

Raptor Pharmaceutical Corp
Form 424B5
December 18, 2009

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Registration No. 333-162374

Prospectus Supplement

(To prospectus dated October 7, 2009)

3,747,558 shares of Common Stock, par value \$0.001 per share
Series A Warrants to Purchase up to 1,873,779 shares of Common Stock
Series B Warrants to Purchase up to 1,873,779 shares of Common Stock

This prospectus supplement and the accompanying prospectus relate to the offering for sale of 3,747,558 units, consisting of (i) 3,747,558 shares of our common stock, (ii) warrants to purchase an aggregate of up to 1,873,779 shares of our common stock (and the shares of common stock issuable from time to time upon exercise of such warrants), exercisable, subject to its terms, at \$2.45 per share, during the period beginning one hundred eighty (180) days after the date of issue and ending on the fifth (5th) anniversary of the date of issue (the "Series A Warrants") and (iii) warrants to purchase an aggregate of up to 1,873,779 shares of our common stock (and the shares of common stock issuable from time to time upon exercise of such warrants), exercisable, subject to its terms, at \$2.45 per share, during the period beginning one hundred eighty (180) days after the date of issue and ending on the eighteen- (18) month anniversary of the date of issue (the "Series B Warrants," and collectively with the Series A Warrants, the "Warrants").

The purchase price for each unit purchased in this offering is \$2.00. Each unit consists of one share of our common stock, one Series A Warrant exercisable for 0.5 of a share of our common stock and one Series B Warrant exercisable for 0.5 of a share of our common stock. Units will not be issued or certificated. The shares of our common stock and the Warrants comprising the units will be issued separately.

You should carefully read this prospectus supplement and the accompanying prospectus, together with the documents we incorporate by reference, before you invest in any of our securities.

We have retained Ladenburg Thalmann & Co. Inc. as our exclusive placement agent to use its best efforts to solicit offers to purchase our securities in this offering. In addition to the placement agent's fee below, we have also agreed to issue the placement agent warrants to purchase up to an aggregate of 74,951 shares of our common stock at an exercise price of \$2.50 per share. See "Plan of Distribution" beginning on page S-32 of this prospectus supplement for more information regarding these arrangements.

Our common stock is listed on The Nasdaq Capital Market under the symbol "RPTP." The last reported sale price of our common stock on the Nasdaq Capital Market on December 17, 2009 was \$2.45 per share. The aggregate market value of our outstanding common equity held by non-affiliates on December 17, 2009 was approximately \$41,904,641.

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There is no established public trading market for the offered Warrants and we do not expect a market to develop. In addition, we do not intend to apply for listing of the Warrants on any national securities exchange. We have not issued any securities pursuant to Instruction I.B.6 of Form S-3 during the 12 calendar month period that ends on and includes the date of this prospectus supplement.

This investment involves a high degree of risk. See “Risk Factors” beginning on page S-10 of this prospectus supplement and in our periodic reports filed with the Securities and Exchange Commission and incorporated by reference herein for a discussion of the material risks you should consider before making an investment in our common stock.

| | Per Unit | Total |
|----------------------------------|----------|--------------|
| Public offering price | \$ 2.00 | \$ 7,495,116 |
| Placement agent’s fees | \$ 0.13 | \$ 487,183 |
| Proceeds, before expenses, to us | \$ 1.87 | \$ 7,007,933 |

We expect that delivery of the securities being offered pursuant to this prospectus supplement will be made to investors on or about December 22, 2009.

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

Ladenburg Thalmann & Co. Inc.

The date of this prospectus supplement is December 17, 2009

TABLE OF CONTENTS

Page

Prospectus Supplement

| | |
|---|------|
| Forward-Looking Statements | ii |
| Prospectus Summary | S-1 |
| Risk Factors | S-10 |
| Use of Proceeds | S-29 |
| Determination of Offering Price | S-29 |
| Dilution | S-30 |
| Capitalization | S-31 |
| Plan of Distribution | S-32 |
| Description of Securities We Are Offering | S-34 |
| Description of Warrants | S-34 |
| Legal Matters | S-37 |
| Experts | S-37 |
| Where You Can Find More Information | S-37 |

Accompanying Prospectus

| | |
|---|----|
| About This Prospectus | 1 |
| Raptor Pharmaceutical Corp. | 2 |
| Risk Factors | 2 |
| Forward-Looking Statements | 3 |
| The Securities We May Offer | 4 |
| Use of Proceeds | 6 |
| Description of Our Capital Stock | 6 |
| Description of Debt Securities | 11 |
| Description of Warrants | 14 |
| Description of Units | 15 |
| Legal Ownership of Securities | 16 |
| Plan of Distribution | 19 |
| Legal Matters | 21 |
| Experts | 21 |
| Where You Can Find Additional Information | 21 |

This document has two parts. The first part is this prospectus supplement, which describes the specific terms of the units consisting of our common stock and warrants that we are offering and certain other matters relating to us. This first part also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement or the accompanying prospectus. The second part, the accompanying prospectus, gives more general information about our company and securities we may offer from time to time under our shelf registration statement, some of which may not apply to this offering. If the information varies between this prospectus supplement and the accompanying prospectus, or any document incorporated by reference in

this prospectus supplement or the accompanying prospectus, you should rely on the information in this prospectus supplement.

You should read this entire document, including the prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein that are described under “Where You Can Find More Information” before making your investment decision. You should rely only on the information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide information different from that contained or incorporated by reference in this prospectus supplement or the accompanying prospectus. You should not assume that the information appearing in this prospectus supplement, the accompanying prospectus, or information we previously filed with the Securities and Exchange Commission, or the SEC, and incorporated by reference herein is accurate as of any date other than their respective dates, even though this prospectus supplement and any accompanying prospectus is delivered or common stock and warrants are sold on a later date. Our business, financial condition, results of operations and prospects may have changed since those dates. These documents do not constitute an offer to sell or solicitation of any offer to buy our shares of common stock or warrants to purchase our shares of common stock in any circumstances under which the offer or solicitation is unlawful.

FORWARD-LOOKING STATEMENTS

In this prospectus supplement and the accompanying prospectus, in other filings with the SEC and in press releases and other public statements by our officers throughout the year, we make or will make statements that plan for or anticipate the future. These “forward-looking statements,” within the meaning of the Private Securities Litigation Reform Act of 1995, include statements about our future business plans and strategies, as well as other statements that are not historical in nature. These forward-looking statements are based on our current expectations.

In some cases, these statements can be identified by the use of terminology such as “believes,” “expects,” “anticipates,” “plans,” “may,” “might,” “will,” “could,” “should,” “would,” “projects,” “anticipates,” “predicts,” “intends,” “continues,” “estimate,” “opportunity” or the negative of these terms or other comparable terminology. All such statements, other than statements of historical facts, including our financial condition, future results of operation, projected revenues and expenses, business strategies, operating efficiencies or synergies, competitive positions, growth opportunities for existing intellectual properties, technologies, products, plans, and objectives of management, markets for our securities, and other matters, are about us and our industry that involve substantial risks and uncertainties and constitute forward-looking statements for the purpose of the safe harbor provided by Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Such forward-looking statements, wherever they occur, are necessarily estimates reflecting the best judgment of our senior management on the date on which they were made, or if no date is stated, as of the date of the filing made with the SEC in which such statements were made. You should not place undue reliance on these statements, which only reflect information available as of the date that they were made. Our business’ actual operations, performance, development and results might differ materially from any forward-looking statement due to various known and unknown risks, uncertainties, assumptions and contingencies, including those described in the section titled “Risk Factors,” and including, but not limited to, the following:

- our need for, and our ability to obtain, additional funds;
- uncertainties relating to clinical trials and regulatory reviews;
- our dependence on a limited number of therapeutic compounds;
- the early stage of the products we are developing;
- the acceptance of any of our future products by physicians and patients;
- competition and dependence on collaborative partners;
- loss of key management or scientific personnel;
- our ability to obtain adequate intellectual property protection and to enforce these rights;
-

our ability to avoid infringement of the intellectual property rights of others; and

- the other factors and risks described under the section captioned “Risk Factors” as well as other factors not identified therein.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, the factors discussed in this prospectus supplement and the accompanying prospectus, in other filings with the SEC and in press releases and other public statements by our officers throughout the year, could cause actual results or outcomes to differ materially and/or adversely from those expressed in any forward-looking statements made by us or on our behalf, and therefore we cannot guarantee future results, levels of activity, performance or achievements and you should not place undue reliance on any such forward-looking statements. We cannot give you any assurance that such forward-looking statements will prove to be accurate and such forward-looking events may not occur. In light of the significant uncertainties inherent in such forward-looking statements, you should not regard the inclusion of this information as a representation by us or any other person that the results or conditions described in those statements or our objectives and plans will be achieved.

PROSPECTUS SUMMARY

This summary highlights selected information concerning our business and this offering of shares of our common stock and warrants to purchase shares of our common stock. It is not complete and does not contain all of the information that may be important to you and your investment decision. The following summary is qualified in its entirety by the more detailed information and consolidated financial statements and notes thereto included elsewhere or incorporated by reference into this prospectus supplement and the accompanying prospectus. You should carefully read this entire prospectus supplement and the accompanying prospectus, including the information incorporated by reference herein, and should consider, among other things, the matters set forth in “Risk Factors” before making an investment decision. References to the terms “we,” “us,” “our” and similar terms, refer to Raptor Pharmaceutical Corp. and its wholly-owned subsidiaries on a consolidated basis, unless we state or the context implies otherwise.

Our Business

Overview

We believe that we are building a balanced pipeline of drug candidates that may expand the reach and benefit of existing therapeutics. Our product portfolio includes both candidates from our proprietary drug targeting platforms and in-licensed and acquired product candidates.

Our current pipeline includes three clinical development programs which we are actively developing. We also have three other clinical-stage product candidates, for which we are seeking business development partners but are not actively developing, and we have four preclinical product candidates we are developing, three of which are based upon our proprietary drug-targeting platforms.

Clinical Development Programs

Our three active clinical development programs are based on an existing therapeutic that we are reformulating for potential improvement in safety and/or efficacy and for application in new disease indications. These clinical development programs include the following:

- DR Cysteamine for the potential treatment of nephropathic cystinosis, or cystinosis, a rare genetic disorder;
- DR Cysteamine for the potential treatment of non-alcoholic steatohepatitis, or NASH, a metabolic disorder of the liver; and
- DR Cysteamine for the potential treatment of Huntington’s Disease, or HD.

Other Clinical-Stage Product Candidates

We have three clinical-stage product candidates for which we are seeking partners:

-

Convivia™ for the potential management of acetaldehyde toxicity due to alcohol consumption by individuals with aldehyde dehydrogenase, or ALDH2 deficiency, an inherited metabolic disorder; and

- Tezampanel and NGX426, non-opioids for the potential treatment of: migraine, acute pain, and chronic pain.

Preclinical Product Candidates

Our preclinical platforms consist of targeted therapeutics, which we are developing for the potential treatment of multiple indications, including liver diseases, neurodegenerative diseases and breast cancer:

Our receptor-associated protein, or RAP, platform consists of: HepTide™ for the potential treatment of primary liver cancer and hepatitis C; and NeuroTrans™ to potentially deliver therapeutics across the blood-brain barrier for treatment of a variety of neurological diseases.

Our mesoderm development protein, or Mesd, platform consists of WntTide™ for the potential treatment of breast cancer.

We are also examining our glutamate receptor antagonists, tezampanel and NGX426, for the potential treatment of thrombosis and spasticity disorders.

S-1

| DRUG PRODUCT CANDIDATE | DISEASE INDICATION | STAGE OF DEVELOPMENT |
|---|--|--|
| Delayed release, enterically coated cysteamine bitartrate, or DR Cysteamine | cystinosis | Phase IIb (completed, Phase III planned for 2010) Orphan Product Designation |
| DR Cysteamine | NASH | Phase IIa (ongoing, open IND) |
| DR Cysteamine | HD | Phase II (planned for 2010) Orphan Product Designation |
| Convivia TM | ALDH2 Deficiency, or Ethanol Intolerance | Business Development Opportunity (Phase IIa completed) |
| Tezampanel and NGX 426 | Migraine and Pain | Business Development Opportunity (Phase I/II completed) |
| HepTide TM | Hepatocellular Carcinoma, or HCC and Hepatitis | Preclinical (ongoing) |
| WntTide TM | Breast Cancer | Preclinical (ongoing) |
| NeuroTrans TM | Neurodegenerative Diseases | Preclinical Roche collaboration (ongoing) |
| Tezampanel and NGX 426 | Thrombosis and Spasticity Disorder | Preclinical |

Future Activities

Over the next 12 months, we plan to conduct research and development activities based upon our DR Cysteamine clinical programs and continued development of our preclinical product candidates. We also plan to actively seek business development partners for our ConviviaTM product candidate and Tezampanel and NGX426. We may also develop future in-licensed technologies and acquired technologies. A brief summary of our primary objectives in the next 12 months for our research and development activities is provided below. Our Plans for research and development activities over the next 12 months can only be implemented if we are successful in raising significant funds during this period. In addition, there can be no assurances that our research and development activities will be

successful. If we do not make important progress towards achieving at least one of our major clinical objectives, this could adversely impact our ability to raise significant additional funds, which could adversely impact our ability to continue as a going concern.

Clinical Development Programs

We develop clinical-stage drug product candidates which are: internally discovered therapeutic candidates based on our novel drug delivery platforms and in-licensed or purchased clinical-stage products which may be new chemical entities in mid-to-late stage clinical development, currently approved drugs with potential efficacy in additional indications, and treatments that we could repurpose or reformulate as potentially more effective or convenient treatments for a drug's currently approved indications.

S-2

Development of DR Cysteamine for the Potential Treatment of Nephropathic Cystinosis or Cystinosis

Our DR Cysteamine product candidate is a proprietary delayed-release, enteric-coated microbead formulation of cysteamine bitartrate contained in a gelatin capsule. We are investigating DR Cysteamine for the potential treatment of cystinosis.

We believe that immediate-release cysteamine bitartrate, a cystine-depleting agent, is currently the only U.S. Food and Drug Administration, or FDA, and the European Medicines Agency, or EMEA, approved drug to treat cystinosis, a rare genetic disease. Immediate-release cysteamine is effective at preventing or delaying kidney failure and other serious health problems in cystinosis patients. However, patient compliance is challenging due to the requirement for frequent dosing and gastrointestinal side effects. Our DR Cysteamine for the potential treatment of cystinosis is designed to mitigate some of these difficulties. It is expected to be dosed twice daily, compared to the current every-six-hour dosing schedule. In addition, DR Cysteamine is designed to pass through the stomach and deliver the drug directly to the small intestine, where it is more easily absorbed into the bloodstream and may result in fewer gastrointestinal side effects.

The FDA granted orphan drug designation for DR Cysteamine for the treatment of cystinosis in 2006.

In June 2009, we commenced our Phase IIb clinical trial of DR Cysteamine in cystinosis, in which we enrolled nine cystinosis patients with histories of compliance using the currently available immediate-release form of cysteamine bitartrate. The clinical trial, which was conducted at the University of California at San Diego, or UCSD, evaluated safety, tolerability, pharmacokinetics and pharmacodynamics of a single dose of DR Cysteamine in patients. In November 2009, we released the data from the study which achieved its goal by demonstrating improved tolerability and the potential to reduce total daily dosage and administration frequency compared to immediate-release cysteamine bitartrate. We plan to follow the Phase IIb clinical study with a pivotal, Phase III clinical study in cystinosis patients anticipated to commence in early 2010. While we plan to commercialize DR Cysteamine in the U.S. by ourselves, we are actively reviewing potential development partners for DR Cysteamine for markets outside of the U.S. with companies that have experience in clinical development and commercialization of orphan drugs in various ex-U.S. countries.

Development of DR Cysteamine for the Potential Treatment of Non-Alcoholic Steatohepatitis or NASH

In October 2008, we commenced a clinical trial in collaboration with UCSD to investigate a prototype formulation of DR Cysteamine for the treatment of NASH in juvenile patients. In October 2009, we announced positive findings from the completed treatment phase of this open-label Phase IIa clinical trial. At the completion of the initial six-month treatment phase, the study achieved the primary endpoint: mean blood levels of alanine aminotransferase, or ALT, a common biomarker for NASH, were reduced by over 50%. Additionally, over half of the study participants had achieved normalized ALT levels by the end of the treatment phase.

There are no currently approved drug therapies for NASH, and patients are limited to lifestyle changes such as diet, exercise and weight reduction to manage the disease. DR Cysteamine represents an important potential treatment option for patients with NASH. Although NASH is most common in insulin-resistant obese adults with diabetes and abnormal serum lipid profiles, its prevalence is increasing among juveniles as obesity rates rise within this patient population. Although most patients are asymptomatic and feel healthy, NASH causes decreased liver function and can lead to cirrhosis, liver failure and end-stage liver disease.

The NASH trial entails six months of treatment followed by a six-month post-treatment monitoring period. Eligible patients with baseline ALT and aspartate aminotransferase or AST measurements at least twice that of normal levels were enrolled to receive twice-daily, escalating oral doses of up to 1,000 mg of DR Cysteamine. The trial currently has enrolled eleven NASH patients between 11-18 years old. No major adverse events were reported during the six-month treatment phase. Trial subjects continue to be monitored during the six-month post-treatment period currently underway. Full results are being submitted for peer review by UCSD and us, and are expected to be presented in 2010.

S-3

Development of DR Cysteamine for the Potential Treatment of Huntington's Disease or HD

Huntington's Disease, or HD, is a fatal, inherited degenerative neurological disease affecting about 30,000 people in the U.S. and a comparable number of people in Europe. We are not aware of any treatment for HD other than therapeutics that minimize symptoms such as the uncontrollable movements and mood swings resulting from HD. We are collaborating with a French institution, CHU d' Angers, on a Phase II clinical trial investigating DR Cysteamine in HD patients, anticipated to begin in early 2010. We are providing the clinical trial materials for the study, which is sponsored by CHU d' Angers and funded in part by a grant from the French government. We were granted Orphan Drug Designation in the U.S. by the FDA for cysteamine as a potential treatment for HD in 2008.

Other Clinical-Stage Product Candidates

We have three clinical-stage product candidates for which we are seeking partners.

Convivia™ for Liver Aldehyde Dehydrogenase Deficiency

Convivia™ is our proprietary oral formulation of 4-methylpyrazole, or 4-MP, intended for the potential treatment of acetaldehyde toxicity resulting from alcohol consumption in individuals with ALDH2 deficiency, which is an inherited disorder of the body's ability to breakdown ethanol, commonly referred to as alcohol intolerance. 4-MP is presently marketed in the U.S. and E.U. in an intravenous form as an anti-toxin. Convivia™ is designed to lower systemic levels of acetaldehyde (a carcinogen) and reduce symptoms, such as tachycardia and flushing, associated with alcohol consumption by ALDH2-deficient individuals. Convivia™ is a capsule designed to be taken approximately 30 minutes prior to consuming an alcoholic beverage.

In 2008, we completed a Phase IIa dose escalation clinical trial of oral 4-MP with ethanol in ALDH2 deficient patients. The study results demonstrated that the active ingredient in Convivia™ significantly reduced heart palpitations (tachycardia), which are commonly experienced by ALDH2 deficient people who drink, at all dose levels tested. The study also found that the 4-MP significantly reduced peak acetaldehyde levels and total acetaldehyde exposure in a subset of the study participants who possess specific genetic variants of the liver ADH and ALDH2 enzymes. We believe that this subset represents approximately one-third of East Asian populations. We are actively seeking corporate partnerships with pharmaceutical companies in selected Asian countries to continue clinical development of Convivia™ in those countries.

Tezampanel and NGX426 for the Potential Treatment of Migraine and Pain

Tezampanel and NGX426, the oral prodrug of tezampanel, are what we believe to be first-in-class compounds that may represent novel treatments for both pain and non-pain indications. Tezampanel and NGX426 are receptor antagonists that target and inhibit a specific group of receptors—the AMPA and kainate glutamate receptors—found in the brain and other tissues. While normal glutamate production is essential, excess glutamate production, either through injury or disease, has been implicated in a number of diseases and disorders. Published data show that during a migraine, increased levels of glutamate activate AMPA and kainate receptors, result in the transmission of pain and, in many patients, the development of increased pain sensitivity.

By acting at both the AMPA and kainate receptor sites to competitively block the binding of glutamate, tezampanel and NGX426 have the potential to treat a number of diseases and disorders. These include chronic pain, such as migraine and neuropathic pain, muscle spasticity and a condition known as central sensitization, a persistent and acute sensitivity to pain.

Results of a Phase IIb clinical trial of tezampanel were released in October 2007. In the trial, a single dose of tezampanel given by injection was statistically significant compared to placebo in treating acute migraine headache. This was the sixth Phase II trial in which tezampanel has been shown to have analgesic activity. Based on a review of the Phase II data, the FDA previously agreed that tezampanel may move forward into a Phase III program for acute migraine.

In December 2008, results of NGX426 in a human experimental model of cutaneous pain, hyperalgesia and allodynia demonstrated a statistically significant reduction in spontaneous pain, hyperalgesia and allodynia compared to placebo following injections of capsaicin (i.e., chili oil) under the skin. In February 2009, results from a Phase 1 multiple dose trial of NGX426 showed that the compound is safe and well-tolerated in healthy male and female subjects when dosed once daily for five consecutive days.

In November 2009, we announced the presentation of clinical trial data on NGX426 at the 12th International Conference on the Mechanisms and Treatment of Neuropathic Pain. The results of the study led by Mark Wallace, M.D., Professor of Clinical Anesthesiology at the Center for Pain Medicine of the University of California at San Diego, suggested that NGX426 has the potential to be effective in a variety of neuropathic pain states, which are caused by damage to or dysfunction of the peripheral or central nervous system rather than stimulation of pain receptors.

S-4

We are currently seeking program funding, development collaborations or out-licensing partners for the migraine and pain programs.

Preclinical Product Candidates

We are also developing a drug-targeting platform based on the proprietary use of RAP and Mesd. We believe that these proteins may have therapeutic applications in cancer, infectious diseases and neurodegenerative diseases, among others.

