Raptor Pharmaceutical Corp
Form 424B3
October 21, 2011

Prospectus Filed Pursuant to Rule 424(b)(3)

Registration No. 333-162374

PROSPECTUS

3,747,558 SHARES OF COMMON STOCK

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 relates to the registered direct offering, or the Direct 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 on June 20, 2010 and ending on December 22, 2014, or 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 on June 20, 2010 and ending on June 22, 2011, or the Series B Warrants.

On December 22, 2009, we issued 3,747,558 units to investors in this offering. The purchase price for each unit purchased in this offering was $2.00. Each unit consisted 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 were not issued or certificated. The shares of our common stock and the Series A Warrants and Series B Warrants comprising the units were issued separately.

We 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 also issued 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 8 of this prospectus for more information regarding these arrangements.

Our common stock is registered under Section 12(g) of the Securities Exchange Act of 1934, as amended, and listed on the NASDAQ Capital Market under the symbol "RPTP." On October 20, 2011, the last reported sale price for our common stock as reported on the NASDAQ Capital Market was $4.96 per share.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. YOU SHOULD REVIEW CAREFULLY THE RISKS AND UNCERTAINTIES DESCRIBED UNDER THE HEADING "RISK FACTORS" ON PAGE 6 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.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is October 21, 2011.

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FORWARD-LOOKING STATEMENTS

In this 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, as amended, 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," "e "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, 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. 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. You should carefully read this entire 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 "Raptor", the Company and "we," "us," "our" or similar terms, refer to Raptor Pharmaceutical Corp. and its wholly-owned subsidiaries on a consolidated basis, unless we state or the context implies otherwise.

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 two other clinical-stage product candidates, one of which we are seeking additional Asian business development partners but are not actively developing, and we have three preclinical product candidates for which we are seeking development partners.

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, or RP103, for the potential treatment of nephropathic cystinosis, or cystinosis, a rare genetic disorder;
and
· RP103 for the potential treatment of Huntington's Disease, or HD, an inherited neurodegenerative disorder.

RP103 is our proprietary delayed-release formulation of cysteamine bitartrate in capsules, which may require less frequent dosing and reduce gastro-intestinal side effects compared to the current standard of care.

· RP104, for the potential treatment of non-alcoholic steatohepatitis, or NASH, a metabolic disorder of the liver; and

RP104 is our proprietary delayed-release formulation of cysteamine bitartrate in tablets.

Other Clinical-Stage Product Candidates

Our other clinical-stage product candidates include:

· 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, a glutamate receptor antagonist as a potential anti-platelet agent.

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. We are seeking development partners for these programs. These preclinical programs include the following:

· Our receptor-associated protein, or RAP, platform consists of: HepTide™ for the potential treatment of primary liver cancer and other liver diseases; 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.

Future Activities

Over the next 12 months, we plan to conduct research and development and general and administrative activities including: pre-commercial preparation for the potential launch of RP103 for the treatment of cystinosis in the United States and Europe; supporting our ongoing extension study of RP103 in cystinosis; supporting the ongoing clinical trial of RP103 in HD; funding a potential collaboration of a clinical trial of RP104 in NASH; funding a potential clinical trial of tezampanel as a potential anti-platelet agent; continued development of our preclinical product candidates; and supporting associated facilities and administrative functions. We plan to seek additional Asian business development partners for our Convivia™ product candidate. We may also develop future in-licensed technologies and acquired technologies.

Recent Developments

On September 13, 2011, we announced the closing of an underwritten public offering of shares of our common stock at a price to the public of $4.00 per share. The shares sold in the offering included 10,000,000 shares of our common stock plus an additional 1,500,000 shares of our common stock pursuant to the exercise by JMP Securities LLC, Canaccord Genuity Inc. and Cowen and Company, LLC, the underwriters for the offering, of the over-allotment option we granted to them. Total gross proceeds to us in the offering (including in connection with the sale of the shares of common stock pursuant to the exercise of the over-allotment option) totaled $46 million, before underwriting discounts and commissions. The offering resulted in net proceeds to us of approximately $42.89 million after deduction of underwriting discounts and other offering expenses payable by us. We expect to use the net proceeds from the offering to fund our commercial and pre-commercial efforts, clinical and preclinical development programs and other general corporate activities.

