TorreyPines Therapeutics, Inc.
Form S-4
August 19, 2009
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As filed with the Securities and Exchange Commission on August 19, 2009

Registration No. 333-[ ]

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-4

REGISTRATION STATEMENT

Under

The Securities Act of 1933

TORREYPINES THERAPEUTICS, INC.

(Exact name of Registrant as specified in its charter)

Delaware	**2834**	**86-0883978**
(State or other jurisdiction of incorporation or organization)	**(Primary Standard Industrial Classification Code Number)**	**(I.R.S. Employer Identification Number)**

P.O. Box 231386

Encinitas, CA 92023-1386

(858) 623-5665

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

Evelyn Graham

Chief Executive Officer

TorreyPines Therapeutics, Inc.

P.O. Box 231386

Encinitas, CA 92023-1386

Tel: (858) 623-5665

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

Copies to:

L. Kay Chandler, Esq.	**Christopher M. Starr, Ph.D.**	**Siobhan McBreen Burke, Esq.**
Matthew T. Browne, Esq.	**Chief Executive Officer**	**Kevin O Sullivan, Esq.**
Cooley Godward Kronish LLP	**Raptor Pharmaceuticals Corp.**	**Paul, Hastings, Janofsky & Walker LLP**
4401 Eastgate Mall	**9 Commercial Blvd., Suite 200**	**515 South Flower Street, 25th Floor**
San Diego, CA 92121	**Novato, CA 94949**	**Los Angeles, CA 90071**
Tel: (858) 550-6000	**Tel: (415) 382-1427**	**Tel: (213) 683-6000**
Fax: (858) 550-6420	**Fax: (415) 382-1368**	**Fax: (213) 627-0705**

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effectiveness of this registration statement and the satisfaction or waiver of all other conditions under the merger agreement described herein.

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box. ¨

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

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

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

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

If applicable, place an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13e-4(i) (Cross-Border Issuer Tender Offer) ¨

Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer) ¨

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)(2)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee(5)
Common stock, $0.001 par value per share, including related rights to purchase preferred stock	303,982,102	$0.34(3)	$26,229,316(4)	$1,464
Total	303,982,102	$0.34(3)	$26,229,316(4)	$1,464

(1) Pursuant to Rule 416(a) under the Securities Act, this registration statement also registers such additional shares of TorreyPines Therapeutics, Inc. (TorreyPines) common stock as may hereafter be issued or issuable with respect to the shares registered hereby as a result of any stock split, stock dividend, recapitalization or similar event.

(2) Relates to common stock, $0.001 par value per share, of TorreyPines issuable to holders of common stock, $0.001 par value per share of Raptor Pharmaceuticals Corp., a Delaware corporation (Raptor), in the proposed merger of ECP Acquisition, Inc., a Delaware corporation and a wholly-owned subsidiary of TorreyPines, with and into Raptor. The amount of TorreyPines common stock to be registered is based on the maximum number of shares of TorreyPines common stock that may be issued pursuant to the merger, subject to any adjustments pursuant to Rule 416(a) and/or Rule 416(b) under the Securities Act. TorreyPines anticipates that prior to the completion of the distribution of the securities covered by this registration statement, all of TorreyPines common stock, including the securities covered by this registration statement, will be combined by a reverse stock split into a lesser amount of TorreyPines common stock, and the amount of undistributed common stock deemed to be covered by this registration statement shall be proportionately reduced.

(3) Calculated in accordance with Rule 457(c) and (f) of the Securities Act based upon the average of the high and low per share sales price of Raptor common stock as reported on the Over the Counter Bulletin Board on August 12, 2009.

(4) Estimated solely for purposes of calculation of the registration fee in accordance with Rule 457(c) and (f) of the Securities Act based upon the product of (1) $0.34, the average of the high and low per share sales price of Raptor common stock as reported on the Over the Counter Bulletin Board on August 12, 2009 and (2) 69,145,047 plus up to 8,000,000 additional shares that may be issued prior to closing, the estimated maximum number of shares of Raptor common stock outstanding to be exchanged and cancelled pursuant to the proposed merger for the shares of TorreyPines common stock covered by this registration statement.

(5) This fee has been calculated pursuant to Section 6(b) of the Securities Act at a rate equal to $55.80 per $1,000,000 of the proposed maximum aggregate offering price.

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

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The information in this joint proxy statement/prospectus is not complete and may be changed. TorreyPines may not sell its securities pursuant to the proposed transactions until the Registration Statement filed with the Securities and Exchange Commission is effective. This joint proxy statement/prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to completion, dated August 19, 2009

MEETINGS OF STOCKHOLDERS

PROPOSED MERGER

YOUR VOTE IS VERY IMPORTANT

To the Stockholders of TorreyPines Therapeutics, Inc. and Raptor Pharmaceuticals Corp.:

TorreyPines Therapeutics, Inc., which we refer to as TorreyPines, and Raptor Pharmaceuticals Corp., which we refer to as Raptor, have entered into a merger agreement pursuant to which a wholly-owned subsidiary of TorreyPines will merge with and into Raptor, with Raptor continuing as a wholly-owned subsidiary of TorreyPines. TorreyPines and Raptor believe that the merger will result in a biopharmaceutical company that will be better able to achieve the goals of developing new medicines and/or reformulations of existing medicines for new indications in order to address significant unmet or underserved needs of patients.

At the effective time of the merger, each outstanding share of Raptor common stock is expected to convert into the right to receive the number of shares of TorreyPines common stock equal to the 303,982,102 shares of TorreyPines common stock to be issued in the merger divided by 69,145,047 shares of Raptor common stock outstanding as of the signing of the merger agreement plus 350,000 shares of Raptor common stock issuable pursuant to Raptor stock options outstanding as of the signing of the merger agreement plus any additional shares of Raptor common stock and securities exercisable for or exchangeable or convertible into Raptor common stock that may be issued following the execution of the merger agreement and prior to the effective time of the merger, subject to adjustment to account for the effect of a reverse stock split of TorreyPines common stock to be implemented prior to the consummation of the merger as discussed in the accompanying joint proxy statement/prospectus. TorreyPines stockholders will continue to own their existing shares of TorreyPines common stock. TorreyPines will assume outstanding and unexercised options and warrants to purchase Raptor common stock, and such options and warrants are expected to convert into warrants and options, as applicable, to purchase TorreyPines common stock. Immediately after the merger, Raptor stockholders will hold 95% of the outstanding shares of common stock of the combined company, with TorreyPines stockholders holding 5% of the outstanding shares of common stock of the combined company. For a more complete description of the relative holdings of TorreyPines stockholders and Raptor s stockholders with respect to the capital structure of the combined company, please see the sections titled, Matters Being Submitted to a Vote of TorreyPines Stockholders TorreyPines Proposal No. 2: Approval of Amendment to TorreyPines Certificate of Incorporation Effecting the Reverse Stock Split and The Merger Agreement Merger Consideration and Adjustment in this joint proxy statement/prospectus beginning on pages 128 and 109, respectively.

Shares of TorreyPines common stock are currently listed on the NASDAQ Global Market under the symbol TPTX . Shares of Raptor common stock are currently quoted on the Financial Industry Regulatory Authority, or FINRA, Over-the-Counter Bulletin Board, or OTC Bulletin Board, under the symbol RPTP . Prior to the consummation of the merger TorreyPines intends to file an initial listing application with the NASDAQ Capital Market pursuant to the NASDAQ reverse merger rules for the listing of the combined company following the merger. After completion of the merger, TorreyPines will be renamed Raptor Pharmaceutical Corp. and expects to trade on the NASDAQ Capital Market under the symbol RPTP . On [ ], 2009, the last trading day before the date of this joint proxy statement/prospectus, the closing sale price of TorreyPines common stock was $[ ] per share and the closing sale price of Raptor common stock was $[ ] per share.

TorreyPines and Raptor are each holding their respective annual meetings of stockholders in order to obtain the stockholder approvals necessary to complete the merger and related matters. At the TorreyPines annual meeting, which will be held at 10:00 a.m., local time, on [ ], 2009 at the offices of Cooley Godward Kronish LLP at 4401 Eastgate Mall, San Diego, CA 92121, unless postponed or adjourned to a later date, TorreyPines will ask its stockholders to, among other things, approve the issuance of TorreyPines common stock pursuant to the merger agreement, as well as the resulting change in control and approve amendments to TorreyPines certificate of incorporation effecting a reverse stock split of TorreyPines common stock at one of seventeen reverse split ratios, which is referred to as the reverse stock split, and changing the TorreyPines corporate name to Raptor Pharmaceutical Corp. , each as described in the accompanying joint proxy statement/prospectus. Upon the effectiveness of the amendment to TorreyPines certificate of incorporation effecting the

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reverse stock split, referred to as the split effective time, the issued shares of TorreyPines common stock immediately prior to the split effective time will be combined into a smaller number of shares. Depending on the ratio for the reverse stock split, each ten, eleven, twelve, thirteen, fourteen, fifteen, seventeen, twenty, twenty-five, thirty, thirty-five, forty, forty-five, fifty, fifty-five, sixty or seventy shares, of existing TorreyPines common stock held by a TorreyPines stockholder immediately prior to the split effective time will be combined into one new share of TorreyPines common stock. The number of shares of common stock issued and outstanding will therefore be reduced, depending upon the reverse stock split ratio determined by the TorreyPines board of directors and approved by the Raptor board of directors. The amendment to the restated certificate of incorporation that is filed to effect the reverse stock split, if any, will include only the reverse split ratio determined by the boards of directors of TorreyPines and Raptor, respectively, that causes the combined company s stock price to be at least $4.00 per share and which is determined to be in the best interests of the stockholders of TorreyPines and Raptor, respectively, and all of the other proposed amendments at different ratios will be abandoned. The exact split ratio will be publicly announced by TorreyPines.

At the Raptor annual meeting, which will be held at 10:00 a.m., local time, on [ ], 2009 at Raptor s corporate offices at 9 Commercial Blvd., Suite 200, Novato, CA 94949, unless postponed or adjourned to a later date, Raptor will ask its stockholders to, among other things, adopt the merger agreement, as described in the accompanying joint proxy statement/prospectus.

Concurrently with and as a condition to the execution of the merger agreement, and as described in the accompanying joint proxy statement/prospectus, certain TorreyPines directors and officers who in the aggregate own approximately 1% of the outstanding shares of TorreyPines common stock, and certain Raptor directors and officers who in the aggregate own approximately 11% of Raptor common stock, entered into voting agreements whereby they agreed to vote in favor of the TorreyPines proposals and Raptor proposals, respectively, subject to the terms of the voting agreements.

After careful consideration, the TorreyPines and Raptor boards of directors have each unanimously approved the merger agreement and the respective proposals referred to above, and each of the TorreyPines and Raptor boards of directors has determined that it is advisable to enter into the merger. Each of the boards of directors of TorreyPines and Raptor recommends that its respective stockholders vote FOR the respective proposals described in the accompanying joint proxy statement/prospectus.

More information about TorreyPines, Raptor and the proposed transaction is contained in the accompanying joint proxy statement/prospectus. **TorreyPines and Raptor urge you to read the accompanying joint proxy statement/prospectus carefully and in its entirety. IN PARTICULAR, YOU SHOULD CAREFULLY CONSIDER THE MATTERS DISCUSSED UNDER *RISK FACTORS* BEGINNING ON PAGE 28.**

TorreyPines and Raptor are very excited about the opportunities the merger brings to both TorreyPines and Raptor stockholders, and we thank you for your consideration and continued support.

Chief Executive Officer
TORREYPINES THERAPEUTICS, INC.

Chief Executive Officer and Director
RAPTOR PHARMACEUTICALS CORP.

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 the joint proxy statement/prospectus. Any representation to the contrary is a criminal offense.

The accompanying joint proxy statement/prospectus is dated [ ], 2009, and is first being mailed to TorreyPines and Raptor stockholders, respectively, on or about [ ], 2009.

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TORREYPINES THERAPEUTICS, INC.