These applications are based on the assumption that our targeting molecules can be engineered to bind to a selective subset of receptors with restricted tissue distribution under particular conditions of administration. We believe these selective tissue distributions can be used to deliver drugs to the liver or to other tissues, such as the brain.

In addition to selectively transporting drugs to specific tissues, selective receptor binding constitutes a means by which receptor function might be specifically controlled, either through modulating its binding capacity or its prevalence on the cell surface. Mesd is being engineered for this latter application.

HepTide™ for Hepatocellular Carcinoma and Hepatitis C

Drugs currently used to treat primary liver cancer are often toxic to other organs and tissues. We believe that the pharmacokinetic behavior of RAP (i.e., the determination of the fate or disposition of RAP once administered to a living organism) may diminish the non-target toxicity and increase the on-target efficacy of attached therapeutics.

In preclinical studies of our radio-labeled HepTide™ (a variant of RAP), HepTide™, our proprietary drug-targeting peptide was shown to distribute predominately to the liver. Radio-labeled HepTide™ which was tested in a preclinical research model of HCC, at the National Research Council in Winnipeg, Manitoba, Canada, showed 4.5 times more delivery to the liver than the radio-labeled control. Another study of radio-labeled HepTide™ in a non-HCC preclinical model, showed 7 times more delivery to the liver than the radio-labeled control, with significantly smaller amounts of radio-labeled HepTide™ delivery to other tissues and organs.

HCC is caused by the malignant transformation of hepatocytes, epithelial cells lining the vascular sinusoids of the liver, or their progenitors. HepTide™ has shown to bind to lipoprotein receptor-related protein, or LRP1, receptors on hepatocytes. We believe that the pharmacokinetics and systemic toxicity of a number of potent anti-tumor agents may be controlled in this way.

There are additional factors that favor the suitability of RAP as an HCC targeting agent:

- RAP is captured by hepatocytes with efficiency, primarily on first-pass.
- Late-stage HCC is perfused exclusively by the hepatic artery, while the majority of the liver is primarily perfused through the portal vein.

Studies have shown that the RAP receptor, LRP1, is well expressed on human HCC and under-expressed on non-cancerous, but otherwise diseased, hepatocytes. Also, LRP1 expression is maintained on metastasized HCC. These factors will favor delivery of RAP peptide-conjugated anti-tumor agents to tumor cells, whether in the liver or at metastasized sites.

We are evaluating conjugates between HepTide™ and a chemotherapeutic for testing in vitro and in appropriate preclinical models for the potential treatment of HCC.

S-5

We are also evaluating conjugates between HepTide™ and an antiviral agent for testing in vitro and in appropriate preclinical models for the potential treatment of hepatitis C.

NeuroTrans™ for the Potential Treatment of Diseases Affecting the Brain

Hundreds of known genetic and neurodegenerative diseases affect the brain. Drugs often have difficulty reaching these disease-affected areas because the brain has evolved a protective barrier, commonly referred to as the blood-brain barrier.

Part of the solution to the medical problem of neurodegenerative diseases is the creation of effective brain targeting and delivery technologies. One of the most obvious ways of delivering therapeutics to the brain is via the brain's extensive vascular network. Treating these diseases by delivering therapeutics into the brain in a minimally invasive way, including through a natural receptor mediated transport mechanism called transcytosis, is a vision shared by many researchers and clinicians in the neuroscience and neuromedical fields.

NeuroTrans™ is our proprietary RAP-based technology program to research the delivery of therapeutics across the blood-brain barrier. We believe our NeuroTrans™ platform may provide therapies that will be safer, less intrusive and more effective than current approaches in treating a wide variety of brain disorders.

In preclinical studies, NeuroTrans™ has been conjugated to a variety of protein drugs, including enzymes and growth factors, without interfering with the function of either fusion partner. Studies indicate that radio-labeled NeuroTrans™ may be transcytosed across the blood-brain barrier and that fusions between NeuroTrans™ and therapeutic proteins may be manufactured economically. Experiments conducted in collaboration with Stanford University in 2008 support the NeuroTrans™ peptide's ability to enhance the transport of cargo molecules into the cells that line the blood-brain barrier.

In June 2009, we entered into a collaboration and licensing agreement with F. Hoffman — La Roche Ltd. and Hoffman—La Roche Inc., or Roche, to evaluate therapeutic delivery across the blood-brain barrier utilizing NeuroTrans™. Under terms of the agreement, Roche has funded studies of select molecules attached to NeuroTrans™. The agreement provides Roche with an exclusive worldwide license to NeuroTrans™ for use in the delivery of diagnostic and therapeutic molecules across the blood-brain barrier. Roche's and our scientists will actively collaborate on the project. We have received an initial upfront payment for the collaboration to cover our portion of the initial studies, and may earn development milestone payments and royalties in exchange for the licensing of NeuroTrans™ to Roche.

WntTide™ for the Potential Treatment of Cancer

Human Mesd is a natural inhibitor of the receptor LRP6. LRP6 has recently been shown to play a role in the progression of some breast tumors. Studies in the laboratory of Professor Guojun Bu, one of our scientific advisors, at the Washington University in St. Louis Medical School have demonstrated the potential of Mesd and related peptides to target these tumors. These molecules and applications are licensed to us from Washington University.

WntTide™ is our proprietary, Mesd-based peptide that we are developing as a potential therapeutic to inhibit the growth and metastasis of tumors over-expressing LRP5 or LRP6. We have licensed the use of Mesd from Washington University in St. Louis for the potential treatment of cancer and bone density disorders.

In April 2009, Washington University conducted a preclinical study of WntTide™ in a breast cancer model which showed tumor inhibition. The results of this study were presented at the 2nd Annual Wnt Conference in Washington, D.C., in June 2009 and will likely be published in the first quarter of 2010. We are currently planning another breast tumor preclinical model study with researchers at Washington University in the continued development of WntTide™.

S-6

Tezampanel and NGX426 for the Potential Treatment of Thrombotic Disorder

Research conducted at Johns Hopkins University, or JHU, by Craig Morrell, D.V.M., Ph.D., and Charles Lowenstein, M.D. demonstrated the importance of glutamate release in promoting platelet activation and thrombosis. Research shows that platelets treated with an AMPA/kainate receptor antagonist such as tezampanel or NGX426 are more resistant to glutamate-induced aggregation than untreated platelets. This identifies the AMPA/kainate receptors on platelets targeted by tezampanel or NGX426 as a new antithrombotic target with a different mechanism of action than Plavix®, aspirin or tPA. We have licensed the intellectual property of Tezampanel and NGX 426 for the treatment of thrombotic disorder from JHU and are in discussions with potential collaborators regarding the development of this product candidate. Research conducted in Martin Marsala's lab at UCSD has demonstrated the utility of tezampanel in reducing spasticity elicited by activation of AMPA receptors on spinal astrocytes following ischemic events. We intend to further assess application of tezampanel in the treatment of spasticity.

Other Development Areas

Securing Additional and Complementary Technology Licenses from Others

We plan to establish additional research collaborations with prominent universities and research labs currently working on the development of potential targeting molecules, and to secure licenses from these universities and labs for technology resulting from the collaboration. No assurances can be made regarding our ability to establish such collaborations over the next 12 months, or at all. We intend to focus our in-licensing and product candidate acquisition activities on identifying complementary therapeutics, therapeutic platforms that offer a number of therapeutic targets, and clinical-stage therapeutics based on existing approved drugs in order to create proprietary reformulations to improve safety and efficacy or to expand such drugs' clinical indications through additional clinical trials. We may obtain these products through collaborations, joint ventures or through merger and/or acquisitions with other biotechnology companies.

Facilities

Our primary offices are located at 9 Commercial Blvd., Suite 200, Novato, CA 94949. Our phone number is (415) 382-8111 and our facsimile number is (415) 382-1368. Our website is located at www.raptorpharma.com. The information on our website is not incorporated by reference into this prospectus supplement or the accompanying prospectus, and you should not consider it part of this prospectus supplement or the accompanying prospectus.

Proprietary Rights

We purchased from BioMarin the intellectual property owned by BioMarin for the research and development of the RAP technologies, including two patents, two pending patent applications and two provisional patent applications in review in the U.S., and countries in Europe and Asia and two trademarks for NeuroTrans™. Subsequent to the purchase from BioMarin, we have filed at least four additional patent applications for our RAP technologies. As of October 23, 2009, we own or have licensed eight patent families of applications under prosecution in the U.S. and internationally. Two of these families of applications relate to cysteamine and the remaining six cover the RAP platform. Of the six RAP platform patent families, two patents have issued in the U.S. and a patent has issued in each of Japan, Australia and Europe. All other applications are awaiting or undergoing examination in a variety of countries. We also entered into an exclusive worldwide license agreement with Washington University for our Mesd program for the treatment of cancer and bone diseases. We fund the prosecution of a patent application covering this technology, entering national

phase in the U.S. and internationally in November 2009. In October 2007, we acquired intellectual property assets from Convivia, Inc., a privately held pharmaceutical company, including four filed patents for 4-MP as a potential treatment for ALDH2 deficiency. Since the acquisition of Convivia, Inc. assets, we filed a provisional patent for trans-dermal formulation of 4-MP, a provisional patent for genotype specific methods for treating human subjects using 4-methylpyrazole and a patent based on botanically derived compound for treatment of ALDH2 deficiency. In December 2007, we acquired an exclusive worldwide license agreement to pending patent applications from UCSD relating to our DR Cysteamine program. In March 2008, we amended our license with UCSD to add exclusive worldwide rights to develop DR Cysteamine for the potential treatment of NASH. We also have a license from Eli Lilly & Co. for the intellectual property related to tezampanel and NGX426 for pain indications and a license of tezampanel and NGX 426 for the treatment of thrombotic disorder from JHU. We fund the prosecution of a patent covering this technology, which entered national phase in the U.S. in August, 2009.

S-7

The Offering

The following summary contains basic information about this offering of our common stock and warrants to purchase our common stock, and it is not intended to be complete. It does not contain all of the information that is important to you. For a more complete understanding of our common stock and warrants to purchase our common stock, please refer to the section of this prospectus supplement and the accompanying prospectus titled, “Description of Securities We Are Offering” and “Description of Warrants.”

| | |
|--|---|
| Issuer | Raptor Pharmaceutical Corp. |
| Common Stock offered hereby | Up to 3,747,558 shares. |
| Warrants to purchase common stock offered hereby | Up to 3,747,558 Warrants to purchase common stock. This prospectus supplement also relates to the offering of shares of common stock issuable upon exercise of the Warrants. |
| Warrant terms | The Warrants will be exercisable at a price of \$2.45 per share and are exercisable commencing one hundred eighty (180) days after the date of issuance. The Series A Warrants have a term of five years terminating on the fifth anniversary of the date of issue, and the Series B Warrants have a term of eighteen (18) months terminating on the eighteen- (18) month anniversary of the date of issue. |
| Common stock to be outstanding after this offering | Up to 22,579,515 shares of common stock. |
| NASDAQ listing | Our common stock is listed on the Nasdaq Capital Market under the symbol “RPTP.” There is no established public trading market for the offered Warrants and we do not expect a market to develop. In addition, we do not intend to apply for listing of the Warrants on any national securities exchange. |
| Use of proceeds | The net proceeds from this offering, after deducting the placement agent’s fees and our estimated expenses, will be approximately \$6.9 million, based on a public offering price of \$2.00 |

per share. We expect to use the net proceeds from the offering to fund part of our capital expenditure program and for other corporate purposes. See "Use of Proceeds" on page S-29 of this prospectus supplement.

Dividend policy

We intend to retain all future earnings, if any, to fund the development and growth of our business. We do not anticipate paying cash dividends on our common stock.

Risk factors

This investment involves a high degree of risk. See "Risk Factors" beginning on page S-10 of this prospectus supplement.

Unless otherwise indicated, this prospectus supplement does not assume that any of the Warrants will be exercised. The number of shares of common stock to be outstanding after this offering is based on 18,831,957 shares of our common stock outstanding as of December 17, 2009. The number of shares of common stock to be outstanding after this offering excludes:

- 1,186,610 shares of our common stock issuable upon the exercise of options outstanding under our stock option plans at a weighted average exercise price of \$19.14 per share;
- 1,222,795 shares of our common stock available for future issuance under our stock option plans;
- 2,020,793 shares of our common stock issuable upon exercise of various outstanding warrants at a weighted average exercise price of \$3.07 per share;
- Up to 3,747,558 shares of common stock issuable upon the exercise of the Warrants issued hereunder; and
- Up to 74,951 shares of common stock issuable upon the exercise of warrants issued to the placement agent as described in this prospectus supplement.

RISK FACTORS

An investment in our securities involves a high degree of risk. Before you decide to invest in our securities, you should consider carefully all of the information in this prospectus supplement and the accompanying prospectus, including the risks and uncertainties described below, as well as other information included in or incorporated by reference into this prospectus supplement and the accompanying prospectus, particularly the specific risk factors discussed in the sections titled “Risk Factors” contained in our filings with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, before deciding whether to invest in our securities. Any of these risks could have a material adverse effect on our business, prospects, financial condition and results of operations. In any such case, the trading price of our common stock could decline and you could lose all or part of your investment. You should also refer to the other information contained in this prospectus supplement and the accompanying prospectus, or incorporated by reference, including our financial statements and the notes to those statements, and the information set forth under the caption “Forward-Looking Statements.” The risks described below and contained in our other periodic reports are not the only ones that we face. Additional risks not presently known to us or that we currently deem immaterial may also adversely affect our business operations.

Risks Related to Our Business

If we fail to obtain the capital necessary to fund our operations, our financial results, financial condition and our ability to continue as a going concern will be adversely affected and we will have to delay or terminate some or all of our product development programs.

Our consolidated financial statements as of August 31, 2009 have been prepared assuming that we will continue as a going concern. As of August 31, 2009, we had an accumulated deficit of approximately \$21.9 million. We expect to continue to incur losses for the foreseeable future and will have to raise substantial cash to fund our planned operations. Our recurring losses from operations and our stockholders’ deficit raise substantial doubt about our ability to continue as a going concern and, as a result, our independent registered public accounting firm included an explanatory paragraph in its report on our consolidated financial statements for the year ended August 31, 2009, which is incorporated herein by reference, with respect to this uncertainty. We will need to generate significant revenue or raise additional capital to continue to operate as a going concern. In addition, the perception that we may not be able to continue as a going concern may cause others to choose not to deal with us due to concerns about our ability to meet our contractual obligations and may adversely affect our ability to raise additional capital.

We believe that our cash and cash equivalents balances as of December 16, 2009, will be sufficient to meet our obligations into the first calendar quarter of 2010. Assuming the full 3,747,558 units that are the subject of this offering are sold at a price to the public of \$2.00 per share, the net proceeds from this offering, after deducting the placement agent’s fees and our estimated expenses, will be approximately \$6.9 million, which, if aggregated with our cash and cash equivalents balances as of December 16, 2009, would likely be sufficient to meet our obligations into the third quarter of 2010. We are currently in the process of negotiating strategic partnerships and collaborations in order to fully fund our preclinical and clinical programs in and beyond the third quarter of 2010. These estimates are based on assumptions that may prove to be wrong. In addition to the activities described herein above, we anticipate that we will need to raise funds in the future for the continued development of our drug development programs. We will need to sell equity or debt securities to raise significant additional funds. The sale of additional securities is likely to result in additional dilution to our stockholders. Additional financing may not be available in amounts or on terms

satisfactory to us or at all. We may be unable to raise additional financing due to a variety of factors, including our financial condition, the status of our research and development programs, and the general condition of the financial markets. If we fail to raise significant additional financing, we will have to delay or terminate some or all of our research and development programs, our financial condition and operating results will be adversely affected and we may have to cease our operations.

S-10

If we obtain significant additional financing, we expect to continue to spend substantial amounts of capital on our operations for the foreseeable future. The amount of additional capital we will need depends on many factors, including:

- the progress, timing and scope of our preclinical studies and clinical trials;
- the time and cost necessary to obtain regulatory approvals;
- the time and cost necessary to develop commercial manufacturing processes, including quality systems, and to build or acquire manufacturing capabilities;
- the time and cost necessary to respond to technological and market developments; and
- any changes made or new developments in our existing collaborative, licensing and other corporate relationships or any new collaborative, licensing and other commercial relationships that we may establish.

Moreover, our fixed expenses such as rent, collaboration and license payments and other contractual commitments are substantial and will likely increase in the future. These fixed expenses are likely to increase because we expect to enter into:

- additional licenses and collaborative agreements;
- contracts for manufacturing, clinical and preclinical research, consulting, maintenance and administrative services; and
- financing facilities.

We are an early development stage company and have not generated any revenues to date and have a limited operating history. Many of our drug product candidates are in the concept stage and have not undergone significant testing in preclinical studies or any testing in clinical trials. Moreover, we cannot be certain that our research and development efforts will be successful or, if successful, that our drug product candidates will ever be approved for sale or generate commercial revenues. We have a limited relevant operating history upon which an evaluation of our performance and prospects can be made. We are subject to all of the business risks associated with a new enterprise, including, but not limited to, risks of unforeseen capital requirements, failure of drug product candidates either in preclinical testing or in clinical trials, failure to establish business relationships, and competitive disadvantages against larger and more established companies.

The current disruptions in the financial markets could affect our ability to obtain financing on favorable terms (or at all).

The U.S. credit markets have recently experienced historic dislocations and liquidity disruptions which have caused financing to be unavailable in many cases and, even if available, have caused the cost of prospective financings to increase. These circumstances have materially impacted liquidity in the debt markets, making financing terms for borrowers able to find financing less attractive, and in many cases have resulted in the unavailability of certain types of debt financing. Continued uncertainty in the debt and equity markets may negatively impact our ability to access financing on favorable terms or at all. In addition, Federal legislation to deal with the current disruptions in the financial markets could have an adverse affect on our ability to raise other types of financing.

S-11

Even if we are able to develop our drug product candidates, we may not be able to receive regulatory approval, or if approved, we may not be able to generate significant revenues or successfully commercialize our products, which would adversely affect our financial results and financial condition and we would have to delay or terminate some or all of our research product development programs.

All of our drug product candidates are at an early stage of development and will require extensive additional research and development, including preclinical testing and clinical trials, as well as regulatory approvals, before we can market them. Since our inception in 1997, and since Raptor Pharmaceuticals Corp. began operations in 2005, both companies have dedicated substantially all of their resources to the research and development of their technologies and related compounds. All of our compounds currently are in preclinical or clinical development, and none have been submitted for marketing approval. Our preclinical compounds may not enter human clinical trials on a timely basis, if at all, and we may not develop any product candidates suitable for commercialization. We cannot predict if or when any of the drug product candidates we intend to develop will be approved for marketing. There are many reasons that we may fail in our efforts to develop our drug product candidates. These include:

- the possibility that preclinical testing or clinical trials may show that our drug product candidates are ineffective and/or cause harmful side effects;
- our drug product candidates may prove to be too expensive to manufacture or administer to patients;
- our drug product candidates may fail to receive necessary regulatory approvals from the FDA or foreign regulatory authorities in a timely manner, or at all;
- our drug product candidates, if approved, may not be produced in commercial quantities or at reasonable costs;
- our drug product candidates, if approved, may not achieve commercial acceptance;
- regulatory or governmental authorities may apply restrictions to our drug product candidates, which could adversely affect their commercial success; and
- the proprietary rights of other parties may prevent us or our potential collaborative partners from marketing our drug product candidates.

If we fail to develop our drug product candidates, our financial results and financial condition will be adversely affected, we will have to delay or terminate some or all of our research product development programs and may be forced to cease operations.

If we are limited in our ability to utilize acquired or licensed technologies, we may be unable to develop, out-license, market and sell our product candidates, which could cause delayed new product introductions, and/or adversely affect our reputation, any of which could have a material adverse effect on our business, prospects, financial condition, and

operating results.

We have acquired and licensed certain proprietary technologies, discussed in the following risk factors, and plan to further license and acquire various patents and proprietary technologies owned by third parties. These agreements are critical to our product development programs. These agreements may be terminated, and all rights to the technologies and product candidates will be lost, if we fail to perform our obligations under these agreements and licenses in accordance with their terms including, but not limited to, our ability to make all payments due under such agreements. Our inability to continue to maintain these technologies could materially adversely affect our business, prospects, financial condition, and operating results. In addition, our business strategy depends on the successful development of these licensed and acquired technologies into commercial products, and, therefore, any limitations on our ability to utilize these technologies may impair our ability to develop, out-license, market and sell our product candidates, delay new product introductions, and/or adversely affect our reputation, any of which could have a material adverse effect on our business, prospects, financial condition, and operating results.

S-12

If the purchase or licensing agreements we entered into are terminated, we will lose the right to use or exploit our owned and licensed technologies, in which case we will have to delay or terminate some or all of our research and development programs, our financial condition and operating results will be adversely affected and we may have to cease our operations.

We entered into an asset purchase agreement with BioMarin Pharmaceutical Inc., or BioMarin, for the purchase of intellectual property related to the receptor-associated protein, or RAP, technology, a licensing agreement with Washington University for mesoderm development protein, or Mesd, and a licensing agreement with UCSD for DR Cysteamine. BioMarin, Washington University and UCSD may terminate their respective agreements with us upon the occurrence of certain events, including if we enter into certain bankruptcy proceedings or if we materially breach our payment obligations and fail to remedy the breach within the permitted cure periods. Although we are not currently involved in any bankruptcy proceedings or in breach of these agreements, there is a risk that we may be in the future, giving BioMarin, Washington University and UCSD the right to terminate their respective agreements with us. We have the right to terminate these agreements at any time by giving prior written notice. If the BioMarin, Washington University or UCSD agreements are terminated by either party, we would be forced to assign back to BioMarin, in the case of the BioMarin agreement, all of our rights, title and interest in and to the intellectual property related to the RAP technology, would lose our rights to the Mesd technology, in the case of the Washington University agreement and would lose our rights to DR Cysteamine, in the case of UCSD. Under such circumstances, we would have no further right to use or exploit the patents, copyrights or trademarks in those respective technologies. If this happens, we will have to delay or terminate some or all of our research and development programs, our financial condition and operating results will be adversely affected, and we may have to cease our operations. If we lose our rights to the intellectual property related to the RAP technology purchased by us from BioMarin, our agreement with Roche regarding the evaluation of therapeutic delivery across the blood-brain barrier utilizing NeuroTrans™ would likely be terminated and any milestone or royalty payments from Roche to us would thereafter cease to accrue.