On July 25, 2011, we announced that our Phase 3 clinical trial of RP103 for the treatment of nephropathic cystinosis, met the sole primary endpoint of non-inferiority compared to Cystagon®, immediate-release cysteamine bitartrate. The comparison was based on white blood cell, or WBC, cystine levels, the established efficacy surrogate biomarker and sole primary endpoint in the clinical trial. There were no unexpected serious safety concerns experienced by patients in the trial attributable to RP103.

Our pivotal Phase 3 clinical trial was designed as an outpatient study of the pharmacodynamics, pharmacokinetics, safety and tolerability of RP103 compared to Cystagon® in cystinosis patients. The clinical trial was conducted at eight clinical research centers in the United States and Europe.

Of 41 patients who completed the Phase 3 protocol, 38 were included in the evaluable data set, 3 not being fully compliant with the protocol due to the fact that their WBC cystine levels went above 2.0 while on Cystagon® during the trial. The age range of study participants was 6-26 years, with 87% of patients below 16 years old. On average, the peak WBC cystine level measured in patients treated with Cystagon® was 0.54 ± 0.05 nmol ½ cystine/mg protein, compared to an average peak value of 0.62 ± 0.05 nmol ½ cystine/mg protein for patients treated with RP103. The mean difference was 0.08 nmol ½ cystine/mg protein, with a 95.8% confidence interval of 0.00-0.16 (one sided p=0.021). As stipulated in our Statistical Analysis Plan, the non-inferiority endpoint of the clinical trial would be achieved when the upper end of the confidence interval around the mean difference of WBC cystine levels did not exceed an absolute value of 0.3. The upper end of the confidence interval in the Phase 3 clinical trial was determined to be 0.16, thus achieving the non-inferiority endpoint.

Additionally, the endpoint was achieved at a lower average daily dose of RP103, compared to Cystagon®. Patients enrolled in the study were required to be “well controlled” under the existing Cystagon® therapy. The starting dose of RP103 for patients in the Phase 3 clinical trial was initially set at 70% of their established dose of Cystagon®. The protocol allowed for a single RP103 dose increase of 25%, based on intermediate WBC cystine level results, to reflect the current standard of care in establishing appropriate dosing of Cystagon® in cystinosis patients. Approximately

one-third of patients remained at 70% of their starting Cystagon® dose throughout the study. The remaining two-thirds of the patients had their RP103 dose increased. On average, the total daily, steady-state dose of RP103 in patients in the Phase 3 clinical trial was 82% of their established, incoming dose of Cystagon®.

In the course of the study, no unexpected safety issues were experienced. Seven serious adverse events, or SAEs, requiring a visit to the emergency room or hospital, were reported for seven individual patients. Of these seven SAEs, six were determined by the principal investigator to be unrelated to either RP103 or Cystagon®. One SAE, gastric intolerance, was graded as "possibly related" to RP103 and was subsequently resolved and the patient returned on RP103 treatment. The most frequently reported non-serious adverse events, or AEs, in the study were gastric intolerance symptoms. Fifty-three AEs were scored as "possibly" or "probably" related to either study drug, and forty-three of fifty-three of the drug related AEs were scored as gastric intolerance symptoms.

We are conducting an ongoing, extension study in which all patients completing the Phase 3 clinical trial may elect to continue on RP103 treatment and are monitored for WBC cystine levels and safety parameters. The extension study will provide at least six months of safety data for each patient and will be part of our New Drug Application filing. Forty out of forty-one patients who completed the Phase 3 clinical trial elected to enroll in the extension study. Thirty-eight of such patients remain in the extension study. Thirty-two patients have been on RP103 in the extension study for at least 6 months. We plan to submit our Phase 3 clinical trial data for publication in the coming months.

In a related clinical trial, we demonstrated bioequivalence between RP103 administered as whole capsules and administered as capsule contents sprinkled onto applesauce. As a significant number of cystinosis patients are too young to take whole capsules, this result may enable us to expand enrollment in the extension study to patients who are too young to swallow whole capsules and were therefore ineligible for the pivotal Phase 3 clinical trial protocol.

With respect to RP103 for the treatment of cystinosis, we expect to file a new drug application with the U.S. Food and Drug Administration, or FDA, and a marketing authorization application with the European Medicines Agency in the first quarter of 2012.