P.O. Box 231386

Encinitas, CA 92023-1386 (858) 623-5665

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

TO BE HELD ON [ ], 2009

Dear Stockholders of TorreyPines:

On behalf of the board of directors of TorreyPines Therapeutics, Inc., a Delaware corporation, we are pleased to deliver the accompanying joint proxy statement/prospectus for the proposed merger between TorreyPines and Raptor Pharmaceuticals Corp., a Delaware corporation, pursuant to which ECP Acquisition, Inc., a wholly-owned subsidiary of TorreyPines, will merge with and into Raptor, which will survive as a wholly-owned subsidiary of TorreyPines. The annual meeting of stockholders of TorreyPines will be held on [ ], 2009 at 10:00 a.m., local time, at the offices of Cooley Godward Kronish LLP at 4401 Eastgate Mall, San Diego, CA 92121, for the following purposes:

1. To consider and vote upon a proposal to approve the issuance of TorreyPines common stock and the resulting change in control of TorreyPines pursuant to that certain Agreement and Plan of Merger and Reorganization, dated as of July 27, 2009, by and among TorreyPines, ECP Acquisition, Inc. and Raptor, a copy of which is attached as *Annex A* to the accompanying joint proxy statement/prospectus.

2. To approve an amendment to TorreyPines certificate of incorporation effecting the reverse stock split at one of seventeen reverse split ratios: 1-for-10, 1-for-11, 1-for-12, 1-for-13, 1-for-14, 1-for-15, 1-for-17, 1-for-20, 1-for-25, 1-for-30, 1-for-35, 1-for-40, 1-for-45, 1-for-50, 1-for-55, 1-for-60 or 1-for-70, as described in the accompanying joint proxy statement/prospectus.

3. To approve an amendment to TorreyPines certificate of incorporation to change the corporate name of TorreyPines from TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp.

4. To elect the four directors nominated by the TorreyPines board of directors and named herein; provided, however, that if the merger is consummated, it is anticipated that the TorreyPines board of directors will consist of the four people identified in the accompanying joint proxy statement/prospectus.

5. To consider and vote upon an adjournment of the TorreyPines annual meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of TorreyPines Proposal Nos. 1, 2 and 3.

6. To transact such other business as may properly come before the TorreyPines annual meeting or any adjournment or postponement thereof.

The board of directors of TorreyPines has fixed [ ], 2009 as the record date for the determination of stockholders entitled to notice of, and to vote at, the TorreyPines annual meeting and any adjournment or postponement thereof. Only holders of record of shares of TorreyPines common stock at the close of business on the record date are entitled to notice of, and to vote at, the TorreyPines annual meeting. At the close of business on the record date, TorreyPines had [ ] shares of common stock outstanding and entitled to vote.

Your vote is important. The affirmative vote of the holders of a majority of the shares of TorreyPines common stock having voting power present in person or represented by proxy at the TorreyPines annual meeting is required for approval of TorreyPines Proposal Nos. 1 and 5. The affirmative vote of the holders of a majority of the shares of TorreyPines common stock having voting power outstanding on the record date for the TorreyPines annual meeting is required for approval of TorreyPines Proposal Nos. 2 and 3. For the election of directors (Proposal No. 4), the four nominees receiving the most FOR votes from the shares of TorreyPines common stock having voting power present in person or represented by proxy at the TorreyPines annual meeting will be elected.

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The accompanying joint proxy statement/prospectus describes the proposed merger and the actions to be taken in connection with the merger and provides additional information about the parties involved. Please give this information your careful attention.

Even if you plan to attend the TorreyPines annual meeting in person, TorreyPines requests that you sign and return the enclosed proxy to ensure that your shares will be represented at the TorreyPines annual meeting if you are unable to attend. If you sign, date and mail your proxy card without indicating how you wish to vote, your proxy will be counted as a vote in favor of TorreyPines Proposal Nos. 1 through 5. If you fail to return your proxy card and do not attend the TorreyPines annual meeting in person, the effect will be that your shares will not be counted for purposes of determining whether a quorum is present at the TorreyPines annual meeting and will count as a vote against TorreyPines Proposal Nos. 2 and 3. If you do attend the TorreyPines annual meeting and wish to vote in person, you may withdraw your proxy and vote in person. You may revoke the proxy at any time prior to the TorreyPines annual meeting in the manner described in the accompanying joint proxy statement/prospectus. Any stockholder present at the TorreyPines annual meeting, including any adjournment or postponement of the meeting, may revoke such stockholder s proxy and vote personally on the matters to be considered at the TorreyPines annual meeting.

Please do not send any TorreyPines stock certificates at this time. If TorreyPines Proposal Nos. 2 and 3 are approved and effected, you will receive written instructions for exchanging your stock certificates.

By Order of TorreyPines Board of Directors,

Chief Executive Officer and Director

Encinitas, California

[ ], 2009

THE TORREYPINES BOARD OF DIRECTORS HAS DETERMINED AND BELIEVES THAT EACH OF THE PROPOSALS OUTLINED ABOVE IS ADVISABLE TO, AND IN THE BEST INTERESTS OF, TORREYPINES AND ITS STOCKHOLDERS AND HAS APPROVED EACH SUCH PROPOSAL. THE TORREYPINES BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT TORREYPINES STOCKHOLDERS VOTE FOR EACH SUCH PROPOSAL AND FOR EACH OF THE NOMINEES FOR ELECTION OF DIRECTORS IN PROPOSAL NO. 4.

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RAPTOR PHARMACEUTICALS CORP.

9 Commercial Blvd.

Suite 200

Novato, CA 94949

(415) 382-8111

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

TO BE HELD ON [ ], 2009

Dear Stockholders of Raptor Pharmaceuticals Corp.:

On behalf of the board of directors of Raptor Pharmaceuticals Corp., a Delaware corporation, we are pleased to deliver the accompanying joint proxy statement/prospectus for the proposed merger between Raptor and TorreyPines Therapeutics, Inc., a Delaware corporation, pursuant to which ECP Acquisition, Inc., a wholly-owned subsidiary of TorreyPines, will merge with and into Raptor, which will survive as a wholly-owned subsidiary of TorreyPines. The annual meeting of stockholders of Raptor will be held at 10:00 a.m., local time, on [ ], 2009 at its corporate offices at 9 Commercial Blvd., Suite 200, Novato, CA 94949, for the following purposes:

1. To consider and vote upon a proposal to adopt that certain Agreement and Plan of Merger and Reorganization, dated as of July 27, 2009, by and among TorreyPines, ECP Acquisition, Inc. and Raptor, a copy of which is attached as *Annex A* to the accompanying joint proxy statement/prospectus.

2. To elect four directors to serve until the next annual meeting of Raptor stockholders or until their respective successors are duly elected and qualified.

3. To ratify the appointment by the audit committee of Raptor s board of directors of Burr, Pilger & Mayer, LLP as Raptor s independent registered public accounting firm for the fiscal year ending August 31, 2009.

4. To consider and vote upon an adjournment of the Raptor annual meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of the adoption of the merger agreement.

5. To transact such other business as may properly come before the Raptor annual meeting or any adjournment or postponement thereof.

The board of directors of Raptor has fixed [ ], 2009 as the record date for the determination of stockholders entitled to notice of, and to vote at, the Raptor annual meeting and any adjournment or postponement thereof. Only holders of record of shares of Raptor common stock at the close of business on the record date are entitled to notice of, and to vote at, the Raptor annual meeting. At the close of business on the record date, Raptor had [ ] shares of common stock outstanding and entitled to vote.

Your vote is important. The affirmative vote of the holders of a majority of the shares of Raptor common stock outstanding on the record date and entitled to vote at the Raptor annual meeting is required for approval of Raptor Proposal No. 1. The affirmative vote of the holders of a majority of the shares of Raptor common stock having voting power present in person or represented by proxy at the Raptor annual meeting is required for approval of Raptor Proposal Nos. 3 and 4. For the election of directors (Proposal No. 2), the affirmative vote of a plurality of the voting power of the shares present in person or represented by proxy at the Raptor annual meeting is required.

Under the Delaware General Corporation Law, referred to as the DGCL, holders of Raptor common stock who do not vote in favor of the adoption of the merger agreement will have the ability to seek appraisal of the fair value of their shares as determined by the Delaware Court of Chancery if the merger is completed, but only if they submit a written demand for an appraisal prior to the vote on the adoption of the merger agreement and they comply with the other procedures under the DGCL explained in the joint proxy statement/prospectus. For more information, please see the section titled, The Merger Appraisal Rights in the accompanying joint proxy statement/prospectus.

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The accompanying joint proxy statement/prospectus describes the proposed merger and the actions to be taken in connection with the merger and provides additional information about the parties involved. Please give this information your careful attention.

Even if you plan to attend the Raptor annual meeting in person, Raptor requests that you sign and return the enclosed proxy to ensure that your shares will be represented at the Raptor annual meeting if you are unable to attend. If you sign, date and mail your proxy card without indicating how you wish to vote, your proxy will be counted as a vote in favor of Raptor Proposal Nos. 1 through 4. If you fail to return your proxy card and do not attend the Raptor annual meeting in person, the effect will be that your shares will not be counted for purposes of determining whether a quorum is present at the Raptor annual meeting and will count as a vote against Raptor Proposal No. 1. If you do attend the Raptor annual meeting and wish to vote in person, you may withdraw your proxy and vote in person. You may revoke the proxy at any time prior to the Raptor annual meeting in the manner described in the accompanying joint proxy statement/prospectus. Any stockholder present at the Raptor annual meeting, including any adjournment or postponement of the meeting, may revoke such stockholder s proxy and vote personally on the matters to be considered at the Raptor annual meeting.

Please do not send any Raptor stock certificates at this time. After the merger is completed, you will receive written instructions for exchanging your stock certificates.

By Order of Raptor s Board of Directors,

Chief Executive Officer and Director

Novato, California

[ ], 2009

THE RAPTOR BOARD OF DIRECTORS HAS DETERMINED AND BELIEVES THAT EACH OF THE PROPOSALS OUTLINED ABOVE IS ADVISABLE TO, AND IN THE BEST INTERESTS OF, RAPTOR AND ITS STOCKHOLDERS AND HAS APPROVED EACH SUCH PROPOSAL. THE RAPTOR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT RAPTOR STOCKHOLDERS VOTE FOR EACH SUCH PROPOSAL AND FOR EACH OF THE NOMINEES FOR ELECTION OF DIRECTORS IN PROPOSAL 2.

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ADDITIONAL INFORMATION

This proxy statement/prospectus incorporates important business and financial information about TorreyPines and Raptor that is not included in or delivered with this proxy statement/prospectus. This information is available without charge to security holders upon written or oral request delivered to the following address and/or phone number: Attn: Investor Relations, TorreyPines Therapeutics, Inc., P.O. Box 231386, Encinitas, CA 92023-1386, telephone number (858) 623-5665. In order to obtain timely delivery, security holders must request the information no later than five business days before the date that security holders must make their investment decision. See the section titled, Where You Can Find More Information on page 273 of this joint proxy statement/prospectus.

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QUESTIONS AND ANSWERS ABOUT THE MERGER

Except where specifically noted, the following information and all other information contained in this joint proxy statement/prospectus does not give effect to the reverse stock split described in TorreyPines Proposal No. 2.

The following section provides answers to frequently asked questions about the merger. This section, however, provides only summary information. For a more complete response to these questions and for additional information, please refer to the cross-referenced sections.

Q: What is the merger?

A: TorreyPines, ECP Acquisition, Inc., a Delaware corporation and a wholly-owned subsidiary of TorreyPines, which is referred to as the merger sub, and Raptor have entered into an Agreement and Plan of Merger and Reorganization, dated as of July 27, 2009, which is referred to as the merger agreement. The merger agreement contains the terms and conditions of the proposed business combination of TorreyPines and Raptor. Under the merger agreement, merger sub will merge with and into Raptor, with Raptor continuing as a wholly-owned subsidiary of TorreyPines, which transaction is referred to as the merger. At the effective time of the merger, each outstanding share of Raptor common stock is expected to convert into the right to receive the number of shares of TorreyPines common stock equal to the 303,982,102 shares of TorreyPines common stock to be issued in the merger divided by 69,145,047 shares of Raptor common stock outstanding as of the signing of the merger agreement plus 350,000 shares of Raptor common stock issuable pursuant to Raptor stock options outstanding as of the signing of the merger agreement plus any additional shares of Raptor common stock and securities exercisable for or exchangeable or convertible into Raptor common stock that may be issued following the execution of the merger agreement and prior to the effective time of the merger, subject to adjustment to account for the effect of a reverse stock split of TorreyPines common stock to be implemented immediately prior to the consummation of the merger, which is referred to as the reverse stock split.