If we fail to compete successfully with respect to acquisitions, joint venture and other collaboration opportunities, we may be limited in our ability to develop our drug product candidates.

Our competitors compete with us to attract established biotechnology and pharmaceutical companies or organizations for acquisitions, joint ventures, licensing arrangements or other collaborations. Collaborations include licensing proprietary technology from, and other relationships with, academic research institutions. If our competitors successfully enter into partnering arrangements or license agreements with academic research institutions, we will then be precluded from pursuing those specific opportunities. Since each of these opportunities is unique, we may not be able to find a substitute. Other companies have already begun many drug development programs, which may target diseases that we are also targeting, and have already entered into partnering and licensing arrangements with academic research institutions, reducing the pool of available opportunities.

Universities and public and private research institutions also compete with us. While these organizations primarily have educational or basic research objectives, they may develop proprietary technology and acquire patents that we may need for the development of our drug product candidates. We will attempt to license this proprietary technology, if available. These licenses may not be available to us on acceptable terms, if at all. If we are unable to compete successfully with respect to acquisitions, joint venture and other collaboration opportunities, we may be limited in our ability to develop new products.

If we do not achieve our projected development goals in the time frames we announce and expect, the credibility of our management and our technology may be adversely affected and, as a result, the price of our common stock may decline.

For planning purposes, we estimate the timing of the accomplishment of various scientific, clinical, regulatory and other product development goals, which we sometimes refer to as milestones. These milestones may include the commencement or completion of scientific studies and clinical trials and the submission of regulatory filings.

From time to time, we may publicly announce the expected timing of some of these milestones. All of these milestones will be based on a variety of assumptions. The actual timing of these milestones can vary dramatically compared to our estimates, in many cases for reasons beyond our control. If we do not meet these milestones as publicly announced, our stockholders may lose confidence in our ability to meet these milestones and, as a result, the price of our common stock may decline.

Our product development programs will require substantial additional future funding which could impact our operational and financial condition.

It will take several years before we are able to develop marketable drug product candidates, if at all. Our product development programs will require substantial additional capital to successfully complete them, arising from costs to:

- conduct research, preclinical testing and human studies;
- establish pilot scale and commercial scale manufacturing processes and facilities; and
- establish and develop quality control, regulatory, marketing, sales, finance and administrative capabilities to support these programs.

Our future operating and capital needs will depend on many factors, including:

- the pace of scientific progress in our research and development programs and the magnitude of these programs;
- the scope and results of preclinical testing and human clinical trials;
- our ability to obtain, and the time and costs involved in obtaining regulatory approvals;
- our ability to prosecute, maintain, and enforce, and the time and costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims;
- competing technological and market developments;
- our ability to establish additional collaborations;
- changes in our existing collaborations;
- the cost of manufacturing scale-up; and
- the effectiveness of our commercialization activities.

We base our outlook regarding the need for funds on many uncertain variables. Such uncertainties include the success of our research initiatives, regulatory approvals, the timing of events outside our direct control such as negotiations with potential strategic partners and other factors. Any of these uncertain events can significantly change our cash requirements as they determine such one-time events as the receipt or payment of major milestones and other payments.

Significant additional funds will be required to support our operations and if we are unable to obtain them on favorable terms, we may be required to cease or reduce further development or commercialization of our drug product programs, to sell some or all of our technology or assets, to merge with another entity or cease operations.

Uncertainties regarding healthcare reform and third-party reimbursement may impair our ability to raise capital, form collaborations and if any of our product candidates become marketable, sell such products.

The continuing efforts of governmental and third-party payers to contain or reduce the costs of healthcare through various means may harm our business. For example, in some foreign markets, the pricing or profitability of healthcare products is subject to government control. In the United States, there have been, and we expect there will continue to be, a number of federal and state proposals to implement similar government control. The implementation or even the announcement of any of these legislative or regulatory proposals or reforms could harm our business if any of our product candidates become marketable by reducing the prices we or our partners are able to charge for our products (if marketable), impeding our ability to achieve profitability, raise capital or form collaborations. In addition, the availability of reimbursement from third-party payers determines, in large part, the demand for healthcare products in the United States and elsewhere. Examples of such third-party payers are government and private insurance plans. Significant uncertainty exists as to the reimbursement status of newly approved healthcare products and third-party payers are increasingly challenging the prices charged for medical products and services. If we succeed in bringing one or more products to the market, reimbursement from third-party payers may not be available or may not be sufficient to allow us to sell such products on a competitive or profitable basis.

S-14

If we fail to demonstrate efficacy in our preclinical studies and clinical trials our future business prospects, financial condition and operating results will be materially adversely affected.

The success of our development and commercialization efforts will be greatly dependent upon our ability to demonstrate drug product candidate efficacy in preclinical studies, as well as in clinical trials. Preclinical studies involve testing drug product candidates in appropriate non-human disease models to demonstrate efficacy and safety. Regulatory agencies evaluate these data carefully before they will approve clinical testing in humans. If certain preclinical data reveals potential safety issues or the results are inconsistent with an expectation of the drug product candidate's efficacy in humans, the regulatory agencies may require additional more rigorous testing, before allowing human clinical trials. This additional testing will increase program expenses and extend timelines. We may decide to suspend further testing on our drug product candidates or technologies if, in the judgment of our management and advisors, the preclinical test results do not support further development.

Moreover, success in preclinical testing and early clinical trials does not ensure that later clinical trials will be successful, and we cannot be sure that the results of later clinical trials will replicate the results of prior clinical trials and preclinical testing. The clinical trial process may fail to demonstrate that our drug product candidates are safe for humans and effective for indicated uses. This failure would cause us to abandon a drug product candidate and may delay development of other drug product candidates. Any delay in, or termination of, our preclinical testing or clinical trials will delay the filing of our investigational new drug application, or IND, and new drug application, or NDA, as applicable, with the FDA and, ultimately, our ability to commercialize our drug product candidates and generate product revenues. In addition, some of our clinical trials will involve small patient populations. Because of the small sample size, the results of these early clinical trials may not be indicative of future results. Following successful preclinical testing, drug product candidates will need to be tested in a clinical development program to provide data on

safety and efficacy prior to becoming eligible for product approval and licensure by regulatory agencies. From first clinical trial through product approval can take at least eight years, on average in the U.S.

If any of our future clinical development drug product candidates become the subject of problems, including those related to, among others:

- efficacy or safety concerns with the drug product candidates, even if not justified;
- unexpected side-effects;
- regulatory proceedings subjecting the drug product candidates to potential recall;
- publicity affecting doctor prescription or patient use of the drug product candidates;
- pressure from competitive products; or
- introduction of more effective treatments,

our ability to sustain our development programs will become critically compromised. For example, efficacy or safety concerns may arise, whether or not justified, that could lead to the suspension or termination of our clinical programs.

Each clinical phase is designed to test attributes of drug product candidates and problems that might result in the termination of the entire clinical plan can be revealed at any time throughout the overall clinical program. The failure to demonstrate efficacy in our clinical trials would have a material adverse effect on our future business prospects, financial condition and operating results.

If we do not obtain the support of new, and maintain the support of existing, key scientific collaborators, it may be difficult to establish products using our technologies as a standard of care for various indications, which may limit our revenue growth and profitability and could have a material adverse effect on our business, prospects, financial condition and operating results.

We will need to establish relationships with additional leading scientists and research institutions. We believe that such relationships are pivotal to establishing products using our technologies as a standard of care for various indications. Although we have established a Medical and Scientific Advisory Board and research collaborations, there is no assurance that our Advisory Board members and our research collaborators will continue to work with us or that we will be able to attract additional research partners. If we are not able to maintain existing or establish new scientific relationships to assist in our research and development, we may not be able to successfully develop our drug product candidates.

If the manufacturers upon whom we rely fail to produce in the volumes and quality that we require on a timely basis, or to comply with stringent regulations applicable to pharmaceutical manufacturers, we may face delays in the development and commercialization of, or be unable to meet demand for, our products, if any, and may lose potential revenues.

We do not currently manufacture our drug product candidates, and does not currently plan to develop the capacity to do so. The manufacture of pharmaceutical products requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. Manufacturers of pharmaceutical products often encounter difficulties in production, particularly in scaling up initial production. These problems include difficulties with production costs and yields, quality control, including stability of the product candidate and quality assurance testing, shortages of qualified personnel, as well as compliance with strictly enforced federal, state and foreign regulations. Our third-party manufacturers and key suppliers may experience manufacturing difficulties due to resource constraints or as a result of labor disputes, unstable political environments at foreign facilities or financial difficulties. If these manufacturers or key suppliers were to encounter any of these difficulties, or otherwise fail to comply with their contractual obligations, our ability to timely launch any potential product candidate, if approved, would be jeopardized.

In addition, all manufacturers and suppliers of pharmaceutical products must comply with cGMP requirements enforced by the FDA, through its facilities inspection program. The FDA is likely to conduct inspections of our third party manufacturer and key supplier facilities as part of their review of any of our NDAs. If our third party manufacturers and key suppliers are not in compliance with cGMP requirements, it may result in a delay of approval, particularly if these sites are supplying single source ingredients required for the manufacture of any potential product. These cGMP requirements include quality control, quality assurance and the maintenance of records and documentation. Furthermore, regulatory qualifications of manufacturing facilities are applied on the basis of the specific facility being used to produce supplies. As a result, if a manufacturer for us shifts production from one facility to another, the new facility must go through a complete regulatory qualification and be approved by regulatory authorities prior to being used for commercial supply. Our manufacturers may be unable to comply with these cGMP requirements and with other FDA, state and foreign regulatory requirements. A failure to comply with these requirements may result in fines and civil penalties, suspension of production, suspension or delay in product approval, product seizure or recall, or withdrawal of product approval. If the safety of any quantities supplied is compromised due to a our third party manufacturer's or key supplier's failure to adhere to applicable laws or for other reasons, we may not be able to obtain regulatory approval for or successfully commercialize our products.

If we fail to obtain or maintain orphan drug exclusivity for some of our drug product candidates, our competitors may sell products to treat the same conditions and our revenues will be reduced.

As part of our business strategy, we intend to develop some drugs that may be eligible for FDA and European Union, or EU, orphan drug designation. Under the Orphan Drug Act, the FDA may designate a product as an orphan drug if it is a drug intended to treat a rare disease or condition, defined as a patient population of less than 200,000 in the U.S. The company that first obtains FDA approval for a designated orphan drug for a given rare disease receives marketing exclusivity for use of that drug for the stated condition for a period of seven years. Orphan drug exclusive marketing rights may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the drug. Similar regulations are available in the EU with a 10-year period of market exclusivity.

Because the extent and scope of patent protection for some of our drug products is particularly limited, orphan drug designation is especially important for our products that are eligible for orphan drug designation. For eligible drugs,

we plan to rely on the exclusivity period under Orphan Drug Act designation to maintain a competitive position. If we do not obtain orphan drug exclusivity for our drug products that do not have patent protection, our competitors may then sell the same drug to treat the same condition and our revenues will be reduced.

Even though we have obtained orphan drug designation for DR Cysteamine for the potential treatment of nephropathic cystinosis, the potential treatment of HD and the potential treatment of Batten Disease and even if we obtain orphan drug designation for our future drug product candidates, due to the uncertainties associated with developing pharmaceutical products, we may not be the first to obtain marketing approval for any orphan indication. Further, even if we obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because different drugs can be approved for the same condition. Even after an orphan drug is approved, the FDA can subsequently approve the same drug for the same condition if the FDA concludes that the later drug is safer, more effective or makes a major contribution to patient care. Orphan drug designation neither shortens the development time or regulatory review time of a drug, nor gives the drug any advantage in the regulatory review or approval process.

The fast-track designation for our drug product candidates, if obtained, may not actually lead to a faster review process and a delay in the review process or in the approval of our products will delay revenue from the sale of the products and will increase the capital necessary to fund these product development programs.

Although we have received Orphan Drug Designations from the FDA as described above, our drug product candidates may not receive an FDA fast-track designation or priority review. Without fast-track designation, submitting an NDA and getting through the regulatory process to gain marketing approval is a lengthy process. Under fast-track designation, the FDA may initiate review of sections of a fast-track drug's NDA before the application is complete. However, the FDA's time period goal for reviewing an application does not begin until the last section of the NDA is submitted. Additionally, the fast-track designation may be withdrawn by the FDA if the FDA believes that the designation is no longer supported by data emerging in the clinical trial process. Under the FDA policies, a drug candidate is eligible for priority review, or review within a six-month time frame from the time a complete NDA is accepted for filing, if the drug candidate provides a significant improvement compared to marketed drugs in the treatment, diagnosis or prevention of a disease. A fast-track designated drug candidate would ordinarily meet the FDA's criteria for priority review. The fast-track designation for our drug product candidates, if obtained, may not actually lead to a faster review process and a delay in the review process or in the approval of our products will delay revenue from the sale of the products and will increase the capital necessary to fund these product development programs.

Because the target patient populations for some of our products are small, we must achieve significant market share and obtain high per-patient prices for our products to achieve profitability.

Our clinical development of DR Cysteamine targets diseases with small patient populations, including nephropathic cystinosis and HD. If we are successful in developing DR Cysteamine and receive regulatory approval to market DR Cysteamine for a disease with a small patient population, the per-patient prices at which we could sell DR Cysteamine for these indications are likely to be relatively high in order for us to recover our development costs and achieve profitability. We believe that we will need to market DR Cysteamine for these indications worldwide to achieve significant market penetration of this product.

We may not be able to market or generate sales of our products to the extent anticipated.

Assuming that we are successful in developing our drug product candidates and receive regulatory clearances to market our products, our ability to successfully penetrate the market and generate sales of those products may be limited by a number of factors, including the following:

- Certain of our competitors in the field have already received regulatory approvals for and have begun marketing similar products in the U.S., the EU, Japan and other territories, which may result in greater physician awareness of their products as compared to ours.
- Information from our competitors or the academic community indicating that current products or new products are more effective than our future products could, if and when it is generated, impede our market penetration or decrease our future market share.

- Physicians may be reluctant to switch from existing treatment methods, including traditional therapy agents, to our future products.
- The price for our future products, as well as pricing decisions by our competitors, may have an effect on our revenues.
- Our future revenues may diminish if third-party payers, including private healthcare coverage insurers and healthcare maintenance organizations, do not provide adequate coverage or reimbursement for our future products.

S-17

There are many difficult challenges associated with developing proteins that can be used to transport therapeutics across the blood-brain barrier.

Our RAP technology has a potential clinical use as a drug transporter through the blood-brain barrier. However, we do not know that our technology will work or work safely. Many groups and companies have attempted to solve the critical medical challenge of developing an efficient method of transporting therapeutic proteins from the blood stream into the brain. Unfortunately, these efforts to date have met with little success due in part to a lack of adequate understanding of the biology of the blood-brain barrier and to the enormous scientific complexity of the transport process itself. In the research and development of our RAP technology, we will certainly face many of the same issues that have caused these earlier attempts to fail. It is possible that:

- We or our collaborator/licensee will not be able to produce enough RAP drug product candidates for testing;
- the pharmacokinetics, or where the drug distributes in the body, of our RAP drug product candidates will preclude sufficient binding to the targeted receptors on the blood-brain barrier;
- the targeted receptors are not transported across the blood-brain barrier;
- other features of the blood-brain barrier, apart from the cells, block access molecules to brain tissue after transport across the cells;
- the targeted receptors are expressed on the blood-brain barrier at densities insufficient to allow adequate transport of our RAP drug product candidates into the brain;
- targeting of the selected receptors induces harmful side-effects which prevent their use as drugs; or
- that we or our collaborator/licensee's RAP drug product candidates cause unacceptable side-effects.

Any of these conditions may preclude the use of RAP or RAP fusion compounds from potentially treating diseases affecting the brain.

If our competitors succeed in developing products and technologies that are more effective than our own, or if scientific developments change our understanding of the potential scope and utility of our drug product candidates, then our technologies and future drug product candidates may be rendered less competitive.

We face significant competition from industry participants that are pursuing similar technologies that we are pursuing and are developing pharmaceutical products that are competitive with our drug product candidates. Nearly all of our industry competitors have greater capital resources, larger overall research and development staffs and facilities, and a longer history in drug discovery and development, obtaining regulatory approval and pharmaceutical product manufacturing and marketing than we do. With these additional resources, our competitors may be able to respond to the rapid and significant technological changes in the biotechnology and pharmaceutical industries faster than we can. Our future success will depend in large part on our ability to maintain a competitive position with respect to these

technologies. Rapid technological development, as well as new scientific developments, may result in our compounds, drug product candidates or processes becoming obsolete before we can recover any of the expenses incurred to develop them. For example, changes in our understanding of the appropriate population of patients who should be treated with a targeted therapy like we are developing may limit the drug's market potential if it is subsequently demonstrated that only certain subsets of patients should be treated with the targeted therapy.

Our reliance on third parties, such as collaborators, university laboratories, contract manufacturing organizations and contract or clinical research organizations, may result in delays in completing, or a failure to complete, preclinical testing or clinical trials if they fail to perform under our agreements with them.

In the course of product development, we may engage university laboratories, other biotechnology or companies or contract or clinical manufacturing organizations to manufacture drug material for us to be used in preclinical and clinical testing and collaborators and contract or clinical research organizations to conduct and manage preclinical studies and clinical trials. If we engage these organizations to help us with our preclinical and clinical programs, many important aspects of this process have been and will be out of our direct control. If any of these organizations we may engage in the future fail to perform their obligations under our agreements with them or fail to perform preclinical testing and/or clinical trials in a satisfactory manner, we may face delays in completing our clinical trials, as well as commercialization of any of our drug product candidates. Furthermore, any loss or delay in obtaining contracts with such entities may also delay the completion of our clinical trials, regulatory filings and the potential market approval of our drug product candidates.

S-18

Companies and universities that have licensed product candidates to us for research, clinical development and marketing are sophisticated competitors that could develop similar products to compete with our products which could reduce our future revenues.

Licensing our product candidates from other companies, universities or individuals does not always prevent them from developing non-identical but competitive products for their own commercial purposes, nor from pursuing patent protection in areas that are competitive with us. While we seek patent protection for all of our owned and licensed product candidates, our licensors or assignors who created these product candidates are experienced scientists and business people who may continue to do research and development and seek patent protection in the same areas that led to the discovery of the product candidates that they licensed or assigned to us. By virtue of the previous research that led to the discovery of the drugs or product candidates that they licensed or assigned to us, these companies, universities, or individuals may be able to develop and market competitive products in less time than might be required to develop a product with which they have no prior experience and may reduce our future revenues from such product candidates.

Any future product revenues could be reduced by imports from countries where our product candidates are available at lower prices.

Even if we obtain FDA approval to market our potential products in the United States, our sales in the United States may be reduced if our products are imported into the United States from lower priced markets, whether legally or illegally. In the United States, prices for pharmaceuticals are generally higher than in the bordering nations of Canada and Mexico. There have been proposals to legalize the import of pharmaceuticals from outside the United States. If such legislation were enacted, our potential future revenues could be reduced.

The use of any of our drug product candidates in clinical trials may expose us to liability claims.

The nature of our business exposes us to potential liability risks inherent in the testing, manufacturing and marketing of our drug product candidates. While we are in clinical stage testing, our drug product candidates could potentially harm people or allegedly harm people and we may be subject to costly and damaging product liability claims. Some of the patients who participate in clinical trials are already critically ill when they enter a trial. The waivers we obtain may not be enforceable and may not protect us from liability or the costs of product liability litigation. Although we currently carry a \$3 million clinical product liability insurance policy, it may not be sufficient to cover future claims. We currently do not have any clinical or product liability claims or threats of claims filed against us.

Our future success depends, in part, on the continued service of our management team.

Our success is dependent in part upon the availability of our senior executive officers, including our Chief Executive Officer, Dr. Christopher M. Starr, our Chief Scientific Officer, Dr. Todd C. Zankel, our Chief Financial Officer, Kim R. Tsuchimoto, Ted Daley, the President of our clinical development subsidiary and Dr. Patrice P. Rioux, Chief Medical Officer of our clinical development subsidiary. The loss or unavailability to us of any of these individuals or key research and development personnel, and particularly if lost to competitors, could have a material adverse effect on our business, prospects, financial condition, and operating results. We have no key-man insurance on any of our employees. There is intense competition for qualified scientists and managerial personnel from numerous pharmaceutical and biotechnology companies, as well as from academic and government organizations, research institutions and other entities. In addition, we will rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development strategy. All of our consultants and advisors will be employed by other employers or be self-employed, and will have commitments to or consulting or advisory contracts with other entities that may limit their availability to us. There is no assurance that we will be able to retain key employees and/or consultants. If key employees terminate their employment, or if insufficient numbers of employees are retained to maintain effective operations, our development activities might be adversely affected, management's attention might be diverted from managing our operations to hiring suitable replacements, and our business might suffer. In addition, we might not be able to locate suitable replacements for any key employees that terminate, or that are terminated from, their employment with us and we may not be able to offer employment to potential replacements on reasonable terms, which could negatively impact our product candidate development timelines and may adversely affect our future revenues and financial condition.

Our success depends on our ability to manage our growth.

If we are able to raise significant additional financing, we expect to continue to grow, which could strain our managerial, operational, financial and other resources. With the addition of our clinical-stage programs and with our plan to in-license and acquire additional clinical-stage product candidates, we will be required to retain experienced personnel in the regulatory, clinical and medical areas over the next several years. Also, as our preclinical pipeline diversifies through the acquisition or in-licensing of new molecules, we will need to hire additional scientists to supplement our existing scientific expertise over the next several years.

Our staff, financial resources, systems, procedures or controls may be inadequate to support our operations and our management may be unable to take advantage of future market opportunities or manage successfully our relationships with third parties if we are unable to adequately manage our anticipated growth and the integration of new personnel.