On July 6, 2011, we announced that the United States Patent and Trademark Office, or USPTO, has issued Notices of Allowance for two patents covering our delayed-release oral formulation of cysteamine bitartrate, or DR Cysteamine, as well as other formulations of cystamine and cysteamine as described below.

U.S. Patent Application No.:	11/990,869
Issued Notice of Allowance:	June 27, 2011
Patent Title:	"Enterically Coated Cystamine, Cysteamine and Derivatives Thereof."
Expected to Cover:	Methods of administering DR Cysteamine to patients for any clinical indication, including nephropathic cystinosis, NASH and HD
Expected Initial Term:	20 years plus 239 days of patent term adjustment; expiring September 22, 2027

Patent application 11/990,869 covers the use of any composition of cysteamine or cystamine, regardless of the specific formulation, that provides increased delivery to the small intestine with pharmacokinetic benefits that allow for less than 4 times daily dosing.

U.S. Patent Application No.:	12/745,504
Issued Notice of Allowance:	June 24, 2011
Patent Title:	"Methods of Treating Non-Alcoholic Steatohepatitis (“NASH”) Using Cysteamine Products."
Expected to Cover:	Methods of treating NASH by administeringcysteamine or cystamine
Expected Initial Term:	20 years; expiring November 22, 2028

Patent application 12/745,504 covers the use of cysteamine or cystamine, in any formulation, for the treatment of NASH.

In addition, we anticipate reaching full enrollment for our Phase 2 clinical trial for RP103 in patients with HD in the fourth quarter of 2011 and we anticipate releasing the top-line Phase 2 clinical trial data in the middle of 2013.

With respect to RP104 for the potential treatment of NASH, we expect to submit an investigational new drug application with the FDA by the end of 2011. We also anticipate initiating our Phase 2b clinical trial for RP104 for the potential treatment of NASH in the first half of 2012 and releasing the top-line Phase 2b clinical trial data in the second half of 2013.

Company History

Corporate Structure

We were 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 our corporate name to "TorreyPines Therapeutics, Inc."

On September 29, 2009, we and a wholly-owned subsidiary completed a reverse merger, business combination with Raptor Pharmaceuticals Corp., or RPC, pursuant to which RPC became our wholly-owned subsidiary. Immediately prior to such time, we changed our corporate name to "Raptor Pharmaceutical Corp." After such merger, our common stock began trading on the NASDAQ Capital Market and currently trades under the ticker symbol "RPTP." This merger is referred to herein as the 2009 Merger. Immediately prior to the 2009 Merger and in connection therewith, we effected a 1-for-17 reverse stock split of our common stock.

Our principal executive office is located at 9 Commercial Blvd., Suite 200, Novato, CA 94949. Our phone number is (415) 382-8111.

SECURITIES OFFERED

Securities sold and offered:	3,747,558 shares of our common stock have been issued in the Direct Offering. 1,873,779 Series A Warrants and 1,873,779 Series B Warrants to purchase our common stock have been issued in the Direct Offering. As of September 29, 2011 317,529 shares of our common stock have been issued upon exercise of the Series A Warrants and 1,873,779 shares of our common stock have been issued upon exercise of the Series B Warrants.
Warrant terms	The Series A Warrants and Series B Warrants are exercisable at a price of $2.45 per share and are exercisable commencing on June 20, 2010. The Series A Warrants have a term of five years terminating on December 22, 2014, and the Series B Warrants have a term of eighteen months, which terminated on June 22, 2011.
Use of proceeds:	The net proceeds from the issuance of the units, after deducting the placement agent's fees and our expenses, was approximately $6.9 million, based on a public offering price of $2.00 per share. The net proceeds from the exercise of the Series A Warrants and the Series B Warrants will be approximately $9.2 million, based on an exercise price of $2.45 per share. We expect to use the net proceeds from the exercise of the warrants to fund our commercial and pre-commercial efforts, our clinical and preclinical development programs and other general corporate purposes. See "Use of Proceeds" on page 7.
Risk Factors	See "Risk Factors" beginning on page 6 and other information included in this prospectus for a discussion of factors you should carefully consider before deciding to invest in the shares.
NASDAQ Ticker Symbol:	RPTP

RISK FACTORS

An investment in shares of our common stock involves a high degree of risk. Before you decide to invest in shares of our common stock, you should consider carefully all of the information in this prospectus, including the risks and uncertainties described below, as well as other information included in or incorporated by reference into this prospectus, particularly the specific risk factors discussed in the sections titled "Risk Factors" contained in our filings with the Securities and Exchange Commission, or Commission or SEC, pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, before deciding whether to invest in shares of our common stock. 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, or incorporated by reference, including our consolidated 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.