Q: Why are the two companies proposing to merge?

A: TorreyPines and Raptor believe that the merger will create a strong, more diversified biopharmaceutical company. The combined company will have a seasoned management team, six clinical programs either in, or ready to begin, Phase II or Phase III clinical trials as well as three preclinical programs based upon a proprietary drug-targeting platform, one of which is partnered with a large pharmaceutical company. TorreyPines and Raptor believe that as a combined company, they will be better able to achieve the goals of developing new medicines to address significant unmet or underserved needs of patients. TorreyPines and Raptor also believe that the combined company provides the opportunity to reorganize both TorreyPines and Raptor s capital structure and that the contemplated listing on the NASDAQ Capital Market may provide the combined company with access to a more liquid market for the combined company s common stock.

Q: On what market are the combined company s shares expected to trade?

A: It is a condition to the closing of the merger that TorreyPines file an initial listing application with the NASDAQ Capital Market pursuant to The NASDAQ Stock Market LLC reverse merger rules and receive conditional approval for the trading of the combined company s common stock on the NASDAQ Capital Market. If such application is accepted, TorreyPines anticipates that the combined company s common stock will be listed on the NASDAQ Capital Market following the closing of the merger under the trading symbol RPTP .

Q: Why am I receiving this joint proxy statement/prospectus?

A: You are receiving this joint proxy statement/prospectus because you have been identified as a stockholder of either TorreyPines or Raptor as of the applicable record date, and you are entitled to vote at such company s

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annual stockholders meeting. This document serves as both a joint proxy statement of TorreyPines and Raptor used to solicit proxies for the respective annual stockholders meetings, and as a prospectus of TorreyPines used to offer shares of TorreyPines common stock in exchange for shares of Raptor common stock in the merger. This joint proxy statement/prospectus contains important information about the merger and respective annual stockholders meetings of TorreyPines and Raptor, and you should read it carefully.

Q: What is required to consummate the merger?

A: To consummate the merger, TorreyPines stockholders must approve:

- the issuance of shares of TorreyPines common stock in the merger and the resulting change of control of TorreyPines, which requires the affirmative vote of the holders of a majority of the shares of TorreyPines common stock having voting power present in person or represented by proxy at the TorreyPines annual meeting; and

- the amendment to TorreyPines certificate of incorporation to effect the reverse stock split of the issued and outstanding shares of TorreyPines common stock and the change of the TorreyPines corporate name to Raptor Pharmaceutical Corp. , which requires the affirmative vote of the holders of a majority of the shares of TorreyPines common stock having voting power outstanding on the record date for the TorreyPines annual meeting.

To consummate the merger, Raptor stockholders must adopt the merger agreement, which requires the affirmative vote of the holders of a majority of the shares of Raptor common stock outstanding on the record date and entitled to vote at the Raptor annual meeting.

In addition to obtaining TorreyPines and Raptor s stockholder approval, each of the other closing conditions set forth in the merger agreement must be satisfied or waived. For a more complete description of the closing conditions under the merger agreement, please see the section titled, The Merger Agreement Conditions to Completion of the Merger beginning on page 112 of this joint proxy statement/prospectus.

Q: What risks should I consider in deciding whether to vote in favor of or consent to the proposals?

A: You should carefully review the section of this joint proxy statement/prospectus titled, Risk Factors beginning on page 28 of this joint proxy statement/prospectus, which sets forth certain risks and uncertainties related to the merger, risks and uncertainties to which the combined company s business will be subject and risks and uncertainties to which each of TorreyPines and Raptor, as an independent company, is subject.

Q: When do the parties expect to complete the merger?

A: The parties are working towards completing the merger as quickly as possible. TorreyPines and Raptor anticipate that the merger will occur in the fourth quarter of 2009, promptly after the later to occur of the conclusion of the TorreyPines annual meeting and the Raptor annual meeting. However, because completion of the merger is subject to various closing conditions, TorreyPines and Raptor cannot predict the exact timing of the merger or whether the merger will occur at all. For more information, please see the section titled, The Merger Agreement Conditions to the Completion of the Merger on page 112 of this joint proxy statement/prospectus.

Q: What will happen to any options or warrants to acquire Raptor common stock in the merger?

A:

As a result of the merger, Raptor warrant holders and option holders will have their Raptor warrants and options converted into warrants and options to purchase TorreyPines common stock, as applicable, with the number of shares and exercise price being appropriately adjusted to reflect the exchange ratio between TorreyPines common stock and Raptor common stock determined in accordance with the merger agreement

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and further subject to adjustment to account for the reverse stock split as described in further detail in this joint proxy statement/prospectus. For a more complete description of what Raptor warrant holders and option holders will receive in the merger, please see the section titled, The Merger Agreement Merger Consideration and Adjustment in this joint proxy statement/prospectus beginning on page 109.

Q: Who will be the directors of the combined company following the merger?

A: Immediately following the merger, the board of directors of the combined company is expected to be composed solely of the members of the Raptor board of directors prior to the merger: (i) Christopher M. Starr, Ph.D., (ii) Raymond W. Anderson, (iii) Erich Sager and (iv) Richard L. Franklin, M.D., Ph.D.

Q: Who will be the executive officers of the combined company immediately following the merger?

A: Immediately following the merger, the executive management team of the combined company is expected to be composed solely of the members of the Raptor executive management team prior to the merger:

Name	Title
Christopher M. Starr, Ph.D.	Chief Executive Officer
Todd C. Zankel, Ph.D.	Chief Scientific Officer
Kim R. Tsuchimoto	Chief Financial Officer, Treasurer and Secretary

Q: What is the reverse stock split and why is it necessary?

A: Immediately prior to the effective time of the merger, the outstanding shares of TorreyPines common stock will be combined into a lesser number of shares to be determined by TorreyPines and Raptor s respective boards of directors prior to the effective time and publicly announced by TorreyPines and Raptor. The merger constitutes a reverse merger under applicable marketplace rules established by NASDAQ Stock Market, LLC, which requires the combined company to comply with the initial listing standards of the applicable NASDAQ market to continue to be listed on such market following the merger. The NASDAQ Capital Market s initial listing standards require a company to have, among other things, a $4.00 per share minimum bid price. Because it is a condition precedent to the merger that TorreyPines common stock be listed on the NASDAQ Capital Market, and the current price of TorreyPines common stock is less than the minimum bid price required by such market, unless the condition is waived, the reverse stock split is necessary to consummate the merger.

Q: What are the United States federal income tax consequences of the merger?

A: Each of TorreyPines and Raptor expects the merger to qualify as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended, or the Code, and it is a closing condition to the merger that TorreyPines and Raptor each receive opinions of their respective counsel regarding such qualification. Assuming the merger qualifies as a reorganization, then, in general, no Raptor stockholder will recognize gain or loss upon the exchange of Raptor common stock for TorreyPines common stock pursuant to the merger, except to the extent of cash received in lieu of a fractional share of TorreyPines common stock as described below; and each Raptor stockholder will recognize gain or loss to the extent any cash received in lieu of a fractional share of TorreyPines common stock exceeds or is less than, respectively, the basis of such fractional share. No gain or loss will be recognized by TorreyPines stockholders (who are not also Raptor stockholders) as a result of the merger.

Tax matters are very complicated, and the tax consequences of the merger to a particular TorreyPines or Raptor stockholder will depend in part on such stockholder s circumstances. Accordingly, you should consult your tax advisor for a full understanding of the tax consequences of the merger to you, including the applicability and effect of federal, state, local and foreign income and other tax laws. For more information, please

see the section titled, The Merger Material United States Federal Income Tax Consequences of the Merger in this joint proxy statement/prospectus beginning on page 102.

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Q: What will happen to TorreyPines if, for any reason, the merger with Raptor does not close?

A: If, for any reason, the merger with Raptor does not close, the TorreyPines board of directors may elect to, among other things, attempt to sell or otherwise dispose of TorreyPines licensed assets, attempt to complete another strategic transaction like the merger or continue to operate TorreyPines business. However, given TorreyPines limited cash reserves it is unlikely TorreyPines would be able to complete any of these transactions in a timely fashion and TorreyPines may be forced to file for bankruptcy, cease operations or liquidate and dissolve.

Q: Who is paying for this proxy solicitation?

A: TorreyPines and Raptor will pay the cost of soliciting their respective proxies. Raptor has agreed to pay all fees and expenses, other than fees and expenses of attorneys, accountants and financial advisors, incurred in connection with the filing with the U.S. Securities and Exchange Commission, or SEC, printing and mailing of this joint proxy statement/prospectus (and the registration statement of which it is a part) and any amendments or supplements thereto. Arrangements will be made with brokerage firms and other custodians, nominees and fiduciaries who are record holders of TorreyPines and Raptor common stock for the forwarding of solicitation materials to the beneficial owners of TorreyPines and Raptor common stock. TorreyPines and Raptor will pay the cost of reimbursing their respective, applicable brokers, custodians, nominees and fiduciaries for the reasonable out-of-pocket expenses they incur in connection with the forwarding of solicitation materials.

FOR TORREYPINES STOCKHOLDERS:

Q: Who is soliciting my proxy?

A: The proxy is being solicited of TorreyPines stockholders by TorreyPines board of directors.

Q: On what matters am I being asked to vote?

A: TorreyPines stockholders are being asked to:

consider and vote upon a proposal to approve the issuance of TorreyPines common stock and the resulting change in control of TorreyPines pursuant to the merger agreement;

consider and vote upon a proposal to approve an amendment to TorreyPines certificate of incorporation effecting the reverse stock split at one of seventeen reverse split ratios: 1-for-10, 1-for-11, 1-for-12, 1-for-13, 1-for-14, 1-for-15, 1-for-17, 1-for-20, 1-for-25, 1-for-30, 1-for-35, 1-for-40, 1-for-45, 1-for-50, 1-for-55, 1-for-60 or 1-for-70;

consider and vote upon a proposal to approve an amendment to TorreyPines certificate of incorporation to change the corporate name of TorreyPines from TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp. ;

consider and vote upon a proposal to elect the four directors nominated by the TorreyPines board of directors; and

consider and vote upon a proposal to adjourn the TorreyPines annual meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of the adoption of the TorreyPines Proposal Nos. 1, 2 and 3.

Q: As a TorreyPines stockholder, how does TorreyPines Board of Directors recommend that I vote?

A: After careful consideration, TorreyPines board of directors recommends that TorreyPines stockholders vote:

FOR Proposal No. 1 to approve the issuance of shares of TorreyPines common stock in the merger, and the resulting change of control of TorreyPines;

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FOR Proposal No. 2 to approve the amendment to TorreyPines certificate of incorporation to effect a reverse stock split of the issued and outstanding shares of TorreyPines common stock;

FOR Proposal No. 3 to approve the amendment to TorreyPines certificate of incorporation to change the corporate name of TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp. ;

FOR Proposal No. 4 to elect the four directors nominated by the TorreyPines board of directors; and

FOR Proposal No. 5 to consider and vote upon an adjournment of the annual meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of the adoption of TorreyPines Proposal Nos. 1, 2 and 3.

To review the background of the merger and TorreyPines board of directors reasons for recommending the merger in greater detail, see the sections titled, The Merger Background of the Merger and The Merger Reasons for the Merger beginning on pages 83 and 88, respectively, of this joint proxy statement/prospectus.

Q: Am I entitled to appraisal rights?

A: Under Delaware General Corporation Law, or the DGCL, holders of TorreyPines common stock are not entitled to appraisal rights in connection with the merger or the proposals described in this joint proxy statement/prospectus.