Our executive offices and laboratory facility are located near known earthquake fault zones, and the occurrence of an earthquake or other catastrophic disaster could cause damage to our facility and equipment, or that of our third-party manufacturers or single-source suppliers, which could materially impair our ability to continue our product development programs.

Our executive offices and laboratory facility are located in the San Francisco Bay Area near known earthquake fault zones and are vulnerable to significant damage from earthquakes. We and the third-party manufacturers with whom we contract and our single-source suppliers of raw materials are also vulnerable to damage from other types of disasters, including fires, floods, power loss and similar events. If any disaster were to occur, our ability to continue our product development programs, could be seriously, or potentially completely impaired. The insurance we maintain may not be adequate to cover our losses resulting from disasters or other business interruptions.

We will incur increased costs as a result of recently enacted and proposed changes in laws and regulations and our management will be required to devote substantial time to comply with such laws and regulations.

We face burdens relating to the recent trend toward stricter corporate governance and financial reporting standards. Legislation or regulations such as Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, as well as other rules implemented by the SEC and NASDAQ, follow the trend of imposing stricter corporate governance and financial reporting standards have led to an increase in the costs of compliance for companies similar to us, including increases in consulting, auditing and legal fees. New rules could make it more difficult or more costly for us to obtain certain types of insurance, including directors' and officers' liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers. Failure to comply with these new laws and regulations may impact market perception of our financial condition and could materially harm our business. Additionally, it is unclear what additional laws or regulations may develop, and we cannot predict the ultimate impact of any future changes in law. Our management and other personnel will need to devote a substantial amount of time to these requirements.

In addition, the Sarbanes-Oxley Act requires, among other things, that we maintain effective internal controls for financial reporting and disclosure controls and procedures. In particular, we must perform system and process evaluation and testing of our internal controls over financial reporting to allow management to report on the effectiveness of our internal controls over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. Our compliance with Section 404 will require that we incur substantial accounting and related expense and expend significant management efforts. In the future, we may need to hire additional accounting and financial staff to satisfy the ongoing requirements of Section 404. Moreover, if we are not able to comply with the requirements of Section

404, or we or our independent registered public accounting firm identifies deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses, the market price of our stock could decline and we could be subject to sanctions or investigations by NASDAQ, the SEC or other regulatory authorities.

S-20

We may be required to suspend, repeat or terminate our clinical trials if they do not meet regulatory requirements, the results are negative or inconclusive, or if the trials are not well designed, which may result in significant negative repercussions on our business and financial condition.

Before regulatory approval for any potential product can be obtained, we must undertake extensive clinical testing on humans to demonstrate the tolerability and efficacy of the product, both on our own terms, and as compared to the other principal drugs on the market that have the same therapeutic indication. We cannot provide assurance that we will obtain authorization to permit product candidates that are already in the preclinical development phase to enter the human clinical testing phase. In addition, we cannot provide assurance that any authorized preclinical or clinical testing will be completed successfully within any specified time period by us, or without significant additional resources or expertise to those originally expected to be necessary. We cannot provide assurance that such testing will show potential products to be safe and efficacious or that any such product will be approved for a specific indication. Further, the results from preclinical studies and early clinical trials may not be indicative of the results that will be obtained in later-stage clinical trials. In addition, we or regulatory authorities may suspend clinical trials at any time on the basis that the participants are being exposed to unacceptable health risks.

Completion of clinical tests depends on, among other things, the number of patients available for testing, which is a function of many factors, including the number of patients with the relevant conditions, the nature of the clinical testing, the proximity of patients to clinical testing centers, the eligibility criteria for tests as well as competition with other clinical testing programs involving the same patient profile but different treatments. We will rely on third parties, such as contract research organizations and/or co-operative groups, to assist us in overseeing and monitoring clinical trials as well as to process the clinical results and manage test requests, which may result in delays or failure to complete trials, if the third parties fail to perform or to meet the applicable standards. A failure by us or such third parties to keep to the terms of a product program development for any particular product candidate or to complete the clinical trials for a product candidate in the envisaged time frame could have significant negative repercussions on our business and financial condition.

If we fail to establish and maintain collaborations or if our partners do not perform, we may be unable to develop and commercialize our product candidates, which may adversely affect our future revenues and financial condition.

We have entered into collaborative arrangements with third parties to develop and/or commercialize product candidates. Additional collaborations might be necessary in order for us to fund our research and development activities and third-party manufacturing arrangements, seek and obtain regulatory approvals and successfully commercialize existing and future product candidates. If we fail to maintain the existing collaborative arrangements held by us or fail to enter into additional collaborative arrangements, the number of product candidates from which we could receive future revenues would decline.

Our dependence on collaborative arrangements with third parties will subject us to a number of risks that could harm our ability to develop and commercialize products:

- collaborative arrangements might not be on terms favorable to us;
- disagreements with partners may result in delays in the development and marketing of products, termination of collaboration agreements or time consuming and expensive legal action;
- we cannot control the amount and timing of resources partners devote to product candidates or their prioritization of product

candidates, and partners may not allocate sufficient funds or resources to the development, promotion or marketing of our product candidates, or may not perform their obligations as expected;

- partners may choose to develop, independently or with other companies, alternative products or treatments, including products or treatments which compete with ours;
- agreements with partners may expire or be terminated without renewal, or partners may breach collaboration agreements with us;
- business combinations or significant changes in a partner's business strategy might adversely affect that partner's willingness or ability to complete their obligations to us; and
- the terms and conditions of the relevant agreements may no longer be suitable.

We cannot assure you that we will be able to negotiate future collaboration agreements or that those currently in existence will make it possible for us to fulfill our objectives.

S-21

We may not complete our clinical trials in the time expected, which could delay or prevent the commercialization of our products, which may adversely affect our future revenues and financial condition.

Although for planning purposes we forecast the commencement and completion of clinical trials, the actual timing of these events can vary dramatically due to factors such as delays, scheduling conflicts with participating clinicians and clinical institutions and the rate of patient enrollment. Clinical trials involving our product candidates may not commence nor be completed as forecasted. In certain circumstances we will rely on academic institutions or clinical research organizations to conduct, supervise or monitor some or all aspects of clinical trials involving our product candidates. We will have less control over the timing and other aspects of these clinical trials than if we conducted them entirely on our own. These trials may not commence or be completed as we expect. They may not be conducted successfully. Failure to commence or complete, or delays in, any of our planned clinical trials could delay or prevent the commercialization of our product candidates and harm our business and may adversely affect our future revenues and financial condition.

If we fail to keep pace with rapid technological change in the biotechnology and pharmaceutical industries, our product candidates could become obsolete, which may adversely affect our future revenues and financial condition.

Biotechnology and related pharmaceutical technology have undergone and are subject to rapid and significant change. We expect that the technologies associated with biotechnology research and development will continue to develop rapidly. Our future will depend in large part on our ability to maintain a competitive position with respect to these technologies. Any compounds, products or processes that we develop may become obsolete before we recover any expenses incurred in connection with developing such products, which may adversely affect our future revenues and financial condition.

Risks Related to Our Intellectual Property

If we are unable to protect our proprietary technology, we may not be able to compete as effectively and our business and financial prospects may be harmed.

Where appropriate, we seek patent protection for certain aspects of our technology. Patent protection may not be available for some of the drug product candidates we are developing. If we must spend significant time and money protecting our patents, designing around patents held by others or licensing, potentially for large fees, patents or other proprietary rights held by others, our business and financial prospects may be harmed.

The patent positions of biopharmaceutical products are complex and uncertain.

We own or license patent applications related to certain of our drug product candidates. However, these patent applications do not ensure the protection of our intellectual property for a number of reasons, including the following:

- We do not know whether our patent applications will result in issued patents. For example, we may not have developed a method for treating a disease before others developed similar methods.

- Competitors may interfere with our patent process in a variety of ways. Competitors may claim that they invented the claimed invention prior to us. Competitors may also claim that we are infringing on their patents and therefore cannot practice our technology as claimed under our patents, if issued. Competitors may also contest our patents, if issued, by showing the patent examiner that the invention was not original, was not novel or was obvious. In litigation, a competitor could claim that our patents, if issued, are not valid for a number of reasons. If a court agrees, we would lose that patent. As a company, we have no meaningful experience with competitors interfering with our patents or patent applications.

- Enforcing patents is expensive and may absorb significant time of our management. Management would spend less time and resources on developing drug product candidates, which could increase our operating expenses and delay product programs.

- Receipt of a patent may not provide much practical protection. If we receive a patent with a narrow scope, then it will be easier for competitors to design products that do not infringe on our patent.

- In addition, competitors also seek patent protection for their technology. Due to the number of patents in our field of technology, we cannot be certain that we do not infringe on those patents or that we will not infringe on patents granted in the future. If a patent holder believes our drug product candidate infringes on its patent, the patent holder may sue us even if we have received patent protection for our technology. If someone else claims we infringe on their technology, we would face a number of issues, including the following:
 - Defending a lawsuit takes significant time and can be very expensive.

 - If a court decides that our drug product candidate infringes on the competitor's patent, we may have to pay substantial damages for past infringement.

- A court may prohibit us from selling or licensing the drug product candidate unless the patent holder licenses the patent to us. The patent holder is not required to grant us a license. If a license is available, we may have to pay substantial royalties or grant cross licenses to our patents.

- Redesigning our drug product candidates so we do not infringe may not be possible or could require substantial funds and time.

It is also unclear whether our trade secrets are adequately protected. While we use reasonable efforts to protect our trade secrets, our employees or consultants may unintentionally or willfully disclose our information to competitors. Enforcing a claim that someone else illegally obtained and is using our trade secrets, like patent litigation, is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the U.S. are sometimes less willing to protect trade secrets. Our competitors may independently develop equivalent knowledge, methods and know-how. We may also support and collaborate in research conducted by government organizations, hospitals, universities or other educational institutions. These research partners may be unwilling to grant us any exclusive rights to technology or products derived from these collaborations prior to entering into the relationship. If we do not obtain required licenses or rights, we could encounter delays in our product development efforts while we attempt to design around other patents or even be prohibited from developing, manufacturing or selling drug product candidates requiring these licenses. There is also a risk that disputes may arise as to the rights to technology or drug product candidates developed in collaboration with other parties.

If our agreements with employees, consultants, advisors and corporate partners fail to protect our intellectual property, proprietary information or trade secrets, it could have a significant adverse effect on us.

We have taken steps to protect our intellectual property and proprietary technology, by entering into confidentiality agreements and intellectual property assignment agreements with our employees, consultants, advisors and corporate partners. Such agreements may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure or other breaches of the agreements, and we may not be able to prevent such unauthorized disclosure. Monitoring unauthorized disclosure is difficult, and we do not know whether the steps we have taken to prevent such disclosure are, or will be, adequate. Furthermore, the laws of some foreign countries may not protect our intellectual property rights to the same extent as do the laws of the United States.

Risks Related to Our Common Stock

There are a substantial number of shares of our common stock eligible for future sale in the public market, and the issuance or sale of equity, convertible or exchangeable securities in the market, or the perception of such future sales or issuances, could lead to a decline in the trading price of our common stock.

Any issuance of equity, convertible or exchangeable securities, including for the purposes of financing acquisitions and the expansion of our business, may have a dilutive effect on our existing stockholders. In addition, the perceived risk associated with the possible issuance of a large number of shares of our common stock or securities convertible or exchangeable into a large number of shares of our common stock could cause some of our stockholders to sell their common stock, thus causing the trading price of our common stock to decline. Subsequent sales of our common stock in the open market or the private placement of our common stock or securities convertible or exchangeable into our common stock could also have an adverse effect on the trading price of our common stock. If our common stock price declines, it may be more difficult for us to or we may be unable to raise additional capital.

In addition, future sales of substantial amounts of our currently outstanding common stock in the public market, or the perception that such sales could occur, could adversely affect prevailing trading prices of our common stock, and could impair our ability to raise capital through future offerings of equity or equity-related securities. We cannot predict what effect, if any, future sales of our common stock, or the availability of shares for future sales, will have on the trading price of our common stock.

In May and June 2008, prior to our merger with Raptor Pharmaceuticals Corp. in 2009, pursuant to a securities purchase agreement for a private placement of units, Raptor Pharmaceuticals Corp. issued to investors in such private placement, 20,000,000 shares of its common stock and two-year warrants to purchase up to, in the aggregate, 10,000,000 shares of its common stock and to placement agents in such private placement, five-year warrants to purchase up to, in the aggregate, 2,100,000 shares of its common stock. On a post-merger basis, the 20,000,000 shares of Raptor Pharmaceuticals Corp.'s common stock, the two-year warrants to purchase up to, in the aggregate, 10,000,000 shares of Raptor Pharmaceuticals Corp.'s common stock and the five-year warrants to purchase up to, in the aggregate, 2,100,000 shares of Raptor Pharmaceuticals Corp.'s common stock, respectively, would be 4,662,468 shares of our common stock, two-year warrants to purchase up to, in the aggregate, 2,331,234 shares of our common stock and the five-year warrants to purchase up to, in the aggregate, 489,559 shares of our common stock, respectively. In April 2009, in order to reflect then-current market prices, Raptor Pharmaceuticals Corp. notified the holders of warrants purchased in the May/June 2008 private placement that it was offering, in exchange for such warrants, new warrants to purchase its common stock at an exercise price of \$0.30 per share, but only to the extent such exchange of the original warrants and exercise of the new warrants, including the delivery of the exercise price, occurred on or prior to July 17, 2009. The warrants that were not exchanged prior to or on July 17, 2009 retained their

original exercise prices of \$0.90 per share and original expiration date of May 21, 2010. On a post-merger basis, the warrants that were not exchanged prior to or on July 17, 2009 would be warrants to purchase shares of our common stock at an exercise price of \$3.86 per share and would continue to have an expiration date of May 21, 2010. Raptor Pharmaceuticals Corp. received approximately \$2.6 million of proceeds from warrant exercises that resulted in the issuance of 8,715,000 shares of its common stock pursuant to the exchange described above. On a post-merger basis, the 8,715,000 shares of Raptor Pharmaceuticals Corp.'s common stock would be 2,031,670 shares of our common stock. In August 2009, pursuant to a securities purchase agreement for a private placement of units, Raptor Pharmaceuticals Corp. issued to investors in such private placement, 7,456,250 shares of its common stock and two-year warrants to purchase up to, in the aggregate, 3,728,125 shares of its common stock and to placement agents in such private placement, a five-year warrant to purchase up to, in the aggregate, 556,500 shares of its common stock. On a post-merger basis, the 7,456,250 shares of Raptor Pharmaceuticals Corp.'s common stock, the two-year warrants to purchase up to, in the aggregate, 3,728,125 shares of Raptor Pharmaceuticals Corp.'s common stock and the five-year warrants to purchase up to, in the aggregate, 556,500 shares of Raptor Pharmaceuticals Corp.'s common stock, respectively, would be 1,738,226 shares of our common stock, two-year warrants to purchase up to, in the aggregate, 869,113 shares of our common stock and the five-year warrants to purchase up to, in the aggregate, 129,733 shares of our common stock, respectively. These stock issuances and other future issuances of common stock underlying unexpired and unexercised warrants have and will result in, significant dilution to our stockholders. In connection with other collaborations, joint ventures, license agreements or future financings that we may enter into in the future, we may issue additional shares of common stock or other equity securities, and the value of the securities issued may be substantial and create additional dilution to our existing and future common stockholders.

S-24

There were 18,831,957 shares of our common stock outstanding as of December 17, 2009. We also had outstanding as of December 17, 2009 warrants that are exercisable to purchase an aggregate of 2,020,793 shares of our common stock at a weighted average exercise price of \$3.07 per share. On October 13, 2009, we filed a registration statement registering the resale of up to an aggregate of 5,557,865 shares of our common stock (including common stock issuable under warrants). Such registration statement was declared effective by the SEC on November 12, 2009.

In addition to our outstanding warrants, as of December 17, 2009, there were (i) options to purchase 1,025,566 shares of our common stock outstanding under our 2006 Raptor Pharmaceutical Equity Incentive Plan at a weighted-average exercise price of \$2.46, (ii) options to purchase 161,044 shares of our common stock outstanding under our 2006 TorreyPines Therapeutics Equity Incentive Plan at a weighted-average exercise price of \$125.36, (iii) 367,679 shares of our common stock available for issuance under our 2006 Raptor Pharmaceutical Equity Incentive Plan (of which all such shares are subject to approval by our stockholders at our 2010 Annual Meeting of stockholders) and (iv) 855,116 shares of our common stock available for issuance under our 2006 TorreyPines Therapeutics Equity Incentive Plan. The shares issuable under our equity incentive plans will be available for immediate resale in the public market. The shares issuable under the warrants are available for immediate resale in the public market. The market price of our common stock could decline as a result of such resales due to the increased number of shares available for sale in the market.

Our executive officers and directors will be subject to the lock-up agreements described in “Plan of Distribution” for a period of 90 days after the date of this prospectus supplement, representing approximately 1,728,022 shares, or 7.7% of our outstanding common stock after this offering (taking into account the 3,747,558 shares of common stock that are expected to be sold in this offering). Following the termination of these lock-up periods, these stockholders will have the ability to sell a substantial number of shares of common stock in the public market in a short period of time. Sales of a substantial number of shares of common stock in the public trading market, whether in a single transaction or a series of transactions, or the perception that these sales may occur, could also have a significant effect on volatility and the trading price of our common stock.

We are obligated to issue additional common stock based on our contractual obligations, if we meet certain triggering events, if at all. When we issue such additional common stock, this will result in dilution to common stockholders at the time such additional common stock is issued.

Future milestone payments, as more fully set forth under “Contractual Obligations with Thomas E. Daley (as assignee of the dissolved Convivia, Inc.)” and “Contractual Obligations with Former Encode Securityholders” discussed in certain of our periodic filings with the SEC relating to our acquisition of the Convivia assets and merger with Encode will result in dilution. We may be required to make additional contingent payments of up to 664,400 shares of our common stock, in the aggregate, under the terms of our acquisition of Convivia assets and merger with Encode, based on milestones related to certain future marketing and development approvals obtained with respect to Convivia and Encode product candidates. The issuance of any of these shares will result in further dilution to our existing stockholders.

Because we do not intend to pay any cash dividends on our common stock, investors will benefit from an investment in our common stock only if it appreciates in value. Investors seeking dividend income or liquidity should not purchase shares of our common stock.

We have not declared or paid any cash dividends on our common stock since our inception. We anticipate that we will retain our future earnings, if any, to support our operations and to finance the growth and development of our

business and do not expect to pay cash dividends in the foreseeable future. As a result, the success of an investment in our common stock will depend upon any future appreciation in the value of our common stock. There is no guarantee that our common stock will appreciate in value or even maintain its current price. Investors seeking dividend income or liquidity should not invest in our common stock.

S-25

Our stock price is volatile, which could result in substantial losses for our stockholders, and the trading in our common stock may be limited.

Our common stock is quoted on The Nasdaq Capital Market. The trading price of our common stock has been and may continue to be volatile. Our operating performance will significantly affect the market price of our common stock. To the extent we are unable to compete effectively and gain market share or the other factors described in this “Risk Factors” section (or the “Risk Factors” sections of our periodic reports that we file with the SEC that are incorporated by reference herein) affect us, our stock price will likely decline. The market price of our common stock also may be adversely impacted by broad market and industry fluctuations regardless of our operating performance, including general economic and technology trends. The Nasdaq Capital Market has, from time to time, experienced extreme price and trading volume fluctuations, and the market prices of biopharmaceutical development companies such as ours have been extremely volatile. Market prices for securities of early-stage pharmaceutical, biotechnology and other life sciences companies have historically been particularly volatile and trading in such securities has often been limited. Some of the factors that may cause the market price of our common stock to fluctuate include:

- the results of our current and any future clinical trials of our drug candidates;
- the results of ongoing preclinical studies and planned clinical trials of our preclinical drug candidates;
- the entry into, or termination of, key agreements, including key strategic alliance agreements;
- the results and timing of regulatory reviews relating to the approval of our drug candidates;
- the initiation of, material developments in, or conclusion of litigation to enforce or defend any of our intellectual property rights;
- failure of any of our drug candidates, if approved, to achieve commercial success;
- general and industry-specific economic conditions that may affect our research and development expenditures;
- the results of clinical trials conducted by others on drugs that would compete with our drug candidates;
- issues in manufacturing our drug candidates or any approved products;
- the loss of key employees;

- the introduction of technological innovations or new commercial products by our competitors;
- Changes in estimates or recommendations by securities analysts, if any, who cover our common stock;
- future sales of our common stock;
- Changes in the structure of health care payment systems; and
- period-to-period fluctuations in our financial results.

Moreover, the stock markets in general have experienced substantial volatility that has often been unrelated to the operating performance of individual companies. These broad market fluctuations may also adversely affect the trading price of our common stock. In the past, following periods of volatility in the market price of a company's securities, stockholders have often instituted class action securities litigation against those companies. Such litigation can result in substantial costs and diversion of management attention and resources, which could significantly harm our profitability and reputation.

Our stock is a penny stock. Trading of our stock may be restricted by the SEC's penny stock regulations and the FINRA's sales practice requirements, which may limit a stockholder's ability to buy and sell our stock.

Our common stock is a penny stock. The SEC has adopted Rule 15c-9 which generally defines "penny stock" to be any equity security that has a market price less than \$5.00 per share or an exercise price of less than \$5.00 per share, subject to certain exceptions. Our securities are covered by the penny stock rules, which impose additional sales practice requirements on broker-dealers who sell to persons other than established customers and institutional accredited investors. The penny stock rules require a broker-dealer, prior to a transaction in a penny stock not otherwise exempt from the rules, to deliver a standardized risk disclosure document in a form prepared by the SEC which provides information about penny stocks and the nature and level of risks in the penny stock market. The broker-dealer also must provide the customer with current bid and offer quotations for the penny stock, the compensation of the broker-dealer and its salesperson in the transaction and monthly account statements showing the market value of each penny stock held in the customer's account. The bid and offer quotations, and the broker-dealer and salesperson compensation information, must be given to the customer orally or in writing prior to effecting the transaction and must be given to the customer in writing before or with the customer's confirmation. In addition, the penny stock rules require that prior to a transaction in a penny stock not otherwise exempt from these rules, the broker-dealer must make a special written determination that the penny stock is a suitable investment for the purchaser and receive the purchaser's written agreement to the transaction. These disclosure requirements may have the effect of reducing the level of trading activity in the secondary market for the stock that is subject to these penny stock rules. Consequently, these penny stock rules may affect the ability of broker-dealers to trade our securities. We believe that the penny stock rules discourage investor interest in and limit the marketability of our common stock.