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.

In December 2009, we entered into a definitive securities purchase agreement or the Direct Offering Purchase Agreement, dated as of December 17, 2009, with 33 investors, collectively, the Direct Offering Investors, whereby, on an aggregate basis, the Direct Offering Investors agreed to purchase 3,747,558 units for a negotiated purchase price of $2.00 per unit for aggregate gross proceeds of approximately $7.5 million. 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. The Series A Warrants are exercisable during the period beginning on June 20, 2010 and ending on December 22, 2014. The Series B Warrants are exercisable during the period beginning on June 20, 2010 and ending on June 20, 2011. The Investor Warrants have a per share exercise price of $2.45. In connection with this offering we paid a placement agent cash compensation equaled to 6.5% of the gross proceeds or $487,183 plus a five-year warrant at an exercise price of $2.50 per share for the purchase of up to 74,951 shares of our common stock, on the same terms as the investor warrants described above.

USE OF PROCEEDS

The net proceeds from this offering, after deducting the placement agent's fees and our expenses, was approximately $6.9 million, based on a public offering price of $2.00 per share. We may receive proceeds of up to approximately $9.2 million to the extent that the Series A Warrants and Series B Warrants issued under the Direct Offering are fully exercised for cash. As of September 29, 2011, 317,529 shares of our common stock have been issued pursuant to exercises of Series A Warrants for aggregate proceeds of approximately $0.8 million and 1,873,779 shares of our common stock have been issued pursuant to exercises of Series B Warrants for aggregate proceeds of approximately $4.6 million. In addition, all of the warrants issued to the placement agent in the Direct Offering have been exercised for approximately $0.2 million. In this regard, we have used 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. We expect to use the net proceeds from any future exercises of Series A Warrants to fund our commercial and pre-commercial efforts, our clinical and preclinical development programs and other general corporate purposes. The amounts and timing of these expenditures will depend on a number of factors, such as the timing and progress of our regulatory and commercial and pre-commercial efforts, our research and development programs, technological advances and the competitive environment for our drug candidates. Pending these uses, we intend to invest the net proceeds in short-term, investment-grade, interest-bearing securities.

DILUTION

If you exercise your Series A Warrants and Series B Warrants from the Direct Offering, your interest will be diluted to the extent of the difference between the exercise price per share you pay and the net tangible book value per share of our common stock immediately after taking into account the warrant exercise. Our net tangible book value, as of May 31, 2011, was $11.6 million, or $0.35 per share of common stock. Net tangible book value per share is calculated by subtracting our total cash liabilities from our total tangible assets, which is total assets less intangible assets of $6.7 million, and dividing this amount by the number of shares of common stock outstanding as of May 31, 2011. Assuming the exercise of all outstanding Series A Warrants and Series B Warrants as of May 31, 2011, to purchase 2,893,750 shares of our common stock at an exercise price of $2.45 per share, our adjusted net tangible book value as of May 31, 2011 would have been approximately $18.7 million, or $0.52 per share of common stock. This would represent an immediate increase in the net tangible book value of $0.17 per share to our existing stockholders and an immediate and substantial dilution in the pro forma net tangible book value of $1.93 per share of common stock to warrant holders that exercise their warrants. The following table illustrates this calculation on a per share basis:

Warrant exercise price		$ 2.45
Net tangible book value per share as of May 31, 2011	$ 0.35	
Increase per share attributable to exercise of warrants	0.17	
As adjusted net tangible book value per share after warrant exercise		0.52
Net dilution per share to warrant holders that exercise warrants		$ 1.93

The information in the table above is provided for illustrative purposes and assumes that all of the warrants in the aggregate amount of 2,893,750 shares for aggregate proceeds of approximately $7.1 million are exercised at an exercise price of $2.45 per share.