Q: Will the TorreyPines stockholder rights plan be triggered as a result of the merger?

A: No. TorreyPines board of directors adopted an amendment to the TorreyPines stockholder rights plan that excludes the signing of the merger agreement, the merger and the other transactions contemplated with Raptor from triggering the TorreyPines stockholder rights plan.

Q: What do I need to do now?

A: TorreyPines and Raptor urge you to read this joint proxy statement/prospectus carefully, including its annexes, and to consider how the merger affects you.

If you are a TorreyPines stockholder, you may provide your proxy instructions in one of three different ways. First, you can mail your signed proxy card in the enclosed return envelope. Alternatively, you can provide your proxy instructions via touch-tone telephone by dialing the toll-free telephone number on your proxy card or voting instruction form. You may also provide your proxy instructions via the Internet by following the instructions on your proxy card or voting instruction form. If your proxy card allows for Internet voting and you have Internet access, TorreyPines encourages you to record your vote on the Internet. It is convenient, and it saves TorreyPines significant postage and processing costs. In addition, when voting via the Internet or by telephone prior to the meeting date, your vote is recorded immediately, and there is no risk that postal delays will cause your vote to arrive late and therefore not be counted. Please provide your proxy instructions only once and as soon as possible so that your shares can be voted at the annual meeting of stockholders of TorreyPines.

Q: What happens if I return a signed and dated proxy card but do not indicate how to vote my proxy?

A: If you do not include instructions on how to vote your properly signed and dated proxy, your shares will be voted **FOR** approval of the issuance of shares of TorreyPines common stock in the merger and the resulting change of control of TorreyPines; **FOR** election of the four directors nominated by the TorreyPines board of directors; and **FOR** approval of the adjournment of the TorreyPines annual meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of the adoption of TorreyPines Proposal Nos. 1, 2 and 3.

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Q: What happens if I do not return a proxy card or otherwise provide proxy instructions?

A: If you are a TorreyPines stockholder, the failure to return your proxy card or otherwise provide proxy instructions will have the same effect as voting against TorreyPines Proposal Nos. 2 and 3 and your shares will not be counted for purposes of determining whether a quorum is present at the TorreyPines annual meeting.

Q: May I vote in person?

A: If you are a stockholder of TorreyPines and your shares of TorreyPines common stock are registered directly in your name with TorreyPines transfer agent, you are considered to be the stockholder of record with respect to those shares, and the proxy materials and proxy card are being sent directly to you by TorreyPines. If you are a TorreyPines stockholder of record, you may attend the annual meeting of TorreyPines stockholders to be held on [ ], 2009 and vote your shares in person. **Even if you plan to attend the TorreyPines annual meeting in person, TorreyPines requests that you sign and return the enclosed proxy to ensure that your shares will be represented at the TorreyPines annual meeting if you are unable to attend.**

Q: If my TorreyPines shares are held in street name by my broker, will my broker vote my shares for me?

A: If your shares of TorreyPines common stock are held in a brokerage account or by another nominee, you are considered the beneficial owner of shares held in street name, and the proxy materials are being forwarded to you together with a voting instruction card. As the beneficial owner, you are also invited to attend the annual meeting of TorreyPines stockholders. Because a beneficial owner is not the stockholder of record, you may not vote these shares in person at the TorreyPines annual meeting unless you obtain a proxy from the broker, trustee or nominee that holds your shares, giving you the right to vote the shares at the meeting. Additionally, unless your broker has discretionary authority to vote on certain matters, your broker will not be able to vote your shares of TorreyPines common stock without instructions from you. To make sure that your vote is counted, you should instruct your broker to vote your shares, following the procedure provided by your broker.

Q: May I change my vote after I have submitted a proxy or provided proxy instructions?

A: TorreyPines stockholders of record, other than those TorreyPines stockholders who have executed voting agreements, may change their vote at any time before their proxy is voted at the TorreyPines annual meeting in one of three ways. First, a stockholder of record of TorreyPines can send a written notice to the Corporate Secretary of TorreyPines stating that it would like to revoke its proxy. Second, a stockholder of record of TorreyPines can submit new proxy instructions either on a new proxy card, by telephone or via the Internet. Third, a stockholder of record of TorreyPines can attend the TorreyPines annual meeting and vote in person. Attendance alone will not revoke a proxy.

Any written notice of revocation or subsequent TorreyPines proxy card must be received by the Corporate Secretary of TorreyPines prior to the taking of the vote at TorreyPines 2009 annual meeting. Such written notice of revocation or subsequent TorreyPines proxy card should be hand delivered to the Corporate Secretary of TorreyPines or should be sent so as to be delivered to TorreyPines Therapeutics, Inc., P.O. Box 231386 Encinitas, CA 92032-1386, Attention: Investor Relations. Stockholders whose TorreyPines shares are held in street name should consult with their broker or nominee concerning the method for revoking their TorreyPines proxy. If a stockholder of record of TorreyPines has instructed a broker to vote its shares of TorreyPines common stock, the stockholder must follow directions received from its broker to change those instructions.

Q: Should I send in my stock certificates now?

A: No. If TorreyPines Proposal Nos. 2 and 3 are approved and effected, TorreyPines stockholders will exchange their stock certificates and will receive written instructions from TorreyPines transfer agent for exchanging their shares of TorreyPines common stock.

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Q: Who can help answer my questions?

A: If you are a TorreyPines stockholder and would like additional copies, without charge, of this joint proxy statement/prospectus or if you have questions about the merger, including the procedures for voting your shares, you should contact:

TorreyPines Therapeutics, Inc.

P.O. Box 231386

Encinitas, CA 92032-1386

Tel: (858) 623-5665

Attn: Investor Relations

FOR RAPTOR STOCKHOLDERS:

Q: Who is soliciting my proxy?

A: The proxy is being solicited of Raptor s stockholders by Raptor s board of directors.

Q: On what matters am I being asked to vote?

A: Raptor s stockholders are being asked to:

consider and vote upon a proposal to adopt the merger agreement;

consider and vote upon a proposal to elect four directors to serve until the next annual meeting of the stockholders of Raptor or until their respective successors are duly elected and qualified;

consider and vote upon a proposal to ratify the appointment by the audit committee of Raptor s board of directors of Burr, Pilger & Mayer, LLP as Raptor s independent registered public accounting firm for the fiscal year ending August 31, 2009; and

consider and vote upon a proposal to adjourn the Raptor annual meeting, if necessary, to solicit additional proxies in the event there are not sufficient votes in favor of the adoption of the merger agreement.

Q: As a Raptor stockholder, how does Raptor s Board of Directors recommend that I vote?

A: After careful consideration, Raptor s board of directors recommends that Raptor s stockholders vote:

FOR Proposal No. 1 to adopt the merger agreement;

FOR Proposal No. 2 to elect four directors to serve until the next annual meeting of the stockholders of Raptor or until their respective successors are duly elected and qualified;

FOR Proposal No. 3 to ratify the appointment by the audit committee of Raptor s board of directors of Burr, Pilger & Mayer, LLP as Raptor s independent registered public accounting firm for the fiscal year ending August 31, 2009; and

FOR Proposal No. 4 to consider and vote upon an adjournment of the annual meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of adoption of the merger agreement.

To review the background of the merger and TorreyPines board of directors reasons for recommending the merger in greater detail, see the sections titled, The Merger Background of the Merger and The Merger Reasons for the Merger beginning on pages 83 and 88, respectively, of this joint proxy statement/prospectus.

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Q: How many shares of common stock of the combined company would I own assuming that I own 100,000 shares of Raptor common stock as of the closing of the merger?

A: The effective share split a Raptor stockholder will experience in this transaction will largely be dependent on the TorreyPines share price upon the date immediately preceding the closing date of this transaction. Assuming a reverse stock split of TorreyPines common stock immediately prior to the closing of the merger within the range of 10:1 to 70:1, a Raptor stockholder currently holding 100,000 shares of common stock of Raptor, would hold between approximately 43,962 and 6,280 shares of common stock of the combined company. For a more complete description of the relative holdings of TorreyPines stockholders and Raptor s stockholders with respect to the capital structure of the combined company, please see the sections titled, Matters Being Submitted to a Vote of TorreyPines Stockholders TorreyPines Proposal No. 2: Approval of Amendment to TorreyPines Certificate of Incorporation Effecting the Reverse Stock Split and The Merger Agreement Merger Consideration and Adjustment in this joint proxy statement/prospectus beginning on pages 128 and 109, respectively.

Q: What would my percent ownership in the combined company be assuming that I own 100,000 shares of Raptor common stock as of the closing of the merger?

A: As a result of the proposed merger your percent ownership in the combined company will be reduced by approximately 5% compared to the percent you currently own of Raptor common stock. Raptor currently has approximately 69 million shares of common stock outstanding. For example, if you hold 100,000 shares of Raptor s common stock then you currently own approximately 0.145% of Raptor s common stock. As a result of the merger, such percent ownership in the combined company would be reduced by 5% to 0.137%. For a more complete description of the relative holdings of TorreyPines stockholders and Raptor s stockholders with respect to the capital structure of the combined company, please see the sections titled, Matters Being Submitted to a Vote of TorreyPines Stockholders TorreyPines Proposal No. 2: Approval of Amendment to TorreyPines Certificate of Incorporation Effecting the Reverse Stock Split and The Merger Agreement Merger Consideration and Adjustment in this joint proxy statement/prospectus beginning on pages 128 and 109, respectively.

Q: Am I entitled to appraisal rights?

A: Holders of Raptor common stock are entitled to appraisal rights in connection with the merger pursuant to Section 262 of the DGCL. Failure to take any of the steps required under Section 262 of the DGCL on a timely basis may result in a loss of those appraisal rights. The provisions of the DGCL that grant appraisal rights and govern such procedures are attached as *Annex B* to this joint proxy statement/prospectus. For a more complete description of Raptor s stockholder s appraisal rights, see the section titled, The Merger Appraisal Rights.

Q: Will the Raptor stockholder rights plan be triggered as a result of the merger?

A: No. Raptor s board of directors adopted an amendment to the Raptor stockholder rights plan that excludes the signing of the merger agreement, the merger and the other transactions contemplated with TorreyPines from triggering the Raptor stockholder rights plan.

Q: What do I need to do now?

A: TorreyPines and Raptor urge you to read this joint proxy statement/prospectus carefully, including its annexes, and to consider how the merger affects you.

If you are a Raptor stockholder, you may provide your proxy instructions by mailing your signed proxy card in the enclosed return envelope.

Please provide your proxy instructions only once and as soon as possible so that your shares can be voted at the respective annual meeting of stockholders of Raptor.

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Q: What happens if I return a signed and dated proxy card but do not indicate how to vote my proxy?

A: If you do not include instructions on how to vote your properly signed and dated proxy, your shares will be voted **FOR** adoption of the merger agreement, **FOR** the election of four directors to serve until the next annual meeting of the stockholders of Raptor or until their respective successors are duly elected and qualified, **FOR** the ratification of the appointment by the audit committee of Raptor s board of directors of Burr, Pilger & Mayer, LLP as Raptor s independent registered public accounting firm for the fiscal year ending August 31, 2009; and **FOR** approval of the adjournment of the annual meeting, if necessary, to solicit additional proxies in the event there are not sufficient votes in favor of the adoption of the merger agreement.

Q: What happens if I do not return a proxy card or otherwise provide proxy instructions?

A: If you are a Raptor stockholder, the failure to return your proxy card will have the same effect as voting against Raptor Proposal No. 1 and your shares will not be counted for purposes of determining whether a quorum is present at the Raptor annual meeting.

Q: May I vote in person?

A: If you are a stockholder of Raptor and your shares of Raptor common stock are registered directly in your name with Raptors transfer agent, you are considered to be the stockholder of record with respect to those shares, and the proxy materials and proxy card are being sent directly to you by Raptor. If you are a Raptor stockholder of record, you may attend the annual meeting of Raptor stockholders to be held on [ ], 2009 and vote your shares in person. **Even if you plan to attend the Raptor annual meeting in person, Raptor requests that you sign and return the enclosed proxy to ensure that your shares will be represented at the Raptor annual meeting if you are unable to attend.**

Q: If my Raptor shares are held in street name by my broker, will my broker vote my shares for me?