In addition to the "penny stock" rules promulgated by the SEC, the Financial Industry Regulatory Authority, or FINRA, has adopted rules that require that in recommending an investment to a customer, a broker-dealer must have reasonable grounds for believing that the investment is suitable for that customer. Prior to recommending speculative low priced securities to their non-institutional customers, broker-dealers must make reasonable efforts to obtain information about the customer's financial status, tax status, investment objectives and other information. Under interpretations of these rules, the FINRA believes that there is a high probability that speculative low priced securities will not be suitable for at least some customers. The FINRA requirements make it more difficult for broker-dealers to recommend that their customers buy our common stock, which may limit your ability to buy and sell our stock.

An adverse determination, if any, in the class action suit in which we are a defendant, or our inability to obtain or maintain directors' and officers' liability insurance, could have a material adverse effect on us.

A class action securities lawsuit was filed against us, as described in the section titled, "Legal Proceedings" in certain of our periodic reports that we file with the SEC. We are defending against this action vigorously; however, we do not know what the outcome of the proceedings will be and, if we do not prevail, we may be required to pay substantial damages or settlement amounts. Furthermore, regardless of the outcome, we may incur significant defense costs, and the time and attention of our key management may be diverted from normal business operations. If we are ultimately required to pay significant defense costs, damages or settlement amounts, such payments could materially and adversely affect our operations and results. We have purchased liability insurance, however, if any costs or expenses associated with the litigation exceed the insurance coverage, we may be forced to bear some or all of these costs and expenses directly, which could be substantial and may have an adverse effect on our business, financial condition, results of operations and cash flows. In any event, publicity surrounding the lawsuits and/or any outcome unfavorable

to us could adversely affect our reputation and stock price. The uncertainty associated with substantial unresolved lawsuits could harm our business, financial condition and reputation. We have certain obligations to indemnify our officers and directors and to advance expenses to such officers and directors. Although we have purchased liability insurance for our directors and officers, if our insurance carriers should deny coverage, or if the indemnification costs exceed the insurance coverage, we may be forced to bear some or all of these indemnification costs directly, which could be substantial and may have an adverse effect on our business, financial condition, results of operations and cash flows. If the cost of the liability insurance increases significantly, or if this insurance becomes unavailable, we may not be able to maintain or increase our levels of insurance coverage for our directors and officers, which could make it difficult to attract or retain qualified directors and officers.

S-27

We can issue shares of preferred stock that may adversely affect the rights of a stockholder of our common stock.

Our certificate of incorporation authorizes us to issue up to 15,000,000 shares of preferred stock with designations, rights and preferences determined from time-to-time by our board of directors. Accordingly, our board of directors is empowered, without stockholder approval, to issue preferred stock with dividend, liquidation, conversion, voting or other rights superior to those of stockholders of our common stock.

Anti-takeover provisions in our stockholder rights plan and in our certificate of incorporation and bylaws may prevent or frustrate attempts by stockholders to change the board of directors or current management and could make a third-party acquisition of us difficult.

We are a party to a stockholder rights plan, also referred to as a poison pill, which is intended to deter a hostile takeover of us by making such proposed acquisition more expensive and less desirable to the potential acquirer. The stockholder rights plan and our certificate of incorporation and bylaws, as amended, contain provisions that may discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares. These provisions could limit the price that investors might be willing to pay in the future for shares of our common stock.

Management may invest or spend the proceeds of this offering in ways with which you may not agree and in ways that may not yield a return to our stockholders.

We will retain broad discretion over the use of proceeds from this offering. We expect to use the net proceeds from this offering to fund our research and development efforts and for general corporate purposes, including working capital. A number of variables will influence our actual use of the proceeds from this offering, and our actual uses of the proceeds of this offering may vary substantially from our currently planned uses. Management could choose to spend the net proceeds from this offering in ways in which stockholders may not deem desirable, or in ways that do not improve our operating results or result in a significant return or any return at all for our stockholders.

New investors in our common stock could experience immediate and substantial dilution.

The offering price of our common stock could be substantially higher than what the net tangible book value per share of our common stock is at the time of any offering. As a result, investors of our common stock in this offering could incur immediate and substantial dilution. For example, assuming the full 3,747,558 units that are the subject of this offering are sold at a price to the public of \$2.00 per share, the investors would experience immediate dilution of approximately \$1.54 per share. Those investors could experience additional dilution upon the exercise of outstanding stock options having an exercise price less than the per share offering price to the public in this offering. See "Dilution" for a more detailed discussion of the dilution new investors will incur in this offering.

No trading market for the warrants is expected to develop.

Although the warrants being offered hereby are registered for public sale, they will not be listed on The Nasdaq Capital Market or any other exchange and we do not expect a trading market for the warrants to develop. As a result, your ability to sell or otherwise transfer your warrants may be limited.

USE OF PROCEEDS

The net proceeds from this offering, after deducting the placement agent's fees and our estimated expenses, will be approximately \$6.9 million, based on a public offering price of \$2.00 per share. We expect to use the net proceeds from the offering to fund part of our capital expenditure program and for other corporate purposes. In this regard, we may use the net proceeds of this offering to fund our research and development efforts, including clinical trials for our drug candidates, and for general corporate purposes, including working capital. The amounts and timing of these expenditures will depend on a number of factors, such as the timing and progress of our research and development efforts, technological advances and the competitive environment for our drug candidates. Pending these uses, we intend to invest the net proceeds in investment-grade, interest-bearing securities.

DETERMINATION OF OFFERING PRICE

The last reported sale price of our common stock on the Nasdaq Capital Market on December 17, 2009 was \$2.45 per share and the price of the units (up to 3,747,558) we are selling in this offering is \$2.00 per unit (each unit, which is comprised of one share, one Series A Warrant to purchase 0.5 of a share of our common stock and one Series B Warrant to purchase 0.5 of a share of our common stock). This negotiated offering price was principally determined through negotiations among us, the placement agent and the investors. The Warrants have a term of five years and eighteen (18) months, respectively, to purchase up to, in the aggregate, 1,873,779 shares of our common stock at an exercise price of \$2.45 per share.

The principal factors considered in determining the public offering price, and the terms and conditions of the securities purchase agreement, placement agent agreement and Warrants include:

- the market price and volatility of our common stock;
- our need to obtain financing in an efficient and expeditious manner in order to fund our operations and research and development programs and their related costs;
 - the immediate and substantial dilution of investors in this offering;
- the information set forth in this prospectus supplement and accompanying prospectus and otherwise available to the placement agent and investors;
 - our history and prospects and the history of, and prospects for, the industry in which we compete;
 - our past and present financial performance;
 - our prospects for future earnings and the present state of our development;
 - the general condition of the securities markets at the time of this offering;
- the recent market prices of, and demand for, publicly traded common stock of generally comparable companies; and
 - other factors deemed relevant by the placement agent, investors and us.

DILUTION

If you purchase units from us, your interest will be diluted to the extent of the difference between the offering price per share you pay and the net tangible book value per share of our common stock immediately after the completion of the offering. Our net tangible book value as of August 31, 2009, was \$3.0 million, or \$0.17 per share of common stock. Net tangible book value per share is calculated by subtracting our total liabilities from our total tangible assets, which is total assets less intangible assets of \$2,524,792, and dividing this amount by the number of shares of common stock outstanding as of August 31, 2009. Assuming the sale by us of all 3,747,558 units offered hereby at the offering price of \$2.00 per unit (and assuming a value per share of common stock offered in each unit of \$2.00 per share and attributing no value to the warrants included in each unit), and after deducting the estimated fees and offering expenses payable by us, our adjusted net tangible book value as of August 31, 2009 would have been approximately \$9.9 million, or \$0.46 per share of common stock. This would represent an immediate increase in the net tangible book value of \$0.29 per share to our existing stockholders and an immediate and substantial dilution in the pro forma net tangible book value of \$1.54 per share of common stock to new investors. The following table illustrates this calculation on a per share basis:

| | | | |
|--|------|----|------|
| Assumed public offering price per share included in each unit | | \$ | 2.00 |
| Net tangible book value per share as of August 31, 2009 | 0.17 | | |
| Increase per share attributable to new investors | 0.29 | | |
| As adjusted net tangible book value per share after the offering | | | 0.46 |
| Net dilution per share to new investors | | \$ | 1.54 |

Investors that purchase common stock upon exercise of warrants offered hereby may experience dilution depending on our net tangible book value at the time of exercise.

The information in the table above is provided for illustrative purposes and assumes that all of the units offered hereby in the aggregate amount of 3,747,558 are sold at a price of \$2.00 per share. An increase, or decrease, of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$2.00 per share shown in the table above, assuming all of the units in the aggregate amount of 3,747,558 are sold at that price, would increase (or decrease) our adjusted net tangible book value after the offering by \$3,747,558 or \$0.06 per share, respectively, and the dilution in net tangible book value per share for new investors in this offering by \$(0.93), after deducting the estimated fees of the placement agent and estimated aggregate offering expenses payable by us.

The information above and in the foregoing table is based upon 17,857,555 shares of our common stock outstanding as of August 31, 2009. The information above and in the foregoing table excludes:

- 1,186,610 shares of our common stock issuable upon the exercise of options outstanding under our stock option plans at a weighted average exercise price of \$19.14 per share;

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- 1,222,795 shares of our common stock available for future issuance under our stock option plans;
- 2,020,793 shares of our common stock issuable upon exercise of various outstanding warrants at a weighted average exercise price of \$3.07 per share;
 - any shares deemed issued as result of the merger with Raptor Pharmaceuticals Corp.;
- Up to 3,747,558 shares of common stock issuable upon the exercise of the Warrants issued hereunder;
- Up to 74,951 shares of common stock issuable upon the exercise of warrants issued to the placement agent as described in this prospectus supplement;
 - 7,680 shares issued pursuant to an exercised warrant; and
 - 2,115 shares issued pursuant to an exercised option.

S-30

CAPITALIZATION

The following table sets forth our cash and cash equivalents and our capitalization as of August 31, 2009:

- on an actual basis; and
- on an as adjusted basis to give effect to this offering (assuming approximately 3,747,558 shares of our common stock are sold in this offering at an assumed public offering price of \$2.00 per share, but excluding the 3,747,558 shares of common stock issuable upon the exercise of the Warrants issued to the investors and excluding the 74,951 shares of common stock issuable upon the exercise of warrants issued to the placement agent, each as described in this prospectus supplement), as if this offering had occurred on August 31, 2009.

This table should be read in conjunction with “Use of Proceeds” and our consolidated financial statements and the accompanying notes, which are incorporated by reference into this prospectus supplement.

| | As of August 31, 2009 | |
|---|-----------------------|---------------|
| | Actual | As Adjusted |
| Cash, cash equivalents and marketable securities | \$ 3,701,787 | \$ 10,601,787 |
| Long-term debt | \$ 6,676 | \$ 6,676 |
| Stockholders' equity: | | |
| Common stock, \$0.001 par value, 150,000,000 shares authorized, 17,857,555 issued and outstanding, actual; 21,605,113 issued and outstanding, as adjusted | \$ 17,858 | \$ 21,605 |
| Preferred stock, \$0.001 par value, 15,000,000 shares authorized, none issued and outstanding, actual and as adjusted | — | — |
| Additional paid-in capital | 27,364,286 | 34,260,539 |
| Accumulated deficit | (21,879,183) | (21,879,183) |
| Total stockholders' equity | \$ 5,502,961 | \$ 12,402,961 |

The number of shares of our common stock to be in the actual and as adjusted columns in the table above excludes the following shares of our common stock as of August 31, 2009:

- 989,213 shares of our common stock issuable upon the exercise of options outstanding under our stock option plans at a weighted average exercise price of \$2.42 per share;
- 406,147 shares of our common stock available for future issuance under our stock option plans; and

- 2,057,990 shares of our common stock issuable upon exercise of outstanding warrants at a weighted average exercise price of \$2.67 per share.

S-31

PLAN OF DISTRIBUTION

Pursuant to General Instruction I.B.6. of Form S-3, we are permitted to utilize the registration statement of which this prospectus supplement forms a part to sell a maximum amount of securities equal to one-third of the aggregate market value of the outstanding voting and non-voting common equity held by our non-affiliates in any 12-month period. We may, from time to time, offer the securities registered hereby up to this maximum amount.

We have entered into a placement agent agreement with Ladenburg Thalmann & Co. Inc., or Ladenburg, with respect to the units being offered hereby. The material terms and provisions of the placement agent agreement are summarized below. This summary is subject to and qualified in its entirety by the placement agent agreement, which will be filed with the SEC on a Current Report on Form 8-K in connection with this offering and which will be incorporated by reference into the registration statement of which this prospectus supplement forms a part.

Subject to the terms and conditions stated in our placement agent agreement with Ladenburg, Ladenburg has agreed to act, on a best efforts basis, as our placement agent in connection with the sale by us of up to 3,747,558 units in this offering in a proposed takedown from our shelf registration statement. Ladenburg is acting as the sole placement agent for this offering. The placement agent is not purchasing or selling any units pursuant to the placement agent agreement, this prospectus supplement or accompanying prospectus, nor are we requiring that the placement agent arrange for the purchase or sale of any minimum or specific number or dollar amount of units. The placement agent will have no authority to bind us by virtue of the placement agent agreement. Further, the placement agent does not guarantee that it will be able to raise new capital in any prospective offering. We will enter into a securities purchase agreement directly with investors in connection with this offering and we will only sell to investors who have entered into the securities purchase agreement. The material terms and provisions of the securities purchase agreement are summarized below. This summary is subject to and qualified in its entirety by the securities purchase agreement, which will be filed with the SEC on a Current Report on Form 8-K in connection with this offering and which will be incorporated by reference into the registration statement of which this prospectus supplement forms a part.

Our obligation to issue and sell units to investors is subject to certain conditions precedent as set forth in the securities purchase agreement, which may be waived by us in our discretion. An investor's obligation to purchase units is subject to certain conditions precedent as set forth in the securities purchase agreement, including the absence of any material adverse change in our business and the receipt of certain opinions, letters and certificates from our counsel, our independent auditors and us.

Unless investors instruct us otherwise, we will deliver the shares of common stock being issued to the investors electronically upon receipt of investor funds for the purchase of the units offered pursuant to this prospectus supplement, and we will issue the warrants in registered physical form to investors. We expect to deliver the shares of our common stock and the warrants being offered pursuant to this prospectus supplement on or about December 22, 2009.

We have agreed to pay the placement agent a total fee equal to 6.5% of the aggregate cash proceeds of this offering (excluding any proceeds from exercise of the warrants). Only in the event the offering closes, we have agreed to reimburse the placement agent for its out-of-pocket accountable expenses actually incurred by it in connection with this offering, in an amount not to exceed 0.5% of the aggregate gross proceeds of this offering, but in no event more than \$30,000.

The following table summarizes the placement agent fees that we will pay to the placement agent in connection with this offering.

| | |
|----------|---------|
| Per Unit | \$ 0.13 |
|----------|---------|

Total \$ 0.13

In addition, we agreed to issue compensation warrants to the placement agent to purchase shares of our common stock equal to 2.0% of the aggregate number of shares of common stock sold in this offering (not including shares of common stock issuable upon the exercise of Warrants issued in this offering), which will allow them to purchase an aggregate of up to 74,951 shares of our common stock. The compensation warrants will be substantially on the same terms as the warrants offered to investors hereby, except that the compensation warrants will have an exercise price equal to \$2.50 (which is 125% of the public offering price per share), will expire on November 5, 2014 (five years from the effective date of the registration statement which this prospectus supplement forms a part) and will otherwise comply with the rules of the FINRA.

We estimate that the total fees and expenses payable by us to Ladenburg, excluding discounts and commissions, will be approximately \$30,000, which includes up to \$30,000 that we agreed to reimburse Ladenburg for the fees, disbursements and other expenses incurred by it. Because there is no minimum offering amount required as a condition to closing of this offering, the actual total offering commissions, if any, may be substantially less than the total offering amounts set forth above.

S-32

The placement agent may engage other FINRA member firms to act as selected dealers in connection with the offering. In compliance with the guidelines of the FINRA, the maximum consideration or discount to be received by the placement agent, as a member of FINRA, other FINRA member firms engaged by the placement agent or any independent broker dealer, will not exceed 8.0% of the gross proceeds to us from the sale of any securities offered pursuant to this prospectus supplement and the accompanying prospectus. Based upon information available to the Company, an employee of the placement agent beneficially owns (through an affiliate, Flower Ventures LLC) approximately 4% of our outstanding common stock (which excludes warrants beneficially owned by such employee to purchase our common stock that are not exercisable within sixty (60) days of the date of this prospectus supplement).

The placement agent has informed us that it will not engage in over-allotment, stabilizing or syndicate covering transactions in connection with this offering. The placement agent agreement provides that the obligations of the placement agent are subject to certain conditions precedent, including the absence of any material adverse change in our business and the receipt of certain certificates, opinions and letters from us, our counsel and our auditors.

We have agreed to indemnify the placement agent and specified other persons against some civil liabilities, including liabilities under the Securities Act or the Exchange Act, and to contribute to payments that the placement agent may be required to make in respect of those liabilities.

Our executive officers and directors have agreed with the placement agent, subject to certain exceptions, not to dispose of or hedge any shares of common stock or securities convertible into or exchangeable for shares of common stock, subject to specified exceptions, during the period from the date of this prospectus supplement continuing through the date 90 days after the date of this prospectus supplement, except with the prior written consent of the placement agent.

The 90-day restricted period described in the preceding paragraph will be automatically extended if: (i) during the period that begins on the date that is 15 calendar days plus three business days before the last day of the 90-day restricted period and ends on the last day of the 90-day restricted period, we issue an earnings release or material news or a material event relating to the company occurs, or (ii) prior to the expiration of the 90-day restricted period, we announce that we will release earnings results during the 16-day period beginning on the last day of the 90-day restricted period, the restrictions will continue to apply until the expiration of the date that is 15 calendar days plus three business days after the date on which the issuance of the earnings release or the material news or material event occurs; provided, however, this provision will not apply if, within three days of the termination of the 90-day restricted period, we deliver to the placement agent a certificate, signed by our chief financial officer or chief executive officer, certifying that our shares of common stock are, as of the date of delivery of such certificate, "actively trading securities," as defined in Regulation M under the Exchange Act.

DESCRIPTION OF SECURITIES WE ARE OFFERING

In this offering we are offering 3,747,558 units for an aggregate of shares of our common stock and Warrants to purchase up to in the aggregate 3,747,558 shares of our common stock, subject to adjustment as provided in the Warrants. Units will not be issued or certificated. The shares of common stock and the Warrants will be issued separately.

Common Stock

The material terms and provisions of our common stock and each other class of our securities which qualifies or limits our common stock are described under the caption “Description of Our Capital Stock” starting on page 6 of the accompanying prospectus.

Warrants

The material terms and provisions of our warrants that we are offering in this offering are described under the caption “Description of Warrants” immediately below.

DESCRIPTION OF WARRANTS

The material terms and provisions of the Series A Warrants and the Series B Warrants being offered pursuant to this prospectus supplement and the accompanying prospectus are summarized below. This summary is subject to and qualified in its entirety by the form of warrant, which will be provided to each investor in this offering and will be filed on a Current Report on Form 8-K in connection with this offering.

The Series A Warrants to be issued in this offering to each investor represent the right to purchase up to in the aggregate 50% of the shares of common stock purchased by such investor at an initial exercise price of \$2.45 per share, subject to anti-dilution adjustments described below. The Series B Warrants to be issued in this offering to each investor represent the right to purchase up to in the aggregate 50% of the shares of common stock purchased by such investor at an initial exercise price of \$2.45 per share, subject to anti-dilution adjustments described below. Each warrant may be exercised at any time and from time to time on or after one hundred eighty (180) days from its original date of issuance (such original date of issuance anticipated to be on or about December 22, 2009) and, in the case of the Series A Warrants, through and including the fifth (5th) anniversary of the original date of issuance, and, in the case of the Series B Warrants, through and including the eighteen month (18) anniversary of the original date of issuance. Except in certain circumstances noted below, the exercise price must be paid in cash at the time of exercise.

Exercise

Holders of the warrants may exercise their warrants to purchase shares of our common stock on or before the termination date by delivering (i) a notice of exercise, appropriately completed and duly signed, and (ii) payment of the exercise price for the number of shares with respect to which the warrant is being exercised, by wire transfer of immediately available funds to us, except if such holder is permitted to and in fact utilizes the cashless exercise provisions with respect to the warrants. Warrants may be exercised in whole or in part, but only for full shares of common stock. Any portion of a warrant not exercised prior to the termination date shall automatically become void and of no value and shall be terminated on the termination date. We provide certain buy-in rights to a holder if we fail to deliver the shares of common stock underlying the warrants by the third trading day after the date on which delivery of the stock certificate is required by the warrant. The buy-in rights apply if after the third trading day on which delivery of the stock certificate is required by the warrant, the holder is required by its broker to purchase

shares of our common stock to deliver in satisfaction of a sale by the holder of the warrant shares that the holder anticipated receiving from us upon exercise of the warrant. In this event, we will:

- pay in cash to the holder the amount by which (x) the holder's total purchase price (including brokerage commissions, if any) for the shares of common stock so purchased exceeds (y) the amount obtained by multiplying (A) the number of warrant shares that the Company was required to deliver to the holder in connection with the exercise at issue times (B) the price at which the sell order giving rise to such purchase obligations was executed; and
- at the option of the Holder, either reinstate the portion of the warrant and equivalent number of warrant shares for which such exercise was not honored or deliver to the holder the number of shares of common stock that would have been issued had the Company timely complied with its exercise and delivery obligations.