The information above and in the foregoing table is based upon 33,127,556 shares of our common stock outstanding as of May 31, 2011. The information above and in the foregoing table excludes:

- 3,589,940 shares of our common stock issuable upon the exercise of options outstanding under our stock option plans at a weighted average exercise price of $6.61 per share;

- 2,121,064 shares of our common stock available for future issuance under our stock option plans;

- With respect to net tangible book value per share as of May 31, 2011 in the table above, 9,425,017 shares of our common stock issuable upon exercise of various outstanding warrants at a weighted average exercise price of $2.89 per share; and

- With respect to as adjusted net tangible book value per share after warrant exercise in the table above, 6,531,267 shares of our common stock issuable upon exercise of various outstanding warrants at a weighted average exercise price of $3.09 per share.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and our capitalization as of May 31, 2011:

- on an actual basis; and
- on an as adjusted basis to give effect to the 2,893,750 shares of common stock issuable (but that have not been issued as of May 31, 2011) upon the exercise of the Series A Warrants and Series B Warrants issued to the Direct Offering Investors as if the warrant exercises had occurred on May 31, 2011.

This table should be read in conjunction with "Use of Proceeds" and our consolidated financial statements and the accompanying notes, which are a part of this prospectus.

	As of May 31, 2011	
	Actual	As Adjusted
Cash, cash equivalents and marketable securities	$ 13,325,695	$ 20,415,383
Long-term debt	$ -	$ -
Stockholders' equity (deficit):		
Common stock, $0.001 par value, 150,000,000 shares authorized, 33,127,556 issued and outstanding, actual; 36,021,306 issued and outstanding, as adjusted	$ 33,128	$ 36,022
Preferred stock, $0.001 par value, 15,000,000 shares authorized, none issued and outstanding, actual and as adjusted	—	—
Additional paid-in capital	59,563,190	77,231,818
Accumulated other comprehensive income	(395)	(395)
Accumulated deficit	(74,166,916)	(73,600,878)
Total stockholders' equity (deficit)	$(14,570,993)	$ 3,666,567

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 May 31, 2011:

· 3,589,940 shares of our common stock issuable upon the exercise of options outstanding under our stock option plans at a weighted average exercise price of $6.62 per share;

· 2,121,064 shares of our common stock available for future issuance under our stock option plans;

· With respect to the "Actual" column, 9,425,017 shares of our common stock issuable upon exercise of various outstanding warrants at a weighted average exercise price of $2.89 per share; and

- With respect to the "As Adjusted" column, 6,531,267 shares of our common stock issuable upon exercise of various outstanding warrants at a weighted average exercise price of $3.09 per share.

The information above does not take into account the proceeds we received pursuant to exercises of certain of our common stock warrants and common stock options from June 1, 2011 to October 13, 2011, cash expenditures from June 1, 2011 to October 13, 2011, the proceeds we received from the underwritten public offering that closed on September 13, 2011, the issuance of our common stock pursuant to the common stock warrant and option exercises from June 1, 2011 to October 13, 2011 and the issuance of our common stock pursuant to the underwritten public offering that closed on September 13, 2011.

PLAN OF DISTRIBUTION

We entered into a placement agent agreement with Ladenburg Thalmann & Co. Inc., or Ladenburg, with respect to the units offered and sold in the Direct Offering. 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 was filed with the SEC on a Current Report on Form 8-K in connection with this offering and which has been incorporated by reference into this prospectus.

Subject to the terms and conditions stated in our placement agent agreement with Ladenburg, Ladenburg 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 the Direct Offering. Ladenburg was the sole placement agent for the Direct Offering. Ladenburg did not purchase or sell any units pursuant to the placement agent agreement, the prospectus supplement or accompanying prospectus filed with the SEC on December 18, 2009, nor did we require that Ladenburg arrange for the purchase or sale of any minimum or specific number or dollar amount of units. Ladenburg had no authority to bind us by virtue of the placement agent agreement. Further, Ladenburg did not guarantee that it would be able to raise new capital in any prospective offering. We entered into a securities purchase agreement directly with the Direct Offering Investors, in connection with this offering and we only sold 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 was filed with the SEC on a Current Report on Form 8-K in connection with this offering and which has been incorporated by reference into this prospectus.

Unless investors instructed us otherwise, we delivered the shares of common stock issued to the investors electronically upon receipt of investor funds for the purchase of units, and we issued the warrants in registered physical form to investors. We delivered the shares of our common stock and the Series A Warrants and Series B Warrants from the Direct Offering on December 22, 2009.

