the February 4, 2013 and May 9, 2013 grant dates. Based on this analysis, the fair value of the common stock on the August 29, 2013 and September 12, 2013 grant dates was determined to be $2.27 per share, which the Company used to value the stock-based compensation expense for these awards.

Stock Options

The Company s board of directors determines the exercise price and vesting period of all stock options. The exercise price of the stock options will be no less than 100% of the fair value per share of the Company s common stock on the grant date. If a person owns capital stock representing more than 10% of all classes of stock of the Company, the exercise price will be not less than 110% of the fair market value on the date of grant. Options are vested over variable periods, generally ranging from one to four years, and expire not more than 10 years after the date of grant.

In September 2012, the Company entered into a consulting agreement with an individual to provide patent legal services to the Company. Pursuant to the terms of the arrangement, payment for services provided by the individual can be made in common stock or in the form of stock options. During the period from September 25, 2012 (inception) through December 31, 2012, the individual earned options to purchase 8,000 shares of the Company s common stock at an exercise price of $0.32 per share. Stock-based compensation expense for services earned by the individual was recognized based on the fair value of the options earned using the Black-Scholes option pricing model and amounted to $2,176 for the period September 25, 2012 (inception) through December 31, 2012.

In October 2012, the Company entered into an employment agreement with the Company s co-founder and current President and CEO. Pursuant to the terms of the employment agreement, the Company agreed to grant the CEO an option to purchase shares of the Company s common stock equivalent in number to 10% of the outstanding shares of

the Company at the time of the closing of a financing event of at least $500,000. In February 2013, the Company s board of directors approved the grant to the CEO an option to purchase 400,000 shares of the Company s common stock at an exercise price of $0.36 per share as a result of the required financing event closing. Pursuant to the option agreement 25% of the option shares will vest on October 1, 2013 and the remaining option shares will vest in equal monthly installments over the following three years. During the nine months ended September 30, 2013 (unaudited), the Company recognized stock-based compensation expense of $21,501 related to this option grant.

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In November 2012, the Company entered into a consulting agreement with SD Scientific, Inc. (SD Scientific) to provide strategic and operational services to the Company. The Company s Chief Operating Officer and co-founder is a 50% stockholder in SD Scientific. Pursuant to the terms of the arrangement, payment for services provided by SD Scientific can be made in common stock or at the option of SD Scientific in the form of stock options. During the nine months ended September 30, 2013 (unaudited), the Company granted fully vested stock options to SD Scientific to purchase 33,688 shares of the Company s common stock at an exercise price of $0.32 per share in payment of consulting fees earned through December 31, 2012. During the nine months ended September 30, 2013 (unaudited), SD Scientific was granted additional fully vested stock options to purchase 64,850 shares of the Company s common stock, of which 44,450 are exercisable at $0.32 per share and 20,400 are exercisable at $0.90 per share. Stock-based compensation expense for services performed by SD Scientific was recognized based on the fair value of the options earned using the Black-Scholes option pricing model and amounted to $9,164 for the period September 25, 2012 (inception) through December 31, 2012 and $53,525 for the nine months ended September 30, 2013 (unaudited).

In February 2013, the Company granted options to purchase an aggregate of 140,000 shares of the Company s common stock to an employee and certain members of the Company s board of directors at an exercise price of $0.32 per share. The options will vest at 25% at the one year anniversary from the vesting start date and the remaining options will vest in equal monthly amounts over the following three years. Stock-based compensation expense for the options granted amounted to $6,473 for the nine months ended September 30, 2013 (unaudited).

In August and September 2013, the Company granted options to purchase an aggregate of 285,092 shares of the Company s common stock to employees and certain members of the Company s board of directors at an exercise price of $0.90 per share. On November 11, 2013, the Company s board of directors, with the consent of the employee and director option holders, approved an adjustment to the exercise price of these options to $1.37 per share (see Note 12). The options will vest as to 25% at the one year anniversary from the vesting start date and the remaining options will vest in equal monthly amounts over the following three years. Stock-based compensation expense for the options granted amounted to $11,119 for the nine months ended September 30, 2013 (unaudited).

During the nine months ended September 30, 2013 (unaudited), the Company entered into various other consulting agreements payable in a combination of stock options and cash. In total, 291,758 stock options were earned resulting in consulting expense recorded during the nine months ended September 30, 2013 (unaudited) of $398,913. Of the stock options earned, 105,180 were granted in May 2013 at an exercise price of $0.32 per share and 136,088 were granted in August 2013 at an exercise price of $0.90.