A: If your shares of Raptor common stock are held in a brokerage account or by another nominee, you are considered the beneficial owner of shares held in street name, and the proxy materials are being forwarded to you together with a voting instruction card. As the beneficial owner, you are also invited to attend the annual meeting of Raptor stockholders. Because a beneficial owner is not the stockholder of record, you may not vote these shares in person at the Raptor annual meeting unless you obtain a proxy from the broker, trustee or nominee that holds your shares, giving you the right to vote the shares at the meeting. Additionally, unless your broker has discretionary authority to vote on certain matters, your broker will not be able to vote your shares of Raptor common stock without instructions from you. To make sure that your vote is counted, you should instruct your broker to vote your shares, following the procedure provided by your broker.

Q: May I change my vote after I have submitted a proxy or provided proxy instructions?

A: Raptor stockholders of record, other than those Raptor stockholders who have executed voting agreements, may change their vote at any time before their proxy is voted at the Raptor annual meeting:

- if you are a Raptor registered stockholder, by filing a written notice of revocation bearing a later date than Raptor proxy with the Corporate Secretary of Raptor before the taking of the vote at Raptor s 2009 annual meeting;

duly executing and submitting a later dated, properly completed Raptor proxy relating to the same shares and delivering it to the Corporate Secretary of Raptor before the taking of the vote at Raptor s 2009 annual meeting; or

attending the 2009 annual meeting and voting in person (although attendance at Raptor s 2009 annual meeting will not in and of itself constitute a revocation of Raptor proxy).

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Any written notice of revocation or subsequent Raptor proxy card must be received by the Corporate Secretary of Raptor prior to the taking of the vote at Raptor s 2009 annual meeting. Such written notice of revocation or subsequent Raptor proxy card should be hand delivered to the Corporate Secretary of Raptor or should be sent so as to be delivered to Raptor Pharmaceuticals Corp., 9 Commercial Blvd., Suite 200, Novato, CA 94949, Attention: Kim R. Tsuchimoto, Corporate Secretary. Stockholders whose Raptor shares are held in street name should consult with their broker or nominee concerning the method for revoking their Raptor proxy. If a stockholder of record of Raptor has instructed a broker to vote its shares of Raptor common stock, the stockholder must follow directions received from its broker to change those instructions.

Q: Will my rights as a Raptor stockholder change as a result of the merger?

A: Yes. You will become a TorreyPines (such name to be changed to Raptor Pharmaceutical Corp.) stockholder as a result of the merger and will have rights after the completion of the merger that are governed by Delaware law and TorreyPines certificate of incorporation and bylaws. For further information regarding your rights as a TorreyPines stockholder following the merger, please see Comparison of Rights of Holders of TorreyPines Stock and Raptor Stock beginning on page 262 of this joint proxy statement/prospectus.

Q: Should I send in my stock certificates now?

A: No. If you are a Raptor stockholder, after the merger is consummated, you will receive written instructions from the exchange agent for exchanging your certificates representing shares of Raptor common stock for certificates representing shares of TorreyPines common stock. You will receive a cash payment for any fractional shares.

Q: Who can help answer my questions?

A: If you are a Raptor stockholder, and would like additional copies, without charge, of this joint proxy statement/prospectus or if you have questions about the merger, including the procedures for voting your shares, you should contact:

Raptor Pharmaceuticals Corp.

9 Commercial Blvd.

Suite 200

Novato, CA 94949

(415) 382-1390

Attn: Secretary

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SUMMARY

This summary highlights selected information from this joint proxy statement/prospectus and may not contain all of the information that is important to you. To better understand the merger and the other proposals being considered at the TorreyPines annual meeting and Raptor annual meeting, you should read this entire joint proxy statement/prospectus carefully, including the merger agreement, attached as Annex A and the other documents to which you are referred herein. For more information, please see the section titled, Where You Can Find More Information in this joint proxy statement/prospectus.

The Companies

TorreyPines Therapeutics, Inc.

P.O. Box 231386

Encinitas, CA 92023-1386

(858) 623-5665

TorreyPines initially incorporated in Nevada on July 29, 1997 as Axonyx Inc. In October 2006, Axonyx Inc. reincorporated in Delaware and changed its name to TorreyPines Therapeutics, Inc., or TorreyPines. TorreyPines is a biopharmaceutical company that has been committed to providing patients with better alternatives to existing therapies through the development and commercialization of small molecule product candidates. TorreyPines goal has been to develop versatile product candidates each capable of treating a number of diseases and disorders characterized by moderate to severe pain, including acute migraine, migraine prophylaxis and chronic pain, such as neuropathic pain. TorreyPines has no products available for sale and has incurred losses since its inception.

Raptor Pharmaceuticals Corp.

9 Commercial Blvd.

Suite 200

Novato, CA 94949

(415) 382-8111

Raptor is a publicly traded 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.

ECP Acquisition, Inc.

ECP Acquisition, Inc., or merger sub, is a wholly-owned subsidiary of TorreyPines, and was formed solely for the purposes of carrying out the merger.

Summary of the Merger

If the merger is completed, merger sub will merge with and into Raptor, with Raptor continuing as a wholly-owned subsidiary of TorreyPines. Immediately after the merger Raptor stockholders will hold 95% of the outstanding shares of common stock of the combined company, with TorreyPines stockholders holding 5% of the outstanding shares of common stock of the combined company. TorreyPines will assume outstanding and unexercised options and warrants to purchase Raptor common stock, and they will be converted into warrants and options, as applicable, to purchase TorreyPines common stock. Upon the effectiveness of one of the

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amendments to TorreyPines certificate of incorporation effecting the reverse stock split, referred to as the split effective time, the issued and outstanding shares of TorreyPines common stock immediately prior to the split effective time will be combined into a smaller number of shares of TorreyPines common stock. Depending on the ratio for the reverse stock split, each ten, eleven, twelve, thirteen, fourteen, fifteen, seventeen, twenty, twenty-five, thirty, thirty-five, forty, forty-five, fifty, fifty-five, sixty or seventy shares, of existing TorreyPines common stock held by a TorreyPines stockholder immediately prior to the split effective time will be converted into one new share of TorreyPines common stock. The number of shares of common stock issued and outstanding will therefore be reduced, depending upon the reverse stock split ratio determined by the TorreyPines board of directors and approved by the Raptor board of directors. The amendment to the restated certificate of incorporation that is filed to effect the reverse stock split, if any, will include only the reverse split ratio determined by the boards of directors of TorreyPines and Raptor, respectively, that causes the combined company s stock price to be at least $4.00 per share and which is determined to be in the best interests of the stockholders of TorreyPines and Raptor, respectively, and all of the other proposed amendments at different ratios will be abandoned. The exact split ratio will be publicly announced by TorreyPines. The reverse stock split will also proportionately reduce the number of shares of TorreyPines common stock issued in the merger but it will not affect the percentages of the outstanding shares of the combined company owned by the TorreyPines stockholders and Raptor stockholders, respectively, described above following the completion of the merger. For a more complete description of the relative holdings of TorreyPines stockholders and Raptor s stockholders with respect to the capital structure of the combined company, please see the sections titled, Matters Being Submitted to a Vote of TorreyPines Stockholders TorreyPines Proposal No. 2: Approval of Amendment to TorreyPines Certificate of Incorporation Effecting the Reverse Stock Split and The Merger Agreement Merger Consideration and Adjustment in this joint proxy statement/prospectus beginning on pages 128 and 109, respectively.

The closing of the merger will occur no later than the third business day after the last of the conditions to the merger has been satisfied or waived, or at another time as TorreyPines and Raptor agree. TorreyPines and Raptor anticipate that the consummation of the merger will occur after the respective TorreyPines and Raptor annual meetings, sometime in the fourth quarter of 2009. However, because the merger is subject to a number of conditions, neither TorreyPines nor Raptor can predict exactly when the closing will occur or if it will occur at all. After completion of the merger, assuming that TorreyPines receives the required stockholder approval of TorreyPines Proposal No. 3, TorreyPines will be renamed Raptor Pharmaceutical Corp. For a more complete description of the merger please see the section titled, The Merger Agreement in this joint proxy statement/prospectus.

Reasons for the Merger

The combined company resulting from the merger will be a biopharmaceutical company focused on the development and commercialization of proprietary products that address important therapeutic needs for various diseases and disorders. TorreyPines and Raptor believe that the combined company will have the following potential advantages:

Pipeline. The combined company will have an expanded product candidate pipeline that is more diversified, and targets unmet and underserved markets. The pipeline will consist of six clinical programs either in, or ready to begin, Phase II or Phase III clinical trials as well as three preclinical programs, one of which is partnered with a large pharmaceutical company.

Markets. The combined company can better manage clinical development risk by having development capabilities across a wider spectrum of diseases and markets. Raptor s orphan product strategy of applying reformulated versions of already approved compounds to new disease indications may provide a balance to the development risks of TorreyPines novel compounds for the potential

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treatment of pain. The orphan and non-orphan markets that may be addressed by the clinical and preclinical stage programs of the combined company represent well documented underserved or unmet medical needs.

Capital Structure. The combined company provides the opportunity to combine and reorganize both TorreyPines and Raptor s capital structure and the contemplated listing on the NASDAQ Capital Market may provide the combined company with access to a more liquid market for the combined company s common stock.

Management Team. The combined company will be led by an experienced senior management team from Raptor who has significant experience in the development, registration, and commercialization of product candidates and a board of directors with representation from Raptor. The existing senior management team from TorreyPines will remain with a wholly-owned subsidiary of the combined company for a transition period and will focus on advancing TorreyPines product candidates for the treatment of moderate to severe pain.

In addition to these potential advantages, each of the board of directors of TorreyPines and Raptor also considered other reasons for the merger, as described herein. For example, the board of directors of TorreyPines considered, among other things:

the addition of the four Raptor clinical development programs, and three preclinical stage programs, broadens the combined company s product pipeline;

the consideration of TorreyPines efforts to pursue alternatives to the merger, including engaging in a merger transaction with another company, an asset sale of TorreyPines pain program or undertaking a bankruptcy or liquidation of TorreyPines;

Raptor s more advanced stage clinical programs, especially for the treatment of cystinosis, offers the opportunity for filing a New Drug Application, or NDA, with the United States Food and Drug Administration, or FDA, in 2010 with a preliminary target of product launch and commercial revenues in 2011. Other ongoing clinical programs at Raptor include a Phase II clinical trial in NASH and the planned initiation of a Phase II study in HD. These trials may provide the combined company with clinical news flow and possibly partnering or licensing transactions over the next 12-18 months; and

the opportunity for TorreyPines stockholders to potentially participate in the short and long-term value of Raptor s preclinical and clinical development programs as a result of the merger.

In addition, the Raptor s board of directors approved the merger based on a number of factors, including the following:

merging with a NASDAQ-listed company gives Raptor the opportunity to qualify for a NASDAQ Capital Markets listing, which may facilitate access to private and public equity markets and stockholder liquidity; and

the addition of TorreyPines clinical programs.

Overview of the Merger Agreement

Merger Consideration and Adjustment

At the effective time of the merger,

each share of Raptor common stock outstanding immediately prior to the effective time of the merger is expected to automatically convert into the right to receive the number of shares of TorreyPines common stock equal to the 303,982,102 shares of TorreyPines common stock to be issued in the

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merger divided by 69,145,047 shares of Raptor common stock outstanding as of the signing of the merger agreement plus 350,000 shares of Raptor common stock issuable pursuant to Raptor stock options outstanding as of the signing of the merger agreement plus any additional shares of Raptor common stock and securities exercisable for or exchangeable or convertible into Raptor common stock that may be issued following the execution of the merger agreement and prior to the effective time of the merger, such calculation which is referred to as the exchange ratio, subject to adjustment to account for the reverse stock split;

each option to purchase shares of Raptor common stock outstanding and unexercised immediately prior to the effective time of the merger will be assumed by TorreyPines and will become an option to purchase shares of TorreyPines common stock equal to the product of the number of shares of Raptor common stock subject to the option multiplied by the exchange ratio, rounded down to the nearest whole number of shares of TorreyPines common stock, subject to adjustment to account for the reverse stock split; and

each warrant to purchase shares of Raptor common stock outstanding and unexercised immediately prior to the effective time of the merger will be assumed by TorreyPines and will become a warrant to purchase shares of TorreyPines common stock equal to the product of the number of shares of Raptor common stock issuable upon exercise of the Raptor warrant multiplied by the exchange ratio, rounded down to the nearest whole number of shares of TorreyPines common stock, subject to adjustment to account for the reverse stock split.