We paid the placement agent a total fee equal to 6.5% of the aggregate cash proceeds we received from the Direct Offering (excluding any proceeds from exercise of the warrants). At closing, we also reimbursed the placement agent for its out-of-pocket accountable expenses actually incurred by it in connection with this offering.

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

Per Unit	$0.13
Total	$0.13

In addition, we issued 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 Series A Warrants and Series B 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 are substantially on the same terms as the warrants offered to investors hereby, except that the compensation warrants have an exercise price equal to $2.50 (which is 125% of the public offering price per share), will expire on November 5, 2014 and will otherwise comply with the rules of the FINRA.

The total fees and expenses paid by us to Ladenburg, excluding discounts and commissions, was approximately $487,000, which includes $26,820 that we agreed to reimburse Ladenburg for the fees, disbursements and other expenses incurred by it.

We agreed to indemnify Ladenburg 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.

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 September 29, 2011, there were 47,069,188 shares of common stock outstanding, 12,719,312 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 of any class or series of the corporation beneficially owned by the interested stockholder; or
· the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

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 "RPTP."

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.

Subject to certain exceptions, 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 WARRANTS

The material terms and provisions of the Series A Warrants and the Series B Warrants sold in the Direct Offering are summarized below. This summary is subject to and qualified in its entirety by the form of warrant, which was filed on a Current Report on Form 8-K.

The Series A Warrants issued 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 issued 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, beginning on June 20, 2010 and, in the case of the Series A Warrants, through and including December 22, 2014, and, in the case of the Series B Warrants, through and including June 22, 2011. Except in certain circumstances noted below, the exercise price must be paid in cash at the time of exercise.

THE TRANSACTION

On December 17, 2009, we entered into a Placement Agent Agreement, or the Placement Agreement, with Ladenburg as placement agent, dated as of December 17, 2009, relating to the issuance and sale to the Direct Offering Investors pursuant to the Direct Offering of up to 3,747,558 units, or the Direct Offering 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), or 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) or, the Series B Warrants.

Ladenburg, acting on a best efforts basis, for the Direct Offering received a placement fee equal to 6.5% of the gross cash proceeds we received from the Direct Offering (excluding any consideration that may be paid in the future upon exercise of the Series A Warrants and Series B Warrants), a warrant to purchase up to an aggregate of 74,951 shares of our common stock at $2.50 per share and $26,820 in out-of-pocket accountable expenses. The warrant issued to Ladenburg has the same terms and conditions as the Series A Warrants and Series B Warrants except that the exercise price is $2.50 per share and the expiration date is November 5, 2014. Ladenburg had no commitment to purchase any of the Direct Offering Units and was acting only as an agent in obtaining indications of interest for the Direct Offering Units from the Direct Offering Investors who purchased the Direct Offering Units directly from us. Ladenburg required us to indemnify it and certain of its affiliates against certain liabilities, including liabilities under the Securities Act, and the Securities Exchange Act of 1934, as amended, or to contribute to payments Ladenburg may be required to make because of any of such liabilities.

In connection with the Direct Offering, following execution of the Placement Agreement, we also entered into a definitive securities purchase agreement, or the Direct Offering Purchase Agreement, dated as of December 17, 2009, with 33 Direct Offering Investors with respect to the Direct Offering, whereby, on an aggregate basis, the Direct Offering Investors agreed to purchase 3,747,558 Direct Offering Units for a negotiated purchase price of $2.00 per Direct Offering Unit. 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. The Series A Warrants are exercisable during the period beginning on June 20, 2010 and ending on December 22, 2014. The Series B Warrants were exercisable during the period beginning on June 20, 2010 and ending on June 22, 2011. The Series A Warrants and Series B Warrants have a per share exercise price of $2.45. As of September 29, 2011, 317,529 shares of our common stock have been issued pursuant to exercises of Series A Warrants for aggregate proceeds of approximately $0.8 million and 1,873,779 shares of our common stock have been issued pursuant to exercises of Series B Warrants for aggregate proceeds of approximately $4.6 million.

The closing of the Direct Offering occurred on December 22, 2009. The aggregate purchase price for the Direct Offering Units was $7,495,116. Net proceeds from the Direct Offering were approximately $6.9 million after deducting placement agent fees and other offering expenses payable by us.