Total stock-based compensation expense for the period from September 25, 2012 (inception) through December 31, 2012 and for the nine months ended September 30, 2013 (unaudited) was $11,340 and $503,562, respectively. The Company recorded accrued expenses of $11,340 and $94,001 at December 31, 2012 and September 30, 2013 (unaudited), respectively, for those options that have been earned but not granted and approved by the board of directors as of these dates.

The Company values its common stock by taking into consideration its most recently available valuation of common stock performed by management and the board of directors, as well as additional factors which may have changed from the date of the most recent contemporaneous valuation through the grant date.

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The fair value of each stock option grant is estimated on the date of grant using the Black-Scholes option-pricing model. The Company historically has been a private company and lacks company-specific historical and implied volatility information. Therefore, it estimates its expected stock volatility based on the historical volatility of its publicly traded peer companies and expects to continue to do so until such time as it has adequate historical data regarding the volatility of its own traded stock price. The expected term of the Company s common stock options has been determined utilizing the simplified method as the Company has insufficient historical experience for options grants overall, rendering existing historical experience irrelevant to expectations for current grants. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. Expected dividend yield is based on the fact that the Company has never paid cash dividends and does not expect to pay any cash dividends in the foreseeable future.

The relevant data used to determine the value of stock options earned or granted is as follows:

	For the Period From September 25, 2012 (inception) through December 31, 2012	Nine Months Ended September 30, 2013 (unaudited)
Risk-free interest rate	0.62%-0.72%	0.62%-2.75%
Expected term (in years)	10.0	5.0-10.0
Expected volatility	90%	80%-90%
Expected dividend yield	0%	0%

The following table summarizes stock option activity for the period from September 25, 2012 (inception) through December 31, 2012 and for the nine months ended September 30, 2013 (unaudited):

	Shares Issuable Under Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Outstanding, as of September 25, 2012 (inception)		$		$
Granted				
Exercised				

Forfeited				
Expired				
Outstanding, December 31, 2012		$		$
Granted	1,172,898	0.55		
Exercised	(7,475)	0.32		
Forfeited				
Expired				
Outstanding, September 30, 2013 (unaudited)	1,165,423	$ 0.55	9.73	$ 2,000,458
Options vested and expected to vest, as of December 31, 2012		$		$
Options exercisable as of December 31, 2012		$		$
Options vested and expected to vest, as of September 30, 2013 (unaudited)	1,165,423	$ 0.55	9.73	$ 2,000,458
Options exercisable as of September 30, 2013 (unaudited)	340,331	$ 0.59	9.86	$ 572,882

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The aggregate intrinsic value of options is calculated as the difference between the exercise price of the options and the fair value of the Company s common stock for those options that had exercise prices lower than the fair value of the Company s common stock on December 31, 2012 and September 30, 2013.

The aggregate intrinsic value of stock options exercised was $14,576 for the nine months ended September 30, 2013 (unaudited). No options were exercised during the period ended December 31, 2012.

The Company received proceeds of $2,392 from the exercise of common stock options during the nine months ended September 30, 2013 (unaudited).

The weighted-average grant date fair value of options granted during the nine months ended September 30, 2013 (unaudited) was $0.85 per share.

Stock-Based Compensation

The Company recognized stock-based compensation expense for only the portion of awards that are expected to vest. In developing a forfeiture rate estimate, the Company has considered its historical experience to estimate pre-vesting forfeitures for service-based awards. The impact of a forfeiture rate adjustment will be recognized in full in the period of adjustment, and if the actual forfeiture rate is materially different from the Company s estimate, the Company may be required to record adjustments to stock-based compensation expense in future periods.

The Company recorded stock-based compensation expense related to stock options for the period from September 25, 2012 (inception) through December 31, 2012 and for the nine months ended September 30, 2013 (unaudited) as follows:

	For the Period From September 25, 2012 (inception) through December 31, 2012	Nine Months Ended September 30, 2013 (unaudited)
Research and development	$ 11,340	$ 434,370
General and administrative		69,192

	$	11,340	$	503,562

The Company had an aggregate of approximately $591,000 of unrecognized stock-based compensation expense for options outstanding as of September 30, 2013 (unaudited), which is expected to be recognized over a weighted average period of 3.3 years. There was no unrecognized stock-based compensation expense at December 31, 2012.

8. Commitments and Contingencies

Operating Lease

The Company leases its office space on a month-to-month basis. Rent expense was $260 and $4,536 for the period from September 25, 2012 (inception) through December 31, 2012, and for the nine months ended September 30, 2013 (unaudited), respectively.