In addition, the warrant holders are entitled to a “cashless exercise” option if, at time of exercise, there is no effective registration statement registering, or no current prospectus available for, the issuance of the shares of common stock underlying the warrants. This option entitles the warrant holders to elect to receive fewer shares of common stock without paying the cash exercise price. The number of shares to be issued would be determined by a formula based on the total number of shares with respect to which the warrant is being exercised, the volume weighted average of the price per share of our common stock for the trading day immediately prior to the date of exercise and the applicable exercise price of the warrants. The shares of common stock issuable on exercise of the warrants will be, when issued and paid for in accordance with the warrants, duly and validly authorized, issued and fully paid and non-assessable. We have agreed to reserve that number of shares of common stock equal to the number of shares of common stock issuable upon exercise of all warrants issued pursuant to this offering.

Fundamental Transaction

If, at any time while the warrants are outstanding, we (1) directly or indirectly, in one or more related transactions, consolidate or merge with or into another person, (2) sell, lease, license, assign, transfer, convey or otherwise dispose of all or substantially all of our assets or (3) are subject to or complete any direct or indirect, purchase offer, tender offer or exchange offer pursuant to which holders of our common stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding common stock, (4) directly or indirectly, in one or more related transactions, effect any reclassification, reorganization or recapitalization of our common stock or any compulsory share exchange pursuant to which our common stock is effectively converted into or exchanged for other securities, cash or property, or (5) directly or indirectly engage in one or more related transactions that consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another person whereby such other person acquires more than 50% of the outstanding shares of common stock (not including any shares of common stock held by the other person or other persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination), then the holder shall have the right thereafter to receive, upon exercise of the warrant, the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of the number of warrant shares then issuable upon exercise of the warrant, and any additional consideration payable as part of the Fundamental Transaction. Any successor to us or surviving entity shall assume the obligations under the warrant.

In the event of certain Fundamental Transactions, the holders of the warrants will be entitled to receive, in lieu of our common stock and at the holders’ option, cash in an amount equal to the value of the remaining unexercised portion of the warrant on the date of the transaction determined using Black-Scholes option pricing model obtained from the "OV" function on Bloomberg, L.P. with an expected volatility equal to the greater of 100% and the 100 day volatility obtained from the HVT by Bloomberg L.P. as of the trading day immediately following the public announcement of the transaction.

Subsequent Rights Offerings

If, at any time while the warrants are outstanding, we issue rights, options or warrants to all holders of our common stock entitling them to purchase our common stock at a price per share less than the volume weighted average price on the record date for such issuance of such rights, options or warrants, then the exercise price will adjust pursuant to a volume weighted average price based ratio.

Pro Rata Distributions

If, at any time while the warrants are outstanding, we distribute evidences of our indebtedness, assets, or rights or warrants to purchase any security for no consideration to all holders of our common stock, then the exercise price will adjust pursuant to a volume weighted average price based ratio.

Certain Other Adjustments

The exercise price and the number of shares of common stock purchasable upon the exercise of the warrants are subject to adjustment upon the occurrence of specific events, including stock dividends, stock splits and combinations of our common stock.

S-35

Delivery of Certificates

Upon the holder's exercise of a warrant in accordance with its terms, we will promptly, but in no event later than three trading days after the exercise date, or the Warrant Share Delivery Date, issue and deliver, or cause to be issued and delivered, a certificate for the shares of common stock issuable upon exercise of the warrant. If the warrant shares can be issued without restrictive legends and if the holder provides the necessary information to us, we will use commercially reasonable efforts to deliver the shares electronically through The Depository Trust and Clearing Corporation or another established clearing corporation performing similar functions. If we fail to deliver certificates evidencing the warrant shares by the Warrant Share Delivery Date, we may be required to comply with the buy-in provisions as described above under the heading, "Exercise."

Notice of Corporate Action

We will provide notice to holders of the warrants to provide them with the opportunity to exercise their warrants and hold common stock in order to participate in or vote on the following corporate events:

- declarations of any dividend or any other distribution of cash, securities or other property in respect of our common stock, including without limitation any granting of rights or warrants to subscribe for or purchase any of our capital stock;
- solicitation of stockholder approval for any Fundamental Transaction; or
- a voluntary dissolution, liquidation or winding up of our company.

Limitations on Exercise

The number of warrant shares that may be acquired by any holder upon any exercise of the warrant shall be limited to the extent necessary to insure that, following such exercise (or other issuance), the total number of shares of common stock then beneficially owned by such holder and its affiliates and any other persons whose beneficial ownership of common stock would be aggregated with the holder's for purposes of Section 13(d) of the Exchange Act, as amended, does not exceed 4.99% of the total number of issued and outstanding shares of our common stock (including for such purpose the shares of common stock issuable upon such exercise), or beneficial ownership limitation. The holder may elect to change this beneficial ownership limitation from 4.99% to 9.9% of the total number of issued and outstanding shares of our common stock (including for such purpose the shares of common stock issuable upon such exercise) upon 61 days' prior written notice to us.

Additional Provisions

The above summary of certain terms and provisions of the warrants is qualified in its entirety by reference to the detailed provisions of the warrants, the form of which will be filed as an exhibit to a current report on Form 8-K that is incorporated herein by reference. We are not required to issue fractional shares upon the exercise of the warrants. No holders of the warrants will possess any rights as a stockholder under those warrants until the holder exercises those warrants. The warrants may be transferred independent of the common stock they were issued with, on a form of assignment, subject to all applicable laws.

S-36



LEGAL MATTERS

Paul, Hastings, Janofsky & Walker LLP, Los Angeles, California will pass upon the validity of the securities being offered by this prospectus supplement. Any placement agent, dealer or agent may be advised about issues relating to any offering by its own legal counsel.

EXPERTS

Burr, Pilger & Mayer, LLP, independent registered public accounting firm, has audited the consolidated financial statements of Raptor Pharmaceuticals Corp. included in Raptor Pharmaceuticals Corp.'s Annual Report on Form 10-K, for the year ended August 31, 2009 as set forth in its report (which contains an explanatory paragraph describing conditions that raise substantial doubt about Raptor Pharmaceuticals Corp.'s ability to continue as a going concern as described in Note 1 to such consolidated financial statements) which is incorporated by reference in this prospectus supplement and elsewhere in the registration statement of Raptor Pharmaceutical Corp. of which this prospectus supplement forms a part. Such consolidated financial statements of Raptor Pharmaceuticals Corp. are incorporated by reference in reliance on Burr, Pilger & Mayer, LLP's reports, given on the authority of such firm as experts in accounting and auditing. Burr, Pilger & Mayer, LLP are the auditors for our fiscal year ended August 31, 2009.

Ernst & Young LLP, independent registered public accounting firm, has audited the consolidated financial statements of TorreyPines Therapeutics, Inc. (now known as Raptor Pharmaceutical Corp.) included in TorreyPines Therapeutics, Inc.'s Annual Report on Form 10-K, for the year ended December 31, 2008 as set forth in its report (which contains an explanatory paragraph describing conditions that raise substantial doubt about TorreyPines Therapeutics, Inc.'s ability to continue as a going concern as described in Note 1 to such consolidated financial statements), which is incorporated by reference in this prospectus supplement and elsewhere in the registration statement of Raptor Pharmaceutical Corp. of which this prospectus supplement forms a part. Such consolidated financial statements of TorreyPines Therapeutics, Inc. are incorporated by reference in reliance on Ernst & Young LLP's reports, given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any reports, statements or other information that we file at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549 on official business days during the hours of 10AM to 3PM. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our SEC filings are also available to the public from commercial document retrieval services and on the website maintained by the SEC at <http://www.sec.gov>. Reports, proxy statements and other information concerning us also may be inspected at the offices of the Financial Industry Regulatory Authority, Inc., Listing Section, 1735 K Street, Washington, D.C. 20006. You may also obtain free copies of the documents that we file with the SEC by going to the Investors and Media section of our website, www.raptorpharma.com. The information provided on our website is not part of this prospectus supplement or in the accompanying prospectus and therefore is not incorporated by reference.

We have filed with the SEC a registration statement on Form S-3 relating to the securities covered by this prospectus supplement. This prospectus supplement is a part of the registration statement and does not contain all the information in the registration statement. Whenever a reference is made in this prospectus supplement to a contract or other document, the reference is only a summary and you should refer to the exhibits that are a part of the registration statement (including information incorporated by reference therein) for a copy of the contract or other document. You may review a copy of the registration statement at the SEC's Public Reference Room in Washington, D.C., as well as

through the SEC's internet website.

S-37

The SEC allows us to “incorporate by reference” the information we file with it, which means that we can disclose important information to you by referring you to another document that we have filed separately with the SEC. You should read the information incorporated by reference because it is an important part of this prospectus supplement. Any information incorporated by reference into this prospectus supplement is considered to be part of this prospectus supplement from the date we file that document. We incorporate by reference the following information or documents that have been filed with the SEC which shall not include, in each case, documents, or information deemed to have been furnished and not filed in accordance with SEC rules:

- The Consolidated Financial Statements set forth under Part II, Item 8 (Financial Statements and Supplementary Data) and Part IV, Item 15 (Exhibits, Financial Statement Schedules), as filed on October 28, 2009 by our wholly-owned subsidiary, Raptor Pharmaceuticals Corp. (Commission File No. 000-50720) with the SEC in its Annual Report of Form 10-K for the fiscal year ended August 31, 2009, which such consolidated financial statements include the (i) Report of Independent Registered Public Accounting Firm, (ii) Consolidated Balance Sheets as of August 31, 2009 and 2008, (iii) Consolidated Statements of Operations for the years ended August 31, 2009 and 2008 and for the cumulative period from September 8, 2005 (Raptor Pharmaceuticals Corp.’s inception) to August 31, 2009, (iv) Consolidated Statements of Stockholders’ Equity for period from September 8, 2005 (Raptor Pharmaceuticals Corp.’s inception) to August 31, 2006 and the years ended August 31, 2007, 2008 and 2009, (v) Consolidated Statements of Cash Flows for the years ended August 31, 2009 and 2008 and for the cumulative period from September 8, 2005 (Raptor Pharmaceuticals Corp.’s inception) to August 31, 2009, and (vi) Notes to Consolidated Financial Statements. Given that Raptor Pharmaceuticals Corp. was the “accounting acquirer” in the reverse merger, business combination that we completed with it in September 2009, described under in the accompanying prospectus under the heading “Raptor Pharmaceutical Corp.,” Raptor Pharmaceuticals Corp.’s financial statements became the historical financial statements of the combined entity after such transaction;
- Our Annual Report on Form 10-K for the year ended December 31, 2008 filed with the SEC on March 27, 2009—note that for accounting purposes we were “acquired” by Raptor Pharmaceuticals Corp. pursuant to a reverse merger, business combination on September 29, 2009;
- Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2009 filed with the SEC on May 1, 2009—note that for accounting purposes we were “acquired” by Raptor Pharmaceuticals Corp. pursuant to a reverse merger, business combination on September 29, 2009;
- Our Quarterly Report on Form 10-Q for the quarter ended June 30, 2009 filed with the SEC on August 11, 2009—note that for accounting purposes we were “acquired” by Raptor Pharmaceuticals Corp. pursuant to a reverse merger, business combination on September 29, 2009;
- Our Current Reports on Form 8-K/A filed with the SEC on November 3, 2009, October 9, 2009 and October 7, 2009, our Current Reports on Form 8-K filed with the SEC on December 15, 2009, November 17, 2009, October 5, 2009, and our Current Reports on Form 8-K filed with the SEC, as filed by TorreyPines Therapeutics, Inc., on July 31, 2009, July 28, 2009, July 22, 2009, June 17, 2009, May 29, 2009, May 1, 2009, April 24, 2009, April 2, 2009, March 31, 2009, March 27, 2009 and February 9, 2009;
- the description of our common stock, which is registered under Section 12(b) of the Exchange Act, in our registration statement on Form 10-SB filed with the SEC on March 17, 1999, as amended by that registration statement on Form 10-SB/A filed with the SEC on August 19, 1999, which description has been updated by our

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Registration Statement on Form S-4 filed with the SEC on August 19, 2009 (See section titled, "Description of TorreyPines' Capital Stock"), and any amendment or report filed with the SEC for the purpose of updating such description; and

- the description of our preferred share purchase rights, which are registered under Section 12 of the Exchange Act, in our registration statement on Form 8-A filed with the SEC on May 16, 2005, which description has been updated by our Registration Statement on Form S-4 filed with the SEC on August 19, 2009 (See section titled, "Description of TorreyPines' Capital Stock"), and any amendment or report filed with the SEC for the purpose of updating such description.

Any information in any of the foregoing documents will automatically be deemed to be modified or superseded to the extent that information in this prospectus supplement or in a later filed document or other report that is incorporated or deemed to be incorporated herein by reference modifies or replaces such information.

S-38

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, until we file a post-effective amendment that indicates the termination of the offering of the securities made by this prospectus supplement. Information in such future filings updates and supplements the information provided in this prospectus supplement. These documents include proxy statements and periodic reports, such as Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, and, to the extent they are considered filed and, except as described above, Current Reports on Form 8-K. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

We will provide to each person, including any beneficial owner, to whom a prospectus supplement is delivered, without charge upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus supplement but not delivered with the prospectus supplement, including exhibits which are specifically incorporated by reference into such documents. If you would like to request documents from us, please send a request in writing or by telephone to us at the following address:

Raptor Pharmaceutical Corp.
9 Commercial Blvd., Suite 200
Novato, CA 94949
(415) 382-1390
Attn: Secretary

Information on Our Website

Information on our website, any subsection, page, or other subdivision of our website, or any website linked to by content on our website, is not part of this prospectus supplement and you should not rely on that information unless that information is also in this prospectus supplement or incorporated by reference in this prospectus supplement.

Trademark Notice

Raptor, our logos and all of our product candidates and trade names are our registered trademarks or our trademarks in the United States and in other select countries. Other third-party logos and product/trade names are registered trademarks or trade names of their respective companies.

Raptor Pharmaceutical Corp.

3,747,558 Units

Consisting of Common Stock and Warrants

Prospectus Supplement

December 17, 2009

Ladenburg Thalmann & Co. Inc.

PROSPECTUS

Raptor Pharmaceutical Corp.

\$30,000,000
Common Stock
Preferred Stock
Debt Securities
Warrants
Units

From time to time, Raptor Pharmaceutical Corp., or Raptor, may offer, issue and sell up to \$30,000,000 of any combination of the securities described in this prospectus, either individually or in units. Raptor may also offer common stock or preferred stock upon conversion of debt securities, common stock upon conversion of preferred stock, or common stock, preferred stock or debt securities upon the exercise of warrants.

Raptor will provide the specific terms of these offerings and securities in one or more supplements to this prospectus. Raptor may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement and any related free writing prospectus may also add, update or change information contained in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, as well as any documents incorporated by reference, before buying any of the securities being offered.

Raptor's common stock is traded on the NASDAQ Capital Market under the symbol "RPTPD." On October 6, 2009, the last reported sale price of its common stock on the NASDAQ Capital Market was \$3.25. The applicable prospectus supplement will contain information, where applicable, as to any other listing, if any, on the NASDAQ Capital Market or any securities market or other exchange of the securities covered by the applicable prospectus supplement. The aggregate market value of our outstanding common equity held by non-affiliates on October 6, 2009 was approximately \$55.5 million. We have not issued any securities pursuant to Instruction I.B.6 of Form S-3 during the 12 calendar month period that ends on and includes the date hereof.

Investing in Raptor's securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" on page 2 and contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus.

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

The securities may be sold directly by Raptor to investors, through agents designated from time to time or to or through underwriters or dealers, on a continuous or delayed basis. For additional information on the methods of sale, you should refer to the section titled "Plan of Distribution" in this prospectus. If any agents or underwriters are involved in the sale of any securities with respect to which this prospectus is being delivered, the names of such agents or underwriters and any applicable fees, commissions, discounts and over-allotment options will be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds that Raptor expects to receive from such sale will also be set forth in a prospectus supplement.

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

The date of this prospectus is November 5, 2009.

TABLE OF CONTENTS

| | Page |
|---|------|
| ABOUT THIS PROSPECTUS | 1 |
| RAPTOR PHARMACEUTICAL CORP. | 2 |
| RISK FACTORS | 2 |
| FORWARD-LOOKING STATEMENTS | 3 |
| THE SECURITIES WE MAY OFFER | 4 |
| USE OF PROCEEDS | 6 |
| DESCRIPTION OF OUR CAPITAL STOCK | 6 |
| DESCRIPTION OF DEBT SECURITIES | 11 |
| DESCRIPTION OF WARRANTS | 14 |
| DESCRIPTION OF UNITS | 15 |
| LEGAL OWNERSHIP OF SECURITIES | 16 |
| PLAN OF DISTRIBUTION | 19 |
| LEGAL MATTERS | 21 |
| EXPERTS | 21 |
| WHERE YOU CAN FIND ADDITIONAL INFORMATION | 21 |

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, utilizing a “shelf” registration process. Under this shelf registration process, we may offer shares of our common stock or preferred stock, various series of debt securities and/or warrants to purchase any of such securities, either individually or in units, in one or more offerings, up to a total dollar amount of \$30,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of those securities. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. We may also add or update in the prospectus supplement (and in any related free writing prospectus that we may authorize to be provided to you) any of the information contained in this prospectus or in the documents we have incorporated by reference into this prospectus. We urge you to carefully read this prospectus, any applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the heading “Where You Can Find Additional Information,” before buying any of the securities being offered. **THIS PROSPECTUS MAY NOT BE USED TO CONSUMMATE A SALE OF SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.**

You should rely only on the information that we have provided or incorporated by reference in this prospectus, any applicable prospectus supplement and any related free writing prospectus that we may authorize to be provided to you. We have not authorized anyone to provide you with different information. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus that we may authorize to be provided to you. You must not rely on any unauthorized information or representation. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. We will not make an offer to sell our securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information in this prospectus, any applicable prospectus supplement, any related free writing prospectus, is accurate only as of the date on the front cover of this prospectus and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus, or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since that date.

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

RAPTOR PHARMACEUTICAL CORP.

Raptor Pharmaceutical Corp., or Raptor, was initially incorporated in Nevada on July 29, 1997 as Axonyx Inc. In October 2006, Axonyx Inc. and its then-wholly-owned subsidiary completed a reverse merger, business combination with TorreyPines Therapeutics, Inc., reincorporated in Delaware and changed its name to TorreyPines Therapeutics, Inc. In September 2009, we and our wholly-owned subsidiary completed a reverse merger, business combination with Raptor Pharmaceuticals Corp. pursuant to which Raptor Pharmaceuticals Corp. became our wholly-owned subsidiary. Immediately prior to the merger, we changed our corporate name from TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp. Raptor's principal executive offices are located at 9 Commercial Blvd., Suite 200, Novato, CA 94949, and Raptor's telephone number is (415) 382-8111. Raptor is a NASDAQ-listed development-stage biotechnology company dedicated to speeding the delivery of new treatment options to patients by working to improve existing therapeutics through the application of highly specialized drug targeting platforms and formulation expertise. Raptor focuses on underserved patient populations where it believes that it can have the greatest potential impact. Raptor is developing drug therapies for the potential treatment of: genetic diseases including nephropathic cystinosis, or cystinosis, and Huntington's Disease, or HD; metabolic diseases including non-alcoholic steatohepatitis, or NASH, and aldehyde dehydrogenase, or ALDH2, deficiency, or Ethanol Intolerance; and liver diseases including primary liver cancer or hepatocellular carcinoma, or HCC, and hepatitis. Raptor is also researching a non-opioid solution designed to treat chronic pain and potentially thrombotic disorder.

We obtained statistical data, market data and other industry data and forecasts used throughout, or incorporated by reference in, this prospectus from market research, publicly available information and industry publications. Industry publications generally state that they obtain their information from sources that they believe to be reliable, but they do not guarantee the accuracy and completeness of the information. Similarly, while we believe that the statistical data, industry data and forecasts and market research are reliable, we have not independently verified the data, and we do not make any representation as to the accuracy of the information. We have not sought the consent of the sources to refer to their reports appearing or incorporated by reference in this prospectus.

As described elsewhere in this prospectus under the heading "Where You Can Find More Information.," this prospectus and the information incorporated herein by reference include trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included or incorporated by reference into this prospectus, any applicable prospectus supplement or any related free writing prospectus are the property of their respective owners.

In this prospectus, we refer to common stock, preferred stock, debt securities, warrants and units collectively as "securities." Unless otherwise mentioned or unless the context requires otherwise, all references in this prospectus to "we," "us," "our," the "Company," "Raptor" and similar references refer to Raptor Pharmaceutical Corp., a Delaware corporation, and its wholly-owned subsidiaries; except that in the description of the securities we may offer these terms refer solely to Raptor Pharmaceutical Corp. and not to any of our subsidiaries.

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully review the risks and uncertainties described under the heading "Risk Factors" contained in the applicable prospectus supplement and any related free

writing prospectus, and under similar headings in the other documents, including our most recent annual report on Form 10-K, any subsequent quarterly reports on Form 10-Q or current report on Form 8-K we file after the date of this prospectus, that are incorporated by reference into this prospectus. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities. Additional risks not presently known to us or that we currently believe are immaterial may also significantly impair our business operations and financial condition.

FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference contain “forward-looking statements” of Raptor within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”) and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). 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, performances or achievements expressed or implied by the forward-looking statements. Forward-looking statements may include statements relating to:

- projections of our results of operations and financial condition and businesses;
- anticipated development, regulatory submissions, regulatory approval and commercialization of our drug candidates;
- the efficacy, safety and intended utilization of our drug candidates;
- competition and consolidation in the markets in which we compete;
- existing and future collaborations and partnerships;
- our ability to comply with government regulations;
- our ability to expand and protect our intellectual property portfolio;
- anticipated future losses;
- the conduct and results of our research, discovery and preclinical efforts and clinical trials; and
- our plans regarding future research, discovery and preclinical efforts and clinical activities and collaborative, intellectual property and regulatory activities.