The Direct Offering Units were registered under, and we made the offer and sale of the Direct Offering Units pursuant to, a shelf registration statement on Form S-3 (File No. 333-162374) which was declared effective by the Commission on November 5, 2009 and a prospectus supplement, describing the terms of the Direct Offering, which was delivered to the Direct Offering investors and filed with the Commission on December 18, 2009. Due to the late filing of our Current Report on Form 8-K with respect to the voting results of our 2010 Annual Meeting of Stockholders, under applicable Commission rules, we did not qualify for the use of a registration statement on Form S-3. To assure that the shares of our common stock held by such selling stockholders, including our shares issuable upon the exercise of such warrants, may be sold pursuant to an effective registration statement, we previously filed a Post-Effective Amendment No. 1 to Form S-3 on Form S-1 on November 24, 2010 and a Post-Effective Amendment No. 2 to Form S-3 on Form S-1 on December 1, 2010, which was declared effective on December 1, 2010. On October 11, 2011, we

filed a Post-Effective Amendment No. 1 to Form S-1 on Form S-3 to, among other things, convert such registration statement from a registration statement on Form S-1 to a registration statement on Form S-3 covering the shares registered previously, but not yet sold, and include an updated prospectus relating to the offering and sale of the shares that were registered on such registration statement.

LEGAL MATTERS

Paul Hastings 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.

EXPERTS

Burr, Pilger Mayer, Inc., independent registered public accounting firm, has audited the consolidated financial statements of Raptor Pharmaceutical Corp. included in our Annual Report on Form 10-K, for the year ended August 31, 2010 as set forth in their report (which contains an explanatory paragraph describing conditions that raise substantial doubt about our 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 this registration statement. Such consolidated financial statements of Raptor Pharmaceutical Corp. are incorporated by reference in reliance on Burr Pilger Mayer, Inc.'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. 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 have filed with the SEC (Commission File No. 000-25571), which shall not include, in each case, documents, or information deemed to have been furnished and not filed in accordance with SEC rules:

(a) Our Annual Report on Form 10-K for the fiscal year ended August 31, 2010 filed with the Commission on November 22, 2010;
(b) Our Quarterly Report on Form 10-Q for the quarterly period ended November 30, 2010 filed with the Commission on January 14, 2011;

(c) Our Quarterly Report on Form 10-Q for the quarterly period ended February 28, 2011 filed with the Commission on April 14, 2011;
(d) Our Quarterly Report on Form 10-Q for the quarterly period ended May 31, 2011 filed with the Commission on July 13, 2011;
(e) Our Current Report on Form 8-K filed with the Commission on November 12, 2010;

(f) Our Current Report on Form 8-K filed with the Commission on November 17, 2010;

(g) Our Current Report on Form 8-K filed with the Commission on November 26, 2010;

(h) Our Current Report on Form 8-K filed with the Commission on February 15, 2011;

(i) Our Current Report on Form 8-K filed with the Commission on March 22, 2011;

(j) Our Current Report on Form 8-K filed with the Commission on April 7, 2011;

(k) Our Current Report on Form 8-K filed with the Commission on April 13, 2011;

(l) Our Current Report on Form 8-K filed with the Commission on June 28, 2011;

(m) Our Current Report on Form 8-K filed with the Commission on July 25, 2011;

(n) Our Current Report on Form 8-K filed with the Commission on July 26, 2011;

(o) Our Current Report on Form 8-K filed with the Commission on September 8, 2011;

(p) Our Current Report on Form 8-K filed with the Commission on September 19, 2011;

(q) Our Current Report on Form 8-K filed with the Commission on September 28, 2011;

(r) The description of our Common Stock contained in our Registration Statement on Form 10-SB filed with the SEC on March 17, 1999 (File No. 000-25571), as amended by that certain Registration Statement on Form 10-SB/A filed on August 19, 1999 (File No. 000-25571), which description has been updated by our Joint Proxy Statement on Form S-4 filed on August 19, 2009 (File No. 333-161424), including any other amendment or report filed for the purpose of updating such description; and
(s) The description of the our Series A Participating Preferred Stock contained in our Registration Statement on Form 8-A filed on May 16, 2005 (File No. 000-25571), pursuant to Section 12(b) of the Exchange Act, including any amendment or report filed 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 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 this 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 this 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.

Raptor Pharmaceutical Corp.

PROSPECTUS

3,747,558 SHARES OF COMMON STOCK

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

October 21, 2011