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(Information As of and For The Nine Months Ended September 30, 2013 is Unaudited)

Indemnities and Guarantees

The Company has made certain indemnities and guarantees, under which it may be required to make payments to a guaranteed or indemnified party, in relation to certain transactions. The Company indemnifies its officers and directors to the maximum extent permitted under the laws of the State of Delaware. The duration of these indemnities and guarantees varies and, in certain cases, is indefinite. These indemnities and guarantees do not provide for any limitation of the maximum potential future payments the Company could be obligated to make. Historically, the Company has not been obligated to make any payments for these obligations and no liabilities have been recorded for these indemnities and guarantees in the accompanying balance sheets.

9. Related Party Transactions

During the period September 25, 2012 (inception) through December 31, 2012 and the nine months ended September 30, 2013 (unaudited), the Company s co-founder and President and Chief Executive Officer paid certain expenses on behalf of the Company totaling $5,122 and $32,003, respectively. At December 31, 2012 and September 30, 2013 (unaudited), the amounts payable to him for reimbursement of these expenses were $5,122 and $4,534, respectively.

In October 2012, the Company s co-founder and President and Chief Executive Officer loaned the Company $10,000 for working capital requirements. The note was due on demand and was non-interest bearing. In November 2012, the note payable was exchanged for 10,000 shares of Series AA Preferred Stock (see Note 5).

The Company entered into a consulting agreement with S.D. Scientific, a company owned 50% by our co-founder and current Chief Operating Officer. Consulting fees earned by S.D. Scientific during the period from September 25, 2012 (inception) through December 31, 2012 and the nine months ended September 30, 2013 (unaudited) were $9,164 and $53,525, respectively (see Note 7).

In connection with the Company s Series AA Preferred Stock financing, the Company s co-founder and current CEO purchased 100,000 shares of Series AA Preferred Stock for $100,000 during the period September 25, 2012 (inception) through December 31, 2012. In addition, the Company s co-founder and Chief Executive Officer purchased 31,546 shares of Series A-1 Preferred Stock for $100,000 during the nine months ended September 30, 2013 (unaudited).

10. Income Taxes

There is no provision for income taxes because the Company has historically incurred operating losses and maintains a full valuation allowance against its net deferred tax assets. The reported amount of income tax expense differs from the amount that would result from applying domestic federal statutory tax rates to pretax losses primarily because of changes in valuation allowance. In all periods presented, all income before income taxes was sourced from the United States.

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A reconciliation of the U.S. federal statutory income tax rate to the Company s effective income tax rate is as follows:

	For the Period From September 25, 2012 (inception) through December 31, 2012
Federal statutory income tax rate	34.0%
State taxes, net of federal benefit	
Non-deductible expenses	(3.7)
Change in deferred tax asset valuation allowance	(30.3)
Effective income tax rate	%

Net deferred tax assets as of December 31, 2012 consisted of the following:

	December 31, 2012
Net operating loss carryforwards	$ 35,656
Accrued expenses	2,290
Depreciation	4,517
Total gross deferred tax assets	42,463
Valuation allowance	(42,463)
Net deferred tax assets	$

As of December 31, 2012, the Company had net operating loss carryforwards for federal and state income tax purposes of $89,511 which begin to expire in fiscal year 2032. Management of the Company has evaluated the positive and negative evidence bearing upon the realizability of its deferred tax assets, which is comprised principally of net operating loss carryforwards. Under the applicable accounting standards, management has considered the

Company s history of losses and concluded that it is more likely than not that the Company will not recognize the benefits of federal and state deferred tax assets. Accordingly, a full valuation allowance of $42,463 has been established at December 31, 2012. Utilization of the net operating loss carryforwards may be subject to a substantial annual limitation under Section 382 of the Internal Revenue Code of 1986 due to ownership change limitations that have occurred previously or that could occur in the future. These ownership changes may limit the amount of net operating loss carryforwards that can be utilized annually to offset future taxable income.

Changes in the valuation allowance for deferred tax assets during the period from September 25, 2012 (inception) through December 31, 2012 was as follows:

	For the Period from September 25, 2012 (inception) through December 31, 2012
Valuation allowance as of beginning of period	$
Decreases recorded as benefit to income tax provisions	
Increases recorded to income tax provision	42,463
Valuation allowance as of end of year	$ 42,463

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The Company has not recorded any amounts for unrecognized tax benefits as of December 31, 2012.