Conditions to Completion of the Merger

To consummate the merger, TorreyPines stockholders must approve:

the issuance of TorreyPines common stock and the resulting change in control of TorreyPines, which requires the affirmative vote of the holders of a majority of the shares of TorreyPines common stock having voting power present in person or represented by proxy at the TorreyPines annual meeting; and

the amendment to TorreyPines certificate of incorporation effecting a reverse stock split of TorreyPines common stock, at one of seventeen reverse split ratios: 1-for-10, 1-for-11, 1-for-12, 1-for-13, 1-for-14, 1-for-15, 1-for-17, 1-for-20, 1-for-25, 1-for-30, 1-for-35, 1-for-40, 1-for-45, 1-for-50, 1-for-55, 1-for-60 or 1-for-70, as described below, and a name change from TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp., which requires the affirmative vote of the holders of a majority of the shares of TorreyPines common stock having voting power outstanding on the record date for the TorreyPines annual meeting.

Upon the effectiveness of the amendment to TorreyPines certificate of incorporation effecting the reverse stock split, referred to as the split effective time, the issued shares of TorreyPines common stock immediately prior to the split effective time will be combined into a smaller number of shares. Depending on the ratio for the reverse stock split, each ten, eleven, twelve, thirteen, fourteen, fifteen, seventeen, twenty, twenty-five, thirty, thirty-five, forty, forty-five, fifty, fifty-five, sixty or seventy shares, of existing TorreyPines common stock held by a TorreyPines stockholder immediately prior to the split effective time will be converted into one new share of TorreyPines common stock. The number of shares of common stock issued and outstanding will therefore be reduced, depending upon the reverse stock split ratio determined by the TorreyPines board of directors and approved by the Raptor board of directors. The amendment to the restated certificate of incorporation that is filed to effect the reverse stock split, if any, will include only the reverse split ratio determined by the boards of directors of TorreyPines and Raptor, respectively, that causes the combined company s stock price to be at least $4.00 per share and which is determined to be in the best interests of the stockholders of TorreyPines and Raptor, respectively, and all of the other proposed amendments at different ratios will be abandoned. The exact split ratio will be publicly announced by TorreyPines. Because the listing standards of the NASDAQ Capital Market will

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require TorreyPines to have, among other things, a $4.00 per share minimum bid price, the reverse stock split will be necessary in order to consummate the merger.

In addition, Raptor stockholders must adopt the merger agreement which requires the affirmative vote of the holders of a majority of the shares of Raptor common stock outstanding on the record date and entitled to vote at the Raptor annual meeting.

In addition to obtaining stockholder approval and appropriate regulatory approvals, if any, each of the other closing conditions set forth in the merger agreement must be satisfied or waived. Among the closing conditions is the requirement that TorreyPines qualify its common stock to be issued in the merger for listing on the NASDAQ Capital Market on the closing date and that TorreyPines net cash, as calculated pursuant to merger agreement, be greater than zero dollars at the closing of the merger. For a more complete description of the closing conditions under the merger agreement, please see the section titled, The Merger Agreement Conditions to the Completion of the Merger in this joint proxy statement/prospectus.

No Solicitation

Subject to certain exceptions, each of TorreyPines and Raptor agreed that TorreyPines and Raptor and any of their respective subsidiaries will not, nor will either party or any of its subsidiaries authorize or permit any of the officers, directors, employees, agents, attorneys, accountants, advisors and representatives retained by it or any of its subsidiaries to, directly or indirectly:

- solicit, initiate, encourage, induce or knowingly facilitate the making, submission or announcement of, any acquisition proposal, as defined below, or any action that could reasonably be expected to lead to an acquisition proposal;
- furnish any information regarding such party or any of its subsidiaries to any person in connection with or in response to an acquisition proposal or an inquiry or indication of interest that could reasonably be expected to lead to an acquisition proposal;
- engage in discussions or negotiations with any person with respect to any acquisition proposal;
- approve, endorse or recommend an acquisition proposal; or
- enter into any letter of intent or similar document or any contract contemplating or otherwise relating to an acquisition transaction, as defined below.

Termination of the Merger Agreement

Either TorreyPines or Raptor can terminate the merger agreement under certain circumstances, which would prevent the merger from being consummated.

Expenses and Reimbursement

If the merger agreement is terminated under certain circumstances, TorreyPines or Raptor, as applicable, will be required to reimburse the other party for certain expenses incurred in connection with the merger, up to a maximum of $250,000.

Voting Agreements

In connection with the execution of the merger agreement, certain Raptor directors and officers entered into voting agreements pursuant to which, among other things, each of such persons agreed, solely in his capacity as a stockholder, to vote all of his shares of Raptor capital stock in favor of the adoption of the merger agreement,

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against any action that would result in a breach of the merger agreement by Raptor, against any proposal for any acquisition transaction, as defined in the merger agreement, other than the merger, between Raptor and any third person other than TorreyPines and merger sub and against any change in a majority of the board of directors of Raptor. As of July 27, 2009, the directors and officers of Raptor who entered into voting agreements collectively owned 7,412,500 shares of Raptor common stock, representing approximately 11% of the outstanding Raptor common stock.

In connection with the execution of the merger agreement, TorreyPines directors and officers entered into voting agreements with Raptor pursuant to which, among other things, each of such persons agreed, solely in his capacity as a stockholder, to vote all of his shares of TorreyPines common stock in favor of the approval of the issuance of the shares of TorreyPines common stock in the merger, the amendment to TorreyPines certificate of incorporation effecting the reverse stock split and the name change from TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp. and any action in furtherance of the foregoing, and against any action that would result in a breach of the merger agreement by TorreyPines and any proposal for any acquisition transaction, as defined in the merger agreement, between TorreyPines and any third person other than Raptor and against any change in a majority of the board of directors of TorreyPines. As of July 27, 2009, the directors and officers of TorreyPines, who entered into voting agreements, collectively owned 151,040 shares of TorreyPines common stock, representing approximately 1% of the outstanding TorreyPines common stock.

Management Following the Merger

Effective as of the closing of the merger, the combined company s officers are expected to include Christopher M. Starr, Ph.D., Chief Executive Officer, Todd C. Zankel, Ph.D., Chief Scientific Officer and Kim R. Tsuchimoto, Chief Financial Officer, Treasurer and Secretary, each of whom currently holds the same position at Raptor. The combined company will initially have a four member board of directors, comprised of the four individuals from Raptor s current board of directors, Christopher M. Starr, Ph.D., Raymond W. Anderson, Erich Sager and Richard L. Franklin, M.D., Ph.D.

Interests of Certain Directors and Officers of TorreyPines and Raptor

In considering the recommendation of the TorreyPines board of directors with respect to issuing shares of TorreyPines common stock pursuant to the merger agreement and the other matters to be acted upon by TorreyPines stockholders at the TorreyPines annual meeting, TorreyPines stockholders should be aware that certain members of the board of directors and executive officers of TorreyPines have interests in the merger that may be different from, or in addition to, interests they have as TorreyPines stockholders. For example, each of TorreyPines three executive officers have entered into amended and restated employment agreements with TPTX, Inc., a wholly-owned subsidiary of TorreyPines, that will become effective on the closing of the merger. Pursuant to such employment agreements, each of the three current TorreyPines executive officers will be paid their respective base salaries by TPTX, Inc. following the merger through February 28, 2010, whether or not they remain employees of TPTX, Inc. following the merger. In addition, such employment agreements provide for bonus payments to each of the three executives in the event that TPTX, Inc. is able to secure funding, a partnership, sale or similar transaction related to NGX426, TPTX, Inc. s product candidate for pain, prior to February 28, 2010, in excess of $10 million. Such employment agreements are discussed in greater detail in the section titled, The Merger Interests of TorreyPines Directors and Executive Officers in the Merger Employment Agreements Following the Merger in this joint proxy statement/prospectus.

As of July 27, 2009, all directors and executive officers of TorreyPines owned approximately 1% of the shares of TorreyPines common stock. The affirmative vote of the holders of a majority of the shares of TorreyPines common stock having voting power present in person or represented by proxy at the TorreyPines annual meeting is required for approval of TorreyPines Proposal Nos. 1 and 5. The affirmative vote of the

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holders of a majority of the TorreyPines common stock having voting power outstanding on the record date for the TorreyPines annual meeting is required for approval of TorreyPines Proposal Nos. 2 and 3. For the election of directors (Proposal No. 4), the four nominees receiving the most FOR votes from the shares of TorreyPines common stock having voting power present in person or represented by proxy at the TorreyPines annual meeting will be elected. Certain TorreyPines officers and directors have also entered into voting agreements in connection with the merger. Such voting agreements are discussed in greater detail in the section titled, Agreements Related to the Merger Voting Agreements in this joint proxy statement/prospectus.

In considering the recommendation of the Raptor board of directors with respect to adopting the merger agreement, Raptor stockholders should be aware that members of the board of directors and executive officers of Raptor have interests in the merger that may be different from, or in addition to, interests they have as Raptor stockholders. For example, following the consummation of the merger, all of Raptor s directors will continue to serve on the board of directors of the combined company and the management team of the combined company is expected to be composed of the current management team of Raptor. In addition, all of Raptor s directors and executive officers hold options to purchase shares of Raptor common stock, which options will be assumed by TorreyPines and become options to purchase shares of TorreyPines common stock following the consummation of the merger.

As of July 27, 2009, all directors and executive officers of Raptor owned approximately 11% of the shares of Raptor s common stock. The adoption of the merger agreement requires the affirmative vote of the holders of a majority of the shares of Raptor common stock outstanding on the record date and entitled to vote at the Raptor annual meeting. Certain Raptor officers and directors have also entered into voting agreements in connection with the merger. Such voting agreements and the Raptor proposals to which they relate are discussed in greater detail in the section titled, Agreements Related to the Merger Voting Agreements in this joint proxy statement/prospectus.

Stock Options and Warrants

At the effective time of the merger, each outstanding stock option to purchase Raptor common stock not exercised immediately prior to the effective time of the merger, whether or not vested, will be assumed by TorreyPines and become exercisable (a) for such number of shares of TorreyPines common stock as is determined by multiplying the number of shares of Raptor common stock subject to the option by the exchange ratio and rounding that result down to the nearest whole number of shares of TorreyPines common stock, and (b) at a per share exercise price as is determined by dividing the existing exercise price of the option by the exchange ratio and rounding that result up to the nearest whole cent. Any restrictions on the exercise of any Raptor option assumed by TorreyPines will continue following the conversion and the term, exercisability, vesting schedules and other provisions of assumed Raptor options will generally remain unchanged; provided, that any Raptor options assumed by TorreyPines may be subject to adjustment to reflect changes in the combined company s capitalization after the effective time of the merger and that the TorreyPines board of directors will succeed to the authority of the Raptor board with respect to each assumed Raptor option.

At the effective time of the merger, each outstanding warrant to purchase shares of Raptor common stock not terminated or exercised immediately prior to the effective time of the merger will be assumed by TorreyPines and will become exercisable (a) for such number of shares of TorreyPines common stock as is determined by multiplying the number of shares of Raptor common stock subject to each warrant by the exchange ratio and rounding that result down to the nearest whole number of shares of TorreyPines common stock, and (b) at a per share exercise price determined by dividing the per share exercise price of the Raptor common stock subject to each warrant as in effect immediately prior to the effective time of the merger by the exchange ratio and rounding that result up to the nearest whole cent.