Words such as “anticipates,” “believes,” “forecast,” “potential,” “contemplates,” “expects,” “intends,” “plans,” “believes,” “estimates,” “could,” “would,” “will,” “may,” “can” and similar expressions identify forward-looking statements. These forward-looking statements are not guarantees of future performance and are subject to risks and uncertainties that could cause actual results to differ materially from the results contemplated by the forward-looking statements. Many of the important factors that will determine these results and values are beyond our ability to control or predict. You are cautioned not to put undue reliance on any forward-looking statements. Except as otherwise required by law, we do not assume any obligation to update any forward-looking statements. In evaluating an investment in our securities, you should carefully consider the discussion of risks and uncertainties described under the heading “Risk Factors” contained in this prospectus and the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents, including our most recent annual report on Form 10-K and in our most recent quarterly report on Form 10-Q, as well as any amendments thereto reflected in subsequent filings with the SEC. You should carefully read both this prospectus, the applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the heading “Where You Can Find Additional Information,” completely and with the understanding that our actual future results may be materially different from what we expect.

THE SECURITIES WE MAY OFFER

We may offer shares of our common stock or preferred stock, various series of debt securities and/or warrants to purchase any of such securities, either individually or in units, in one or more offerings, with a total value of up to \$30,000,000 from time to time under this prospectus at prices and on terms to be determined by market conditions at the time of any offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities including, to the extent applicable:

- designation or classification;
- aggregate principal amount or aggregate offering price;
- maturity, if applicable;
- original issue discount, if any;
- rates and times of payment of interest or dividends, if any;
- redemption, conversion, exercise, exchange or sinking fund terms, if any;
- ranking;
- restrictive covenants, if any;
- voting or other rights, if any;
- conversion prices, if any; and
- important United States federal income tax considerations.

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

THIS PROSPECTUS MAY NOT BE USED TO CONSUMMATE A SALE OF SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

We may sell the securities directly to investors or to or through agents, underwriters or dealers. We, and our agents or underwriters, reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities to or through agents or underwriters, we will include in the applicable prospectus supplement:

- the names of those agents or underwriters;

- applicable fees, discounts and commissions to be paid to them;
- details regarding over-allotment options, if any; and
- the net proceeds to us.

Common Stock. We may issue shares of our common stock from time to time. The holders of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of stockholders and do not have cumulative voting rights. Subject to preferences that may be applicable to any outstanding shares of preferred stock, the holders of common stock are entitled to receive ratably only those dividends as may be declared by our board of directors out of legally available funds. Upon our liquidation, dissolution or winding up, holders of our common stock are entitled to share ratably in all assets remaining after payment of liabilities and the liquidation preferences of any outstanding shares of preferred stock.

Preferred Stock. We may issue shares of our preferred stock from time to time, in one or more series. Under our certificate of incorporation, as amended, our board of directors has the authority, without further action by stockholders, to designate up to 15,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges, qualifications and restrictions granted to or imposed upon the preferred stock, including dividend rights, conversion rights, voting rights, rights and terms of redemption, liquidation preference and sinking fund terms, any or all of which may be greater than the rights of the common stock.

If we sell any series of preferred stock under this prospectus, we will fix the designations, powers, preferences and rights of such series of preferred stock, as well as the qualifications, limitations or restrictions thereon, in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of the related series of preferred stock. We urge you to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of preferred stock being offered, as well as the complete certificate of designation that contains the terms of the applicable series of preferred stock.

Debt Securities. We may issue debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. The senior debt securities will rank equally with any other unsecured and unsubordinated debt. The subordinated debt securities will be subordinate and junior in right of payment, to the extent and in the manner described in the instrument governing the debt, to all of our senior indebtedness. Convertible debt securities will be convertible into or exchangeable for our common stock or our other securities. Conversion may be mandatory or at your option and would be at prescribed conversion rates.

The debt securities will be issued under one or more indentures, which are contracts between us and a national banking association or other eligible party, as trustee. In this prospectus, we have summarized certain general features of the debt securities. We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of debt securities being offered, as well as the complete indentures that contain the terms of the debt securities. Forms of indentures have been filed as exhibits to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

Warrants. We may issue warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series. We may issue warrants together with common stock, preferred stock and/or debt securities, and the warrants may be attached to or separate from these securities. In this prospectus, we have summarized certain general features of the warrants. We urge you, however, to read the applicable prospectus supplement (and any free writing

prospectus that we may authorize to be provided to you) related to the particular series of warrants being offered, as well as the complete warrant agreements and warrant certificates that contain the terms of the warrants. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, forms of the warrant agreements and forms of warrant certificates containing the terms of the warrants being offered.

We will evidence each series of warrants by warrant certificates that we will issue. Warrants may be issued under an applicable warrant agreement that we enter into with a warrant agent. We will indicate the name and address of the warrant agent, if applicable, in the prospectus supplement relating to the particular series of warrants being offered.

Units. We may issue, in one or more series, units consisting of common stock, preferred stock, debt securities and/or warrants for the purchase of common stock, preferred stock and/or debt securities in any combination. In this prospectus, we have summarized certain general features of the units. We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of units being offered, as well as the complete unit agreement that contains the terms of the units. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of unit agreement and any supplemental agreements that describe the terms of the series of units it is offering before the issuance of the related series of units.

USE OF PROCEEDS

Except as described in any prospectus supplement or in any related free writing prospectus that we may authorize to be provided to you, we currently intend to use the net proceeds from the sale of the securities offered hereby for general corporate purposes, including, among other things, working capital to support our clinical and preclinical stage drug candidate programs and potential re-payment of indebtedness that may be outstanding at the time of any offering under this prospectus. We have not specifically allocated the proceeds to those purposes as of the date of this prospectus. We may also use a portion of the net proceeds to acquire or invest in businesses, services and technologies that are complementary to our own. Pending these uses, we expect to invest the net proceeds in short-term, investment-grade securities. The precise amount and timing of the application of proceeds from the sale of securities will depend on our funding requirements and the availability and cost of other funds at the time of sale. Allocation of proceeds of a particular series of securities, or the principal reason for the offering if no allocation has been made, will be described in the applicable prospectus supplement or in any related free writing prospectus.

DESCRIPTION OF OUR CAPITAL STOCK

Authorized and Outstanding Capital Stock

Under our certificate of incorporation, as amended, our authorized capital stock consists of 150,000,000 shares of common stock, par value \$0.001 per share and 15,000,000 shares of preferred stock, par value \$0.001 per share. As of October 6, 2009, there were approximately 18.8 million shares of common stock outstanding, 3,321,916 shares of common stock reserved for issuance upon exercise of outstanding stock options and warrants to purchase common stock, and no shares of preferred stock outstanding.

The following summary description of our capital stock is based on the applicable provisions of the Delaware General Corporation Law, or DGCL, and on the provisions of our certificate of incorporation, as amended and our bylaws, as amended. This information is qualified entirely by reference to the applicable provisions of the Delaware General Corporation Law and our certificate of incorporation, as amended, and our bylaws, as amended. For information on how to obtain copies of such documents, please refer to the heading "Where You Can Find More Information" in this prospectus.

Common Stock

Dividend Rights

Dividends from our capital stock, subject to the provisions of our certificate of incorporation, as amended, and applicable law, if any, may be declared by our board of directors pursuant to law at any regular or annual meeting. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the certificate of incorporation, as amended, and applicable law.

Voting Rights

For the purpose of determining those stockholders entitled to vote at any meeting of our stockholders, except as otherwise provided by law, only persons in whose names stand on the stock records of the corporation on the record date, as provided in Section 12 of our bylaws, as amended, shall be entitled to vote at any meeting of stockholders. Every person entitled to vote shall have the right to do so either in person, by remote communication, if applicable, or

by an agent or agents authorized by a proxy granted in accordance with Delaware law. An agent so appointed need not be a stockholder. No proxy shall be voted after three (3) years from its date of creation unless the proxy provides for a longer period. Each share of our common stock has identical rights and privileges in every respect.

Our bylaws, as amended, provide that holders of shares of our common stock have the power to adopt, amend or repeal the bylaws of the corporation; provided, that in addition to any vote of the holders of any class or series of stock of the corporation required by law or by our certificate of incorporation, as amended, such action by stockholders shall require the affirmative vote of the holders of at least 66-2/3% of the voting power of all of the then-outstanding shares of our capital stock entitled to vote generally in the election of directors, voting together as a single class. In addition, our certificate of incorporation, as amended, and bylaws, as amended, provide that a director may be removed at any time without cause by the affirmative vote of the holders of 66-2/3% of all of our then-outstanding shares of voting stock entitled to vote at an election of directors.

No Preemptive or Similar Rights

Our common stock is not entitled to preemptive rights and is not subject to conversion or redemption.

Right to Receive Liquidation Distributions

If we voluntarily or involuntarily liquidate, dissolve or wind-up, the holders of our common stock will be entitled to receive after distribution in full of the preferential amounts, if any, to be distributed to the holders of preferred stock or any series of preferred stock, all of the remaining assets available for distribution ratably in proportion to the number of shares of our common stock held by them. Holders of our common stock have no preferences or any preemptive conversion or exchange rights. Our outstanding common stock is fully paid and non-assessable. The rights, preferences and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of our preferred stock, which our board of directors may designate and issue in the future.

Anti-Takeover Provisions

Under the provisions of the DGCL, our certificate of incorporation, as amended, and bylaws, as amended, may have the effect of delaying, deferring, or discouraging another person from acquiring control of us. Such provisions could limit the price that some investors might be willing to pay in the future for our common stock. These provisions of the DGCL and our certificate of incorporation, as amended, and bylaws, as amended, may also have the effect of discouraging or preventing certain types of transactions involving an actual or threatened change of control of us, including unsolicited takeover attempts, even though such a transaction may offer our stockholders the opportunity to sell their stock at a price above the prevailing market price.

We are subject to Section 203 of the DGCL, which, subject to certain exceptions, prohibits a Delaware corporation from engaging in any “business combination” with an “interested stockholder” for a period of three years following the time that such stockholder became an interested stockholder, unless:

- the board of directors of the corporation approves either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder, prior to the time the interested stockholder attained that status;
- upon the closing 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 number of shares outstanding those shares owned (a) by persons who are directors or officers and (b) 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 such time, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

With certain exceptions, an “interested stockholder” is a person or group who or which owns 15% or more of the corporation’s outstanding voting stock (including any rights to acquire stock pursuant to an option, warrant, agreement, arrangement or understanding, or upon the exercise of conversion or exchange rights, and stock with respect to which the person has voting rights only), or is an affiliate or associate of the corporation and was the owner of 15% or more of such voting stock at any time within the previous three years.

In general, Section 203 defines a business combination to include:

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

A Delaware corporation may “opt out” of this provision with an express provision in its original certificate of incorporation or an express provision in its amended and restated certificate of incorporation or bylaws resulting from a stockholders’ amendment approved by at least a majority of the outstanding voting shares. However, we have not “opted out” of this provision. Section 203 could prohibit or delay mergers or other takeover or change-in-control attempts and, accordingly, may discourage attempts to acquire us.

Our certificate of incorporation, as amended, and bylaws, as amended, provide that its board will have one class of directors serving concurrent, one-year terms. Subject to the rights of the holders of any outstanding series of our preferred stock, our certificate of incorporation, as amended, authorizes only our board of directors to fill vacancies, including newly created directorships. Accordingly, this provision could prevent a stockholder from obtaining majority representation on the board of directors by enlarging the board of directors and filling the new directorships with its own nominees. Our certificate of incorporation, as amended, also provides that directors may be removed by stockholders for cause by the affirmative vote of the holders of a majority of the outstanding shares of voting stock or without cause by the affirmative vote of the holders of 66-2/3% of the outstanding shares of voting stock.

Our certificate of incorporation, as amended, also provides that stockholders may not take action by written consent, but may only take action at duly called annual or special meetings of stockholders. Our certificate of incorporation, as amended, further provides that special meetings of our stockholders may be called only by the chairman of the board of directors, the chief executive officer or a majority of the board of directors. This limitation on the right of stockholders to call a special meeting could make it more difficult for stockholders to initiate actions that are opposed by our board of directors. These actions could include the removal of an incumbent director or the election of a stockholder nominee as a director. They could also include the implementation of a rule requiring stockholder

ratification of specific defensive strategies that have been adopted by our board of directors with respect to unsolicited takeover bids. In addition, the limited ability of our stockholders to call a special meeting of stockholders may make it more difficult to change the existing board and management.

Our bylaws, as amended, provide that stockholders seeking to bring business before an annual meeting of stockholders, or to nominate candidates for election as directors at an annual meeting of stockholders, must provide timely notice thereof in writing. To be timely, a stockholder's notice must be delivered to or mailed and received at our principal executive offices not less than 120 days prior to the date of our annual meeting. Our bylaws, as amended, also specify certain requirements as to the form and content of a stockholder's notice. These provisions may preclude stockholders from bringing matters before an annual meeting of stockholders or from making nominations for directors at an annual meeting of stockholders.

The authorized but unissued shares of our common stock and preferred stock are available for future issuance without stockholder approval. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions, employee benefit plans and "poison pill" rights plans. This could result in our management being able to issue more shares without further stockholder approval and could render more difficult or discourage an attempt to obtain control of us by means of a proxy contest, tender offer, merger or otherwise.

Transfer Agent

The transfer agent for our common stock is American Stock Transfer & Trust Company.

Listing

Our common stock is listed on the NASDAQ Capital Market under the symbol "RPTPD."

Preferred Stock

Our board of directors is authorized to provide for the issuance of shares of preferred stock in one or more series, and to fix for each series voting rights, if any, designations, preferences and relative, participating, optional or other special rights and such qualifications, limitations or restrictions as provided in a resolution or resolutions adopted by our board of directors. Our board of directors has authorized the issuance of Series A participating preferred stock which includes terms and conditions which could discourage a takeover or other transaction that holders of some or a majority of common stock might believe to be in their best interests. In addition, our board of directors may authorize the issuance of preferred stock in which holders of preferred stock might receive a premium for their shares over the then market price. We have no present plans to issue any shares of preferred stock.

Series A Participating Preferred Stock

Each outstanding share of our common stock has attached to it one preferred share purchase right that entitles the registered holder to purchase from us a unit of one one-thousandth of a share of its Series A participating preferred stock, which is referred to herein as the Junior Preferred Stock, at a price of \$15.00 per unit. The description and terms of the rights are set forth in a rights agreement dated as of May 13, 2005, as amended, by and between American Stock Transfer & Trust Company, as rights agent, and us, which is referred to herein as the Raptor Rights Agreement.

Until the earlier to occur of (i) the close of business on the tenth day after a public announcement that a person or group of affiliated or associated persons has acquired beneficial ownership of 15% or more of our outstanding common stock, subject to certain exceptions, or (ii) 10 business days (or such later date as may be determined by action of our board of directors prior to such time as any person becomes an acquiring person) following the commencement of, or announcement of an intention to make, a tender offer or exchange offer the consummation of

which would result in the beneficial ownership by a person or group of 15% or more of such outstanding common stock (the earlier of such dates is the distribution date), the rights will be evidenced by our common stock certificates.

The Raptor Rights Agreement provides that, until the distribution date, the rights will be transferred with and only with our common stock. Until the distribution date (or earlier redemption or expiration of the rights), our common stock certificates, upon transfer or new issuance of common stock will contain a notation incorporating the Raptor Rights Agreement by reference. Until the distribution date (or earlier redemption or expiration of the rights), the surrender for transfer of any certificates of our common stock will also constitute the transfer of the rights associated with the common stock represented by such certificate. As soon as practicable following the distribution date, if any, separate certificates evidencing the rights will be mailed to holders of record of our common stock as of the close of business on the distribution date and such separate rights certificates alone will evidence the rights.

The rights are not exercisable until the distribution date. The rights will expire at the close of business on May 15, 2015 unless that final expiration date is extended or unless the rights are earlier redeemed or exchanged by us, in each case as described below.

The purchase price payable, and the number of units of Junior Preferred Stock or other securities or property issuable, upon exercise of the rights are subject to adjustment from time to time to prevent dilution (a) in the event of a stock dividend on, or a subdivision, combination or reclassification of, the Junior Preferred Stock, (b) upon the grant to holders of the units of Junior Preferred Stock of certain rights or warrants to subscribe for or purchase units of Junior Preferred Stock at a price, or securities convertible into units of Junior Preferred Stock with a conversion price, less than the then current market price of the units of Junior Preferred Stock, or (c) upon the distribution to holders of the units of Junior Preferred Stock of evidences of indebtedness or assets (excluding regular periodic cash dividends paid out of earnings or retained earnings or dividends payable in units of Junior Preferred Stock) or of subscription rights or warrants other than those referred to above.

The number of outstanding rights and the number of units of Junior Preferred Stock issuable upon exercise of each right are also subject to adjustment in the event of a stock split of our common stock or a stock dividend on the common stock payable in common stock or subdivisions, consolidations or combinations of the common stock occurring, in any such case, prior to the distribution date.

The Junior Preferred Stock purchasable upon exercise of the rights will not be redeemable. Each share of Junior Preferred Stock will be entitled to an aggregate dividend of 1,000 times the dividend declared per share of our common stock. In the event of liquidation, the holders of the shares of Junior Preferred Stock will be entitled to an aggregate payment of 1,000 times the payment made per share of our common stock. Each share of Junior Preferred Stock will have 1,000 votes, voting together with our common stock. Finally, in the event of any merger, consolidation or other transaction in which shares of our common stock are exchanged, each share of Junior Preferred Stock will be exchanged or changed in an amount per share equal to 1,000 times the amount received per share of common stock. These rights are protected by customary anti-dilution provisions.

Because of the nature of the dividend, liquidation and voting rights, the value of each unit of Junior Preferred Stock purchasable upon exercise of each right should approximate the value of one share of common stock.

If, after the rights become exercisable, we are acquired in a merger or other business combination transaction with an acquiring person or one of its affiliates, or 50% or more of our consolidated assets or earning power are sold to an acquiring person or one of its affiliates, proper provision will be made so that each holder of a right will thereafter have the right to receive, upon exercise thereof at the then current exercise price of the right, that number of shares of common stock of the acquiring company which at the time of such transaction will have a market value of two times the exercise price of the right.

If any person or group of affiliated or associated persons becomes the beneficial owner of 15% or more of the outstanding shares of our common stock, subject to certain exceptions, proper provision will be made so that each holder of a right, other than rights beneficially owned by the acquiring person (which will thereafter be unexercisable), will have the right to receive upon exercise that number of shares of our common stock or units of Junior Preferred Stock (or cash, other securities or property) having a market value of two times the exercise price of the right.

At any time after the acquisition by a person or group of affiliated or associated persons of beneficial ownership of 15% or more of the outstanding shares of our common stock, subject to certain exceptions, and prior to the acquisition by such person or group of 50% or more of the outstanding common stock, our board of directors may exchange the rights (other than rights owned by such person or group which have become void), in whole or in part, at an exchange ratio per unit of Junior Preferred Stock equal to the purchase price divided by the then current market price per unit of Junior Preferred Stock on the earlier of (i) the date on which any person becomes an acquiring person and (ii) the date on which a tender or exchange offer is announced which, if consummated would result in the offerer being the beneficial owner of 15% or more of the shares of our common stock then outstanding.

With certain exceptions, no adjustment in the purchase price will be required until cumulative adjustments require an adjustment of at least 1% in the purchase price. No fractional shares of Junior Preferred Stock will be issued (other than fractions which are integral multiples of one one-thousandth of a share of Junior Preferred Stock, which may, at our election, be evidenced by depositary receipts) and, in lieu thereof, an adjustment in cash will be made based on the market price of the units of Junior Preferred Stock on the last trading day prior to the date of exercise.

At any time on or prior to the earlier of (i) the close of business on the tenth day after a public announcement that a person or group of affiliated or associated persons acquires beneficial ownership of 15% or more of the outstanding our common stock (unless the board of directors extends the ten day period) or (ii) the tenth business day after a person commences, or announces its intention to commence, a tender offer or exchange offer that would result in the bidder's beneficial ownership of 15% or more of the shares of our common stock, our board of directors may redeem the rights in whole, but not in part, at a price of \$0.01 per right. The redemption of the rights may be made effective at such time, on such basis and with such conditions as our board of directors in its sole discretion may establish. Immediately upon any redemption of the rights, the right to exercise the rights will terminate and the only right of the holders of rights will receive the redemption price. The rights are also redeemable under other circumstances as specified in the Raptor Rights Agreement.

The terms of the rights may be amended by our board of directors without the consent of the holders of the rights except that from and after such time that there is an acquiring person no amendment may adversely affect the interests of the holders of the rights.

Until a right is exercised, the holder of a right will have no rights by virtue of ownership as our stockholder, other than those accruing as a result of the holder's ownership in our common stock, including, without limitation, the right to vote or to receive dividends.

The rights have certain anti-takeover effects. The rights will cause substantial dilution to a person or group that attempts to acquire us on terms not approved by our board of directors, except pursuant to an offer conditioned on a substantial number of rights being acquired. The rights should not interfere with any merger or other business combination approved by our board of directors since the rights may be redeemed by us at the redemption price prior to the occurrence of a distribution date. The foregoing description of the rights is qualified in its entirety by reference to the Raptor Rights Agreement.

DESCRIPTION OF DEBT SECURITIES

The following description, together with the additional information we include in any applicable prospectus supplement, summarizes the material features, terms and provisions of any debt securities that we may offer under this prospectus. This summary does not purport to be exhaustive and may not contain all the information that is important to you. Therefore, you should read the applicable prospectus supplement relating to those debt securities and any other offering materials that we may provide. We may issue debt securities, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. Unless otherwise stated in the applicable prospectus supplement, we will not be limited in the amount of debt securities that we may issue, and neither the senior debt securities nor the subordinated debt securities will be secured by any of our property or assets. Thus, by owning debt securities, you are one of our unsecured creditors. While the terms we have summarized below will apply generally to any debt securities that we may offer under this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. The terms of any debt securities offered under a prospectus supplement may differ from the terms described below. For any debt securities that we may offer, an indenture (and any relevant supplemental indenture) will contain additional important terms and provisions and will be incorporated by reference as an exhibit to the registration statement that includes this prospectus, or as an exhibit to a current report on Form 8-K, incorporated by reference in this prospectus. Unless the context requires otherwise, whenever we refer to the indentures, we also are referring to any supplemental indentures that specify the terms of a particular series of debt securities.