The Company files tax returns as prescribed by the tax laws of the jurisdictions in which it operates. In the normal course of business, the Company is subject to examination by federal and state jurisdictions, where applicable. There are currently no pending income tax examinations. The Company s tax years are still open under statute from 2012 to the present. The Company s policy is to record interest and penalties related to income taxes as part of its income tax provision.

11. Net Loss Per Share and Unaudited Pro Forma Net Loss Per Share

Net Loss Per Share

Basic and diluted net loss per share was calculated as follows for the period September 25, 2012 (inception) through December 31, 2012 and the nine months ended September 30, 2013 (unaudited):

	For the Period September 25, 2012 (inception) through December 31, 2012	Nine Months Ended September 30, 2013 (unaudited)
Basic and diluted net loss per share attributable to common stockholders:		
Numerator:		
Net loss attributable to common stockholders	$ (119,611)	$ (1,829,670)
Denominator:		
Weighted average common shares outstanding, basic and diluted	2,112,520	3,001,286
Net loss per common share attributable to common stockholders, basic and diluted	$ (0.06)	$ (0.61)

Stock options for the purchase of none and 1,165,423 shares of the Company s common stock and shares of common stock issuable upon the conversion of preferred stock of 1,000,000 and 4,535,206 were excluded from the computation of diluted net loss per share attributable to common stockholders for the period from September 25, 2012 (inception) through December 31, 2012 and the nine months ended September 30, 2013 (unaudited), respectively, because those potentially dilutive common shares had an anti-dilutive impact due to the net loss attributable to common stockholders incurred for the periods.

Unaudited Pro Forma Net Loss Per Share

The unaudited pro forma basic and diluted net loss per share attributable to common stockholders for the period from September 25, 2012 (inception) through December 31, 2012 and the nine months ended September 30, 2013 gives effect to certain adjustments arising upon the closing of an initial public offering. Unaudited pro forma basic and diluted net loss per share attributable to common stockholders for the period from September 25, 2012 (inception) through December 31, 2012 and the nine months ended September 30, 2013 has been prepared to give effect to the automatic conversion of all outstanding shares of convertible preferred stock as of December 31, 2012 and September 30, 2013 into 1,000,000 and 4,535,206 shares of the Company s common stock, respectively, as if the conversion had occurred on the issuance date of the convertible preferred stock.

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The computation of unaudited pro forma net loss per share attributable to common stockholders is as follows:

	For the Period September 25, 2012 (inception) through December 31, 2012 (unaudited)	Nine Months Ended September 30, 2013 (unaudited)
Basic and diluted net loss per share attributable to common stockholders:		
Numerator:		
Net loss attributable to common stockholders	$ (119,611)	$ (1,829,670)
Denominator:		
Weighted average common shares outstanding, basic and diluted	2,112,520	3,001,286
Pro forma adjustment for assumed automatic conversion of all outstanding shares of convertible preferred stock immediately prior to the closing of this offering	605,562	1,712,034
Pro forma weighted average common shares outstanding, basic and diluted	2,718,082	4,713,320
Pro forma net loss per common share attributable to common stockholders, basic and diluted	$ (0.04)	$ (0.39)

12. Subsequent Events (Unaudited)

In the preparation of its financial statements, the Company completed an evaluation of the impact of subsequent events through December 2, 2013, the date on which the financial statements were available to be issued.

On October 7, 2013, the Company issued 8,000 shares of common stock upon exercise of stock options by a consultant at a price of $0.32 per share for total proceeds of $2,560.

On November 3, 2013, the Company issued 18,750 shares of common stock upon exercise of stock options by an employee at a price of $0.32 per share for total proceeds of $6,000.

On November 11, 2013, the Company s board of directors, with the consent of the affected employee and director option holders, approved an increase from $0.90 per share to $1.37 per share in the exercise price of 285,092 options granted in August and September 2013.

On November 11, 2013, the Company granted options to employees and consultants for the purchase of 183,241 shares of the Company s common stock at an exercise price of $3.83 per share.

On November 11, 2013, the Company issued 15,000 shares of the Series AA Preferred Stock to its legal firm in settlement of Series AA Preferred Stock accrued offering costs of $12,950 and payment of $2,050 for Series A-1 Preferred Stock offering costs.

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7,500,000 Shares

KINDRED BIOSCIENCES, INC.

Common Stock

BMO Capital Markets **Guggenheim Securities**

Roth Capital Partners

The date of this prospectus is December 11, 2013.