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For more information, please see the section titled, The Merger Agreement Merger Consideration and Adjustment in this joint proxy statement/prospectus.

Material United States Federal Income Tax Consequences of the Merger

Each of TorreyPines and Raptor expects the merger to qualify as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended, and it is a closing condition to the merger that TorreyPines and Raptor receive opinions of their respective counsel regarding such qualification. Assuming the merger s qualification as a reorganization, Raptor stockholders generally will not recognize gain or loss for United States federal income tax purposes upon the exchange of shares of Raptor common stock for shares of TorreyPines common stock, except with respect to cash received in lieu of fractional shares of TorreyPines common stock, depending on such Raptor stockholder s basis in such fractional share, and except for Raptor stockholders who exercise their appraisal rights with respect to the merger. Assuming the merger s qualification as a reorganization, TorreyPines stockholders will not recognize gain or loss for United States federal income tax purposes as a result of the merger. Tax matters are very complicated, and the tax consequences of the merger to a particular stockholder will depend in part on such stockholder s circumstances. Accordingly, you are urged to consult your own tax advisor for a full understanding of the tax consequences of the merger to you, including the applicability and effect of federal, state, local and foreign income and other tax laws. For more information, please see the section titled, The Merger Material U.S. Federal Income Tax Consequences of the Merger in this joint proxy statement/prospectus.

Risk Factors

Both TorreyPines and Raptor are subject to various risks associated with their businesses and their industries. In addition, the merger, including the possibility that the merger may not be completed, poses a number of risks to each company and its respective stockholders, including the following risks:

- Failure to complete the merger may harm TorreyPines or Raptor s common stock price and future business and operations, and may require TorreyPines to file for bankruptcy, cease operations or liquidate and dissolve;
- If the conditions to the merger are not met or waived, including the requirement that TorreyPines file an initial listing application under The NASDAQ Stock Market LLC s reverse merger rules and qualify its common stock to be issued in the merger for listing on the NASDAQ Capital Market on the closing date and that TorreyPines net cash, as calculated pursuant to merger agreement, be greater than zero dollars at the closing of the merger, the merger will not occur;
- Some of TorreyPines and Raptor s officers and directors have conflicts of interest that may influence them to support or approve the merger;
- The exchange ratio is not adjustable based on the market price of TorreyPines or Raptor s common stock;
- The merger may be completed even though material adverse changes may result from the announcement of the merger, industry-wide changes and other causes;
- The market price of the combined company s common stock may decline as a result of the merger;
- TorreyPines and Raptor stockholders may not realize a benefit from the merger commensurate with the ownership dilution they will experience in connection with the merger; and

During the pendency of the merger, TorreyPines and Raptor may not be able to enter into a business combination with another party at a favorable price because of restrictions in the merger agreement.

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The risks associated with the merger and other risks are discussed in greater detail under the section titled, Risk Factors in this joint proxy statement/prospectus. TorreyPines and Raptor both encourage you to read and consider all of these risks carefully.

Regulatory Approvals

As of the date of this joint proxy statement/prospectus, neither TorreyPines nor Raptor is required to make filings or to obtain approvals or clearances from any antitrust regulatory authorities in the United States or other countries to consummate the merger. In the United States, TorreyPines and Raptor, respectively, must comply with applicable federal and state securities laws and the rules and regulations of the NASDAQ Stock Market and FINRA, respectively, in connection with the issuance of shares of TorreyPines common stock and the filing of this joint proxy statement/prospectus with the SEC. As of the date hereof, the registration statement of which this joint proxy statement/prospectus is a part has not become effective.

NASDAQ Stock Market LLC Listing

Prior to consummation of the merger, TorreyPines intends to file an initial listing application with the NASDAQ Capital Market pursuant to The NASDAQ Stock Market LLC reverse merger rules. Acceptance of the initial listing application and the listing of the shares of TorreyPines common stock on the NASDAQ Capital Market is a condition to closing the merger. Because the listing standards of the NASDAQ Capital Market will require TorreyPines to have, among other things, a $4.00 per share minimum bid price, the reverse stock split will be necessary in order to consummate the merger, but there is no assurance that the reverse stock split will be sufficient from The NASDAQ Stock Market LLC s perspective in order to approve the listing application. If such application is accepted, TorreyPines anticipates that the combined company s common stock will be listed on the NASDAQ Capital Market upon the closing of the merger and will trade under the combined company s new name, Raptor Pharmaceutical Corp., and new trading symbol, RPTP.

Anticipated Accounting Treatment

The merger will be treated by TorreyPines as a reverse merger under the purchase method of accounting in accordance with United States generally accepted accounting principles. For accounting purposes, Raptor is considered to be acquiring TorreyPines in the merger.

Appraisal Rights

Under the Delaware General Corporation Law, referred to as the DGCL, Raptor stockholders are entitled to appraisal rights in connection with the merger. Under the DGCL, TorreyPines stockholders are not entitled to appraisal rights in connection with the merger. For more information about appraisal rights, see the provisions of Section 262 of the DGCL, attached to this joint proxy statement/prospectus as *Annex B*, and the section titled, The Merger Appraisal Rights in this joint proxy statement/prospectus.

Under the DGCL, TorreyPines stockholders are not entitled to appraisal rights with respect to the reverse stock split, and TorreyPines will not independently provide stockholders with any such right.

Comparison of Stockholder Rights

Both TorreyPines and Raptor are incorporated under the laws of the State of Delaware and, accordingly, the rights of the stockholders of each are currently, and will continue to be, governed by the DGCL. If the merger is completed, Raptor stockholders will become stockholders of TorreyPines, and their rights will be governed by

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the DGCL, the bylaws of TorreyPines and, assuming TorreyPines Proposal Nos. 2 and/or 3 are approved by TorreyPines stockholders at the TorreyPines annual meeting, the certificate of incorporation, as amended by the amendment to TorreyPines certificate of incorporation attached to this joint proxy statement/prospectus as *Annex C*. The rights of TorreyPines stockholders contained in the certificate of incorporation, as amended, and bylaws of TorreyPines differ from the rights of Raptor stockholders under the certificate of incorporation and bylaws of Raptor, as more fully described under the section titled, Comparison of Rights of Holders of TorreyPines Stock and Raptor Stock in this joint proxy statement/prospectus.

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SELECTED HISTORICAL AND UNAUDITED PRO FORMA CONDENSED

COMBINED FINANCIAL DATA

The following tables present summary historical financial data for TorreyPines and Raptor, summary unaudited pro forma condensed combined financial data for TorreyPines and Raptor, and comparative historical and unaudited pro forma per share data for TorreyPines and Raptor.

Selected Historical Consolidated Financial Data of TorreyPines

The following selected financial data for the five years ended December 31, 2008 are derived from the audited consolidated financial statements of TorreyPines Therapeutics, Inc. The financial data for the six month periods ended June 30, 2009 and 2008 are derived from unaudited financial statements. The unaudited financial statements include all adjustments, consisting of normal recurring accruals, which TorreyPines Therapeutics, Inc. considers necessary for a fair presentation of the financial position and the results of operations for these periods. Operating results for the six months ended June 30, 2009 are not necessarily indicative of the results that may be expected for the entire year ending December 31, 2009.

You should read the following financial information together with the information under the sections titled, TorreyPines Management s Discussion and Analysis of Financial Condition and Results of Operations and TorreyPines Business and TorreyPines financial statements and the related notes to these financial statements appearing elsewhere in this joint proxy statement/prospectus. Certain reclassifications have been made to prior period amounts to conform to the current presentation.

	Six Months Ended June 30 (unaudited)		Years Ended December 31,				
	2009	2008	2008	2007	2006	2005	2004
	(In thousands, except share and per share data)						
Statement of Operations Data:							
Revenue	$ 280	$ 3,258	$ 6,071	$ 9,850	$ 9,850	$ 7,967	$ 3,551
Operating expenses:							
Research and development	916	10,751	18,949	27,977	22,353	17,317	11,379
General and administrative	2,010	3,199	5,801	5,643	3,971	2,588	2,399
Loss on impairment of purchased patents			3,074				
Purchased in-process research and development					8,328		
Total operating expenses	2,926	13,950	27,824	33,620	34,652	19,905	13,778
Loss from operations	(2,646)	(10,692)	(21,753)	(23,770)	(24,802)	(11,938)	(10,227)
Other income (expense), net	(82)	(651)	(1,032)	401	(575)	396	(129)
Net loss	(2,728)	(11,343)	(22,785)	(23,369)	(25,377)	(11,542)	(10,356)
Dividends and accretion to redemption value of redeemable convertible preferred stock						(4,434)	(2,593)
Net loss attributable to common stockholders	$ (2,728)	$ (11,343)	$ (22,785)	$ (23,369)	$ (25,377)	$ (15,976)	$ (12,949)
Basic and diluted net loss per share attributable to common stockholders	$ (0.17)	$ (0.72)	$ (1.45)	$ (1.49)	$ (8.18)	$ (30.69)	$ (25.99)
Shares used to compute basic and diluted net loss per share attributable to common stockholders	15,982,391	15,743,875	15,748,967	15,717,984	3,100,852	520,588	498,127

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	As of June 30, 2009 (unaudited)	As of December 31,			
		2008	2007	2006	2005	2004
				(In thousands)		
Selected Balance Sheet Data:						
Cash and cash equivalents	$ 1,175	$ 10,864	$ 32,500	$ 55,383	$ 28,757	$ 27,629
Working capital	1,269	5,746	24,299	43,694	24,806	24,357
Total assets	1,418	11,130	38,652	63,435	31,104	29,888
Long-term debt, net of current portion		2,112	954	4,397	3,826	591
Redeemable convertible preferred stock					72,018	67,584
Accumulated deficit	(121,914)	(119,186)	(96,401)	(73,032)	(58,850)	(42,874)
Total stockholders equity (deficit)	1,269	3,713	26,460	44,569	(58,341)	(42,381)

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Selected Historical Consolidated Financial Data of Raptor

The following table shows selected historical consolidated financial and operating information for, and as of the end of, each of the periods indicated and should be read in conjunction with the information in the sections titled, Raptor s Management s Discussion and Analysis of Financial Condition and Results of Operation and Raptor s Business and Raptor s consolidated financial statements and the corresponding notes to those consolidated financial statements included elsewhere in this joint proxy statement/prospectus. The following tables set forth Raptor s consolidated balance sheet data as of May 31, 2009, August 31, 2008, 2007 and 2006, and its consolidated statements of operations data for the nine months ended May 31, 2009 and 2008 (unaudited) and the years ended August 31, 2008 and 2007, for the period from September 8, 2005 (inception) to August 31, 2006.