We conduct substantially all of our operations through subsidiaries. As a result, claims of holders of debt securities will generally have a junior position to claims of creditors of our subsidiaries, except to the extent that we may be recognized as a creditor of those subsidiaries. In addition, our right to participate as a stockholder in any distribution of assets of any subsidiary (and thus the ability of holders of debt securities to benefit from such distribution as our creditors) is junior to creditors of each subsidiary.

We may issue senior debt securities or subordinated debt securities under one or separate indentures, which may be supplemented or amended from time to time. Senior debt securities will be issued under one or more senior indentures that we will enter into with the trustees named in such senior indentures and subordinated debt securities will be issued under one or more subordinated indentures that we will enter into with the trustees named in such subordinated indentures. Any senior debt indentures and subordinated debt indentures are referred to individually in this prospectus as the “indenture” and collectively as the “indentures.” The particular terms of a series of debt securities will be described in an prospectus supplement relating to such series of debt securities. Any indentures will be subject to, governed by and qualified under, the Trust Indenture Act of 1939, as amended, and may be supplemented or amended from time to time following their execution. We use the term “debenture trustee” to refer to either a trustee under a senior indenture or a trustee under a subordinated indenture, as applicable. We have filed forms of indentures to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC..

Any indentures will contain the full legal text of the matters described in this section of the prospectus. Because this section is a summary, it does not describe every aspect of the debt securities or any applicable indentures. This summary is therefore subject to and is qualified in its entirety by reference to all the provisions of any applicable indenture, including any definitions of terms used in such indenture. Your rights will be defined by the terms of any applicable indenture, not the summary provided herein. This summary is also subject to and qualified by reference to the description of the particular terms of a particular series of debt securities described in the applicable prospectus supplement or supplements.

The debt securities may be denominated and payable in U.S. dollars. We may also issue debt securities, from time to time, with the principal amount, interest or other amounts payable on any relevant payment date to be determined by reference to one or more currency exchange rates, securities or baskets of securities, commodity prices, indices or any other financial, economic or other measure or instrument, including the occurrence or non-occurrence of any event or circumstance. In addition, we may issue debt securities as part of any units issued by us. All references in this prospectus or any prospectus supplement to other amounts will include premiums, if any, other cash amounts payable under the applicable indenture, and the delivery of securities or baskets of securities under the terms of the debt securities. Debt securities may bear interest at a fixed rate, which may be zero, or a floating rate.

Some of the debt securities may be issued as original issue discount debt securities. Original issue discount securities bear no interest or bear interest at below market rates and will be sold at a discount below their stated principal amount. A prospectus supplement relating to an issue of original issue discount securities will contain information relating to United States federal income tax, accounting, and other special considerations applicable to original issue discount securities.

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

We will generally have no obligation to repurchase, redeem, or change the terms of debt securities upon any event (including a merger, consolidation, change in control or disposition of substantially all of our assets) that might have an adverse effect on our credit quality.

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

General

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

- the title;
- the principal amount being offered, and if a series, the total amount authorized and the total amount outstanding;
- any limit on the amount that may be issued;
- whether or not we will issue the series of debt securities in global form, the terms and who the depositary will be;
- the maturity date;
- the principal amount due at maturity;

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- whether and under what circumstances, if any, we will pay additional amounts on any debt securities held by a person who is not a United States person for tax purposes, and whether we can redeem the debt securities if we have to pay such additional amounts;
- the annual interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;
- whether or not the debt securities will be convertible into shares of common stock, preferred stock or other securities and, if so, the terms of such conversion;
- whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
- the terms of the subordination of any series of subordinated debt;
- the place where payments will be payable;
- restrictions on transfer, sale or other assignment, if any;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- the date, if any, after which, and the price at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;
- the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;
- whether the indenture will restrict our ability and/or the ability of our subsidiaries to:
 - incur additional indebtedness;
 - issue additional securities;
 - create liens;
 - pay dividends and make distributions in respect of our capital stock and the capital stock of our subsidiaries;
 - redeem capital stock;
 - place restrictions on our subsidiaries' ability to pay dividends, make distributions or transfer assets;
 - make investments or other restricted payments;
 - sell or otherwise dispose of assets;
 - enter into sale-leaseback transactions;
 - engage in transactions with stockholders and affiliates;
 - issue or sell stock of our subsidiaries;

- effect a consolidation or merger;
- whether the indenture will require us to maintain any interest coverage, fixed charge, cash flow-based, asset-based or other financial ratios;
- a discussion of any material United States federal income tax considerations applicable to the debt securities;
- information describing any book-entry features;
- provisions for a sinking fund purchase or other analogous fund, if any;
- the applicability of the provisions in the indenture on discharge;
- whether the debt securities are to be offered at a price such that they will be deemed to be offered at an “original issue discount” as defined in paragraph (a) of Section 1273 of the Internal Revenue Code;
- the currency of payment of debt securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars;
- the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof;
- whether we and/or the debenture trustee may change an indenture without the consent of any holders;
- the form of debt security and how it may be exchanged and transferred;
- the governing law of the indentures and debt securities;
- our ability to be discharged from our obligations with respect to one or more series of debt securities;
- the description of the debenture trustee and paying agent, and the method of payments; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, including any additional events of default, acceleration with or without notice, indemnity or covenants provided with respect to the debt securities, rights to institute a proceeding under the indentures and any terms that may be required by us or advisable under applicable laws or regulations.

Conversion or Exchange Rights

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

Consolidation, Merger or Sale

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the indentures will not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of all or substantially all of our assets. However, any successor to or acquirer of such assets must

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

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of common stock, preferred stock and/or debt securities, in one or more series. We may issue warrants independently or together with common stock, preferred stock and/or debt securities, and the warrants may be attached to or separate from these securities. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. The terms of any warrants offered under a prospectus supplement may differ from the terms described below.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant agreement that describes the terms of the particular series of warrants we are offering before the issuance of the related series of units. The following summaries of material provisions of the warrants and the warrant agreements are subject to, and qualified in their entirety by reference to, all the provisions of the warrant agreement and warrant certificate applicable to the particular series of warrants that we may offer under this prospectus. We urge you to read the applicable prospectus supplements related to the particular series of units that it may offer under this prospectus, as well as any related free writing prospectuses, and the complete warrant agreements that contain the terms of the warrants.

General

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

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

- the dates on which the right to exercise the warrants will commence and expire;
- the manner in which the warrant agreements may be modified;
- a discussion of any material or special United States federal income tax consequences of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants; and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including:

- in the case of warrants to purchase debt securities, the right to receive payments of principal of, or premium, if any, or interest on, the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture; or
- in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Exercise of Warrants

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

Holders of the warrants may exercise the warrants by delivering the warrant agreement representing the warrants to be exercised together with specified information, and paying the required amount to us in immediately available funds, as provided in the applicable prospectus supplement.

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

Enforceability of Rights by Holders of Warrants

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

Governing Law

Unless we provide otherwise in the applicable prospectus supplement, the warrant agreements will be governed by and construed in accordance with the laws of the State of Delaware.

DESCRIPTION OF UNITS

We may issue, in one more series, units consisting of common stock, preferred stock, debt securities and/or warrants for the purchase of common stock, preferred stock and/or debt securities in any combination. While the terms we have summarized below will apply generally to any units that we may offer under this prospectus, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement. The terms of any units offered under a prospectus supplement may differ from the terms described below.

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

General

Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

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

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

The provisions described in this section, as well as those described under “Description of Our Capital Stock,” “Description of Debt Securities” and “Description of Warrants” will apply to each unit to the extent comprised of any such security included in each unit, as well as the underlying, relevant securities, respectively.

Issuance in Series

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

Enforceability of Rights by Holders of Units

Each unit agent will act solely as our agent under the applicable unit agreement and will not assume any obligation or relationship of agency or trust with any holder of any unit. A single bank or trust company may act as unit agent for more than one series of units. A unit agent will have no duty or responsibility in case of any default by us under the applicable unit agreement or unit, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a unit may, without the consent of the related unit agent or the holder of any other unit, enforce by appropriate legal action its rights as holder under any security included in the unit.

Title

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

LEGAL OWNERSHIP OF SECURITIES

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

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

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

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

Street Name Holders

We may terminate a global security or issue securities in non-global form. In these cases, investors may choose to hold their securities in their own names or in “street name.” Securities held by an investor in street name would be registered in the name of a bank, broker or other financial institution that the investor chooses, and the investor would hold only a beneficial interest in those securities through an account he or she maintains at that institution.

For securities held in street name, we will recognize only the intermediary banks, brokers and other financial institutions in whose names the securities are registered as the holders of those securities, and will make all payments,

if any, on those securities to them. These institutions pass along the payments they receive to their customers who are the beneficial owners, but only because they agree to do so in their customer agreements or because they are legally required to do so. Investors who hold securities in street name will be indirect holders, not holders, of those securities.

Legal Holders

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

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

Special Considerations For Indirect Holders

If you hold securities through a bank, broker or other financial institution, either in book-entry form or in street name, you should check with your own institution to find out:

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

Global Securities

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

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

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

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

Special Considerations For Global Securities

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

If securities are issued only in the form of a global security, an investor should be aware of the following:

- an investor cannot cause the securities to be registered in his or her name, and cannot obtain non-global certificates for his or her interest in the securities, except in the special situations described below;
- an investor will be an indirect holder and must look to his or her own bank or broker for payments on the securities and protection of his or her legal rights relating to the securities, as described above;
- an investor may not be able to sell interests in the securities to some insurance companies and to other institutions that are required by law to own their securities in non-book-entry form;
- an investor may not be able to pledge his or her interest in a global security in circumstances where certificates representing the securities must be delivered to the lender or other beneficiary of the pledge in order for the pledge to be effective;
- the depositary’s policies, which may change from time to time, will govern payments, transfers, exchanges and other matters relating to an investor’s interest in a global security;
- we and any applicable trustee have no responsibility for any aspect of the depositary’s actions or for its records of ownership interests in a global security, nor do we or any applicable trustee supervise the depositary in any way;
- the depositary may, and we understand that DTC will, require that those who purchase and sell interests in a global security within its book-entry system use immediately available funds, and your broker or bank may require you to do so as well; and
- financial institutions that participate in the depositary’s book-entry system, and through which an investor holds its interest in a global security, may also have their own policies affecting payments, notices and other matters relating to the securities.

There may be more than one financial intermediary in the chain of ownership for an investor. We do not monitor and are not responsible for the actions of any of those intermediaries.

Special Situations When a Global Security Will Be Terminated

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

Unless we provide otherwise in the applicable prospectus supplement, the global security will terminate when the following special situations occur:

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

The prospectus supplement may also list additional situations for terminating a global security that would apply only to the particular series of securities covered by the applicable prospectus supplement. When a global security terminates, the depositary, and not us or any applicable trustee, is responsible for deciding the names of the institutions that will be the initial direct holders.

PLAN OF DISTRIBUTION

Pursuant to General Instruction I.B.6 of Form S-3, we are permitted to utilize the registration statement of which this prospectus forms a part to sell a maximum amount of securities equal to one-third of the aggregate market value of the outstanding voting and non-voting common equity held by our non-affiliates in any 12 month period. We may, from to time, offer the securities registered hereby up to this maximum amount.

We may sell the securities from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods. We may sell the securities to or through underwriters or dealers, with or without an underwriting syndicate, through agents, or directly to one or more purchasers or a combination of these methods. We may distribute securities from time to time in one or more transactions:

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

- at negotiated prices or in competitively bid transactions.

A prospectus supplement or supplements will describe the terms of the offering of the securities, including:

- the name or names of the underwriters, dealers or agents, if any, and the types and amounts of securities underwritten or purchased by each of them;
- the purchase price of the securities and the proceeds we will receive from the sale;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;
- any public offering price;
- any discounts or concessions allowed or reallocated or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

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

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

If we use dealers in the sale of securities, we will sell securities to such dealers as principals. The dealers may then resell the securities to the public at varying prices to be determined by such dealers at the time of resale. We may solicit offers to purchase the securities directly, and we may sell the securities directly to institutional or other investors, who may be deemed underwriters within the meaning of the Securities Act with respect to any resales of those securities. The terms of these sales will be described in the applicable prospectus supplement. If we use agents in the sale of securities, unless otherwise indicated in the prospectus supplement, they will use their reasonable best efforts to solicit purchases for the period of their appointment. Unless otherwise indicated in a prospectus supplement, if we sell directly, no underwriters, dealers or agents would be involved. We will not make an offer of securities in any jurisdiction that does not permit such an offer.

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

We may authorize underwriters, dealers, or agents to solicit offers by certain types of institutional investors or other purchasers to purchase our securities from them at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. The contracts will be subject to those conditions set forth in the prospectus supplement, and the prospectus supplement will set forth any commissions or discounts we pay for solicitation of these contracts.

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

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

In connection with any offering, the underwriters may purchase and sell securities in the open market. Any underwriter may engage in short sales, over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Short sales involve the sale by the underwriters of a greater number of securities than they are required to purchase in an offering. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum price and are made for the purpose of preventing or retarding a decline in the market price of the securities while an offering is in progress. Syndicate-covering or other short-covering transactions involve purchases of the securities, either through exercise of the over-allotment option or in the open market after the distribution is completed, to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. These activities by the underwriters may stabilize, maintain or otherwise affect the market price of the securities. As a result, the price of the securities may be higher than the price that otherwise might exist in the open market. If these activities are commenced, they may be discontinued by the underwriters at any time. These transactions may be effected on an exchange or automated quotation system, if the securities are listed on an exchange or admitted for trading on an automated quotation system, in the over-the-counter market, or otherwise.

Any underwriters that are qualified market makers on the NASDAQ Capital Market may engage in passive market making transactions in our common stock on the NASDAQ Capital Market in accordance with Regulation M under the Exchange Act, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the common stock. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

In compliance with guidelines of the Financial Industry Regulatory Authority, or FINRA, the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of

the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

We may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates in connection with those derivatives then the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of securities. The third party in such sale transactions will be an underwriter and will be identified in the applicable prospectus supplement (or a post-effective amendment).

LEGAL MATTERS

Paul, Hastings, Janofsky & Walker LLP, Los Angeles, California will pass upon the validity of the securities being offered by this prospectus. Any underwriter, dealer or agent may be advised about issues relating to any offering by its own legal counsel. The name of the law firm or law firms advising any underwriters, dealers or agents with respect to certain issues relating to any offering will be set forth in the applicable prospectus supplement.

EXPERTS

Burr, Pilger & Mayer, LLP, independent registered public accounting firm, has audited the consolidated financial statements of Raptor Pharmaceuticals Corp.'s included in Raptor Pharmaceuticals Corp.'s Annual Report on Form 10-K, for the year ended August 31, 2008 as set forth in their report (which contains an explanatory paragraph describing conditions that raise substantial doubt about Raptor Pharmaceuticals Corp.'s ability to continue as a going concern as described in Note 1 to such consolidated financial statements) which is incorporated by reference in this prospectus and elsewhere in the registration statement of Raptor Pharmaceutical Corp. Such consolidated financial statements of Raptor Pharmaceuticals Corp. are incorporated by reference in reliance on Burr, Pilger & Mayer, LLP's reports, given on the authority of such firm as experts in accounting and auditing. Burr, Pilger & Mayer, LLP are the auditors for our fiscal year ended August 31, 2009.

Ernst & Young LLP, independent registered public accounting firm, has audited the consolidated financial statements of TorreyPines Therapeutics, Inc. included in TorreyPines Therapeutics, Inc.'s Annual Report on Form 10-K, for the year ended December 31, 2008 as set forth in their report (which contains an explanatory paragraph describing conditions that raise substantial doubt about TorreyPines Therapeutics, Inc.'s ability to continue as a going concern as described in Note 1 to such consolidated financial statements), which is incorporated by reference in this prospectus and elsewhere in the registration statement of Raptor Pharmaceutical Corp. Such consolidated financial statements of TorreyPines Therapeutics, Inc. are incorporated by reference in reliance on Ernst & Young LLP's reports, given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any reports, statements or other information that we files at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549 on official business days during the hours of 10AM to 3PM. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our SEC filings are also available to the public from commercial document retrieval services and on the website maintained by the SEC at <http://www.sec.gov>. Reports, proxy statements and other information concerning us also may be inspected at the offices of the Financial Industry Regulatory Authority, Inc., Listing Section, 1735 K Street, Washington, D.C. 20006. You may also obtain free copies of the documents that we file with the SEC by going to the Investors and Media section of our website, www.raptorpharma.com. The information provided on our website is not part of this prospectus, and therefore is not

incorporated by reference.

We have filed with the SEC a registration statement on Form S-3 relating to the securities covered by this prospectus. This prospectus is a part of the registration statement and does not contain all the information in the registration statement. Whenever a reference is made in this prospectus to a contract or other document, the reference is only a summary and you should refer to the exhibits that are a part of the registration statement for a copy of the contract or other document. You may review a copy of the registration statement at the SEC's Public Reference Room in Washington, D.C., as well as through the SEC's internet website.

The SEC allows us to "incorporate by reference" the information we file with it, which means that we can disclose important information to you by referring you to another document that we have filed separately with the SEC. You should read the information incorporated by reference because it is an important part of this prospectus. Any information incorporated by reference into this prospectus is considered to be part of this prospectus from the date we file that document. We incorporate by reference the following information or documents that we and our wholly-owned subsidiary, Raptor Pharmaceuticals Corp., have filed with the SEC (Commission File Nos. 000-25571 and 000-50720, respectively) which shall not include, in each case, documents, or information deemed to have been furnished and not filed in accordance with SEC rules:

- Raptor Pharmaceuticals Corp.'s Annual Report of Form 10-K for the fiscal year ended August 31, 2008 and two Forms 10-K/A filed with the SEC on October 30, 2008, December 23, 2008 and April 20, 2009, respectively;
- Raptor Pharmaceuticals Corp.'s Quarterly Report of Form 10-Q for the fiscal quarter ended November 30, 2008 and Form 10-Q/A filed with the SEC on January 13, 2009 and April 20, 2009, respectively;
- Raptor Pharmaceuticals Corp.'s Quarterly Report of Form 10-Q for our fiscal quarter ended February 28, 2009 filed with the SEC on April 13, 2009;
- Raptor Pharmaceuticals Corp.'s Quarterly Report of Form 10-Q for our fiscal quarter ended May 31, 2009 filed with the SEC on July 15, 2009;
- Raptor Pharmaceuticals Corp.'s Current Reports on Form 8-K filed with the SEC on October 6, 2009, August 31, 2009, August 25, 2009, July 31, 2009, July 28, 2009, July 24, 2009, June 23, 2009, June 9, 2009, May 1, 2009, April 14, 2009, January 5, 2009, December 9, 2008, December 1, 2008, November 12, 2008, November 10, 2008, November 6, 2008 and October 21, 2008;
- Our Annual Report on Form 10-K for the year ended December 31, 2008 filed with the SEC on March 27, 2009, as filed by TorreyPines Therapeutics, Inc.;
- Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2009 filed with the SEC on May 1, 2009, as filed by TorreyPines Therapeutics, Inc.;
- Our Quarterly Report on Form 10-Q for the quarter ended June 30, 2009 filed with the SEC on August 11, 2009, as filed by TorreyPines Therapeutics, Inc.;
- Raptor Pharmaceuticals Corp.'s Joint Proxy Statement on Schedule 14A filed with the SEC on June 19, 2009;
- Our Current Report on Form 8-K/A filed with the SEC on October 7, 2009, our Current Reports on Form 8-K filed with the SEC on October 5, 2009, and our Current Reports on Form 8-K filed with the SEC, as filed by TorreyPines Therapeutics, Inc., on July 31, 2009, July 28, 2009, July 22, 2009, June 17, 2009, May 29, 2009, May 1, 2009, April

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24, 2009, April 2, 2009, March 31, 2009, March 27, 2009 and February 9, 2009;

- the description of our common stock, which is registered under Section 12(b) of the Exchange Act, in our registration statement on Form 10-SB filed with the SEC on March 17, 1999, as amended by that registration statement on Form 10-SB/A filed with the SEC on August 19, 1999, each as filed by TorreyPines Therapeutics, Inc., which description has been updated by Raptor Pharmaceuticals Corp.'s Joint Proxy Statement on Schedule 14A filed with the SEC on June 19, 2009 (See section titled, "Description of TorreyPines' Capital Stock"); and
- the description of our preferred share purchase rights, which are registered under Section 12 of the Exchange Act, in our registration statement on Form 8-A filed with the SEC on May 16, 2005, as filed by TorreyPines Therapeutics, Inc., which description has been updated by Raptor Pharmaceuticals Corp.'s Joint Proxy Statement on Schedule 14A filed with the SEC on June 19, 2009 (See section titled, "Description of TorreyPines' Capital Stock").

Any information in any of the foregoing documents will automatically be deemed to be modified or superseded to the extent that information in this prospectus or in a later filed document or other report that is incorporated or deemed to be incorporated herein by reference modifies or replaces such information.

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, until we file a post-effective amendment that indicates the termination of the offering of the securities made by this prospectus. Information in such future filings updates and supplements the information provided in this prospectus. These documents include proxy statements and periodic reports, such as Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, and, to the extent they are considered filed and except as described above, Current Reports on Form 8-K. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits which are specifically incorporated by reference into such documents. If you would like to request documents from us, please send a request in writing or by telephone to us at the following address:

Raptor Pharmaceutical Corp.
9 Commercial Blvd., Suite 200
Novato, CA 94949
(415) 382-1390
Attn: Secretary

Information on Our Website

Information on any Raptor website, any subsection, page, or other subdivision of any Raptor website, or any website linked to by content on any Raptor website, is not part of this prospectus and you should not rely on that information unless that information is also in this prospectus or incorporated by reference in this prospectus.

Trademark Notice

Raptor, our logos and all of our product candidates and trade names are our registered trademarks or our trademarks in the United States and in other select countries. Other third-party logos and product/trade names are registered trademarks or trade names of their respective companies.

PROSPECTUS

\$30,000,000

Common Stock

Preferred Stock

Debt Securities

Warrants

Units

November 5, 2009