	For the nine months ended May 31, 2008 (unaudited)	For the nine months ended May 31, 2009 (unaudited)	For the year ended August 31, 2008	For the year ended August 31, 2007	For the period from September 8, 2005 (inception) to August 31, 2006
Revenues:	$	$	$	$	$
Operating expenses:					
General and administrative	1,588,035	1,935,612	2,229,140	1,529,028	510,079
Research and development	3,641,400	5,369,922	5,558,871	2,246,057	499,238
In-process research and development	240,625		240,625		
Total operating expenses	5,470,060	7,305,534	8,028,636	3,775,085	1,009,317
Loss from operations	(5,470,060)	(7,305,534)	(8,028,636)	(3,775,085)	(1,009,317)
Interest income	51,583	32,930	77,871	143,760	43,528
Interest expense	(103,044)	(1,876)	(103,198)	(751)	(3,461)
Net loss	$ (5,521,521)	$ (7,274,480)	$ (8,053,963)	$ (3,632,076)	$ (969,250)
Net loss per share:					
Basic and diluted	$ (0.15)	$ (0.12)	$ (0.19)	$ (0.12)	$ (0.18)
Weighted average shares outstanding used to compute:					
Basic and diluted	37,882,220	60,411,732	42,439,379	31,497,782	12,495,425

	May 31, 2009 (unaudited)	August 31, 2008	2007	2006
Balance Sheet Data:				
Cash and cash equivalents	$ 492,963	$ 7,546,912	$ 2,627,072	$ 3,648,538
Working capital (deficit)	(135,982)	6,659,226	2,493,651	3,598,428
Total assets	3,478,585	10,620,770	3,290,925	4,305,582
Long-term portion of capital lease obligations	7,770		2,302	4,801
Total liabilities	800,223	1,003,280	332,816	158,806
Total stockholders equity	2,678,362	9,617,490	2,958,109	4,146,776

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Selected Unaudited Pro Forma Condensed Combined Financial Data of TorreyPines and Raptor

(In thousands, except per share amounts)

The following selected unaudited pro forma condensed combined financial information was prepared using the purchase method of accounting. For accounting purposes, Raptor is considered to be acquiring TorreyPines in the merger. TorreyPines and Raptor s unaudited pro forma condensed combined balance sheet data assume that the merger took place on May 31, 2009 and combine Raptor s historical balance sheet at May 31, 2009 with TorreyPines historical balance sheet at June 30, 2009. TorreyPines and Raptor s unaudited pro forma condensed combined statement of operations data assume that the merger took place as of the beginning of the period presented. The unaudited pro forma condensed combined statement of operations data for the year ended August 31, 2008 combine Raptor s historical statement of operations for the year ended August 31, 2008 with TorreyPines derived historical statement of operations for the year ended December 31, 2008. The unaudited pro forma condensed combined statement of operations data for the nine months ended May 31, 2009 combine Raptor s historical statement of operations for the nine months ended May 31, 2009 with TorreyPines derived historical statement of operations for the nine months ended June 30, 2009.

The selected unaudited pro forma condensed combined financial data are presented for illustrative purposes only and are not necessarily indicative of the combined financial position or results of operations of future periods or the results that actually would have been realized had the entities been a single entity during these periods. The selected unaudited pro forma condensed combined financial data as of and for the nine months ended May 31, 2009 and for the year ended August 31, 2008 are derived from the unaudited pro forma condensed combined financial information and should be read in conjunction with that information. For more information, please see the section titled, Unaudited Pro Forma Condensed Combined Financial Statements in this joint proxy statement/prospectus.

	For the Year Ended August 31, 2008	For the Nine Months Ended May 31, 2009
Unaudited Pro Forma Condensed Combined Statement of Operations Data:		
Total revenue	$ 6,943	$ 1,870
Research and development expense	28,875	9,506
General and administrative expense	7,989	5,421
Loss on impairment of purchased patents		3,074
In-process research and development	241	
Loss from operations	(30,162)	(16,131)
Net loss	$ (32,947)	$ (16,050)

	As of May 31, 2009
Unaudited Pro Forma Condensed Combined Balance Sheet Data:	
Cash and cash equivalents	$ 1,668
Working capital	433
Total assets	6,218
Long-term obligations, less current portion	8
Stockholders equity	4,568

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Comparative Historical and Unaudited Pro Forma Per Share Data

The following information does not give effect to the reverse stock split of TorreyPines common stock described in TorreyPines Proposal No. 2.

The information below reflects the historical net loss and book value per share of Raptor common stock and the historical net loss and book value per share of TorreyPines common stock in comparison with the unaudited pro forma net loss and book value per share after giving effect to the proposed merger of TorreyPines with Raptor on a purchase basis.

You should read the tables below in conjunction with the audited and unaudited financial statements of TorreyPines Therapeutics, Inc. included in this joint proxy statement/prospectus and audited and unaudited financial statements of Raptor included in this joint proxy statement/prospectus and the related notes and the unaudited pro forma condensed financial information and notes related to such financial statements included elsewhere in this joint proxy statement/prospectus.

TORREYPINES

	Derived 12 Months Ended September 30, 2008	Derived Nine Months Ended June 30, 2009
Historical Per Common Share Data:		
Net loss per common share basic and diluted	$ (1.58)	$ (0.55)
Book value per share	$ 0.64	$ 0.08

RAPTOR

	Year Ended August 31, 2008	Nine Months Ended May 31, 2009
Historical Per Common Share Data:		
Net loss per common share basic and diluted	$ (0.19)	$ (0.12)
Book value per share	$ 0.16	$ 0.04

TORREYPINES AND RAPTOR

	Year Ended August 31, 2008	Nine Months Ended May 31, 2009
Combined Unaudited Pro Forma Per Share Data:		
Net loss per combined share basic and diluted	$ (0.10)	$ (0.05)
Book value per combined share		$ 0.01

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MARKET PRICE AND DIVIDEND INFORMATION

TorreyPines common stock currently trades on the NASDAQ Global Market under the symbol TPTX. The following table sets forth the range of high and low sales prices of TorreyPines common stock for the quarterly periods indicated, as reported by NASDAQ. Such quotations represent inter-dealer prices without retail mark up, mark down or commission and may not necessarily represent actual transactions.

	High	Low
Year Ended December 31, 2009:		
First Quarter	$ 0.35	$ 0.15
Second Quarter	0.45	0.12
Third Quarter (through August 12)	0.23	0.07
Year Ended December 31, 2008:		
First Quarter	$ 2.59	$ 1.26
Second Quarter	1.71	1.07
Third Quarter	1.28	0.44
Fourth Quarter	0.55	0.16
Year Ended December 31, 2007:		
First Quarter	$ 8.75	$ 6.59
Second Quarter	7.52	6.10
Third Quarter	7.32	5.76
Fourth Quarter	6.15	2.26
Year Ended December 31, 2006:		
First Quarter	$ 10.00	$ 6.64
Second Quarter	11.60	6.40
Third Quarter	9.12	6.64
Fourth Quarter	9.00	6.15

Raptor s common stock is quoted on the FINRA OTC Bulletin Board under the symbol RPTP . Prior to June 8, 2006, Raptor s common stock had not traded in the public market. The following table sets forth the quarterly high and low trading prices for Raptor s common stock for the period from June 8, 2006 through August 12, 2009, as reported by the OTC Bulletin Board, which reflects inter-dealer quotations, without retail mark-up, mark-down or commission and may not represent actual transactions.

	High	Low
Year Ended December 31, 2009:		
September 1, 2008 November 30, 2008	$ 0.48	$ 0.12
December 1, 2008 February 29, 2009	0.39	0.10
March 1, 2009 May 31, 2009	0.38	0.15
June 1, 2009 August 12, 2009	0.50	0.31
2008 Fiscal Quarters:		
September 1, 2007 November 30, 2007	$ 0.66	$ 0.47
December 1, 2007 February 29, 2008	0.62	0.38
March 1, 2008 May 31, 2008	0.67	0.47
June 1, 2008 August 31, 2008	0.58	0.38
2007 Fiscal Quarters:		
September 1, 2006 November 30, 2006	$ 0.61	$ 0.46
December 1, 2006 February 28, 2007	0.75	0.54
March 1, 2007 May 31, 2007	1.29	0.58
June 1, 2007 August 31, 2007	0.76	0.41
2006 Fiscal Period:		
June 8, 2006 August 31, 2006	$ 0.85	$ 0.50

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On July 27, 2009, the last trading day prior to announcement of the merger, the closing price of TorreyPines common stock was $0.09, for an aggregate value of TorreyPines of approximately $1.4 million. Accordingly, if the merger had been consummated on that day, the value attributable to the Raptor capital stock, or to 95% of the combined company, would have equaled $28.8 million.

The following table presents trading information for TorreyPines and Raptor s common stock for July 27, 2009 and [ ], 2009. July 27, 2009 was the last full trading day prior to the public announcement of the proposed merger. [ ], 2009 was the last practicable trading day for which information was available prior to the date of the first mailing of this joint proxy statement/prospectus.

	TorreyPines Common Stock Close	Raptor Common Stock Close
July 27, 2009	$ 0.09	$ 0.36
[ ], 2009	$ [ ]	$ [ ]

Because the market price of TorreyPines common stock is subject to fluctuation, the market value of the shares of TorreyPines common stock that holders of Raptor common stock will be entitled to receive in the merger may increase or decrease.

Assuming approval of TorreyPines Proposal No. 3 and successful application for initial listing with the NASDAQ Capital Market, following the consummation of the merger, TorreyPines common stock will be listed on the NASDAQ Capital Market and will trade under the combined company s new name, Raptor Pharmaceutical Corp. and the new trading symbol, RPTP . Because the listing standards of the NASDAQ Capital Market will require TorreyPines to have, among other things, a $4.00 per share minimum bid price, the reverse stock split will be necessary in order to consummate the merger, but there is no assurance that the reverse stock split will be sufficient from The NASDAQ Stock Market LLC s perspective in order to approve the listing application.

As of [ ], 2009, there were [ ] registered holders of TorreyPines common stock. As of [ ], 2009, there were [ ] registered holders of Raptor s common stock. For detailed information regarding the beneficial ownership of certain stockholders of the combined company upon consummation of the merger, see the section titled, Principal Stockholders of Combined Company in this joint proxy statement/prospectus.

Dividends

TorreyPines has never declared or paid any cash dividends on its capital stock nor does it intend to do so in the foreseeable future. Any future determination to pay cash dividends will be at the discretion of TorreyPines board of directors and will depend upon its financial condition, operating results, capital requirements, any applicable contractual restrictions and such other factors as TorreyPines board of directors deems relevant.

Raptor has never declared or paid any cash dividends on its capital stock nor does it intend to do so in the foreseeable future.

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RISK FACTORS

The combined company will be faced with a market environment that cannot be predicted and that involves significant risks, many of which will be beyond its control. In addition to the other information contained in this joint proxy statement/prospectus, you should carefully consider the material risks described below before deciding how to vote your shares of common stock.

Risks Related to the Merger

Failure to complete the merger could harm TorreyPines or Raptor s common stock price and future business and operations and may result in TorreyPines filing for bankruptcy, ceasing operations or liquidating and dissolving.

If the merger is not completed, TorreyPines and Raptor are subject to the following risks:

- if the merger agreement is terminated under certain circumstances, TorreyPines or Raptor will be required to pay the expenses of the other party, up to a maximum of $250,000;
- the price of TorreyPines and Raptor s stock may decline; and
- costs related to the merger, such as legal, accounting, certain financial advisory fees and costs associated with printing and mailing this joint proxy statement/prospectus, which TorreyPines and Raptor estimate will total approximately $350,000 per company, must be paid even if the merger is not completed.

In addition, if the merger agreement is terminated and TorreyPines or Raptor s board of directors determines to seek another business combination, there can be no assurance that it will be able to find a partner willing to provide equivalent or more attractive consideration than the consideration to be provided by each party in the merger. If the merger is not completed and TorreyPines is unable to complete a financing or strategic transaction, it does not expect to be able to continue as a going concern and may be required to liquidate in a voluntary dissolution under Delaware law or to seek protection under the provisions of the U.S. Bankruptcy Code.

If the conditions to the merger are not met, the merger will not occur.

Even if the merger is adopted by the stockholders of Raptor, specified conditions must be satisfied or waived to complete the merger. These conditions are described in detail in the merger agreement, and include the requirement that TorreyPines file an initial listing application under The NASDAQ Stock Market LLC s reverse merger rules and qualify its common stock to be issued in the merger for listing on the NASDAQ Capital Market on the closing date and that TorreyPines net cash, as calculated pursuant to merger agreement, be greater than $0 at the closing of the merger. Because the listing standards of the NASDAQ Capital Market will require TorreyPines to have, among other things, a $4.00 per share minimum bid price, the reverse stock split will be necessary in order to consummate the merger, but there is no assurance that the reverse stock split will be sufficient from The NASDAQ Stock Market LLC s perspective in order to approve the listing application. TorreyPines and Raptor cannot assure you that all of the conditions will be satisfied. If the conditions are not satisfied or waived, the merger will not occur or will be delayed, TorreyPines and Raptor each may lose some or all of the intended benefits of the merger, and if TorreyPines is unable to complete another financing or strategic transaction, it does not expect to be able to continue as a going concern and may be required to liquidate in a voluntary dissolution under Delaware law or to seek protection under the provisions of the U.S. Bankruptcy Code.

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Some of TorreyPines and Raptor s officers and directors have conflicts of interest that may influence them to support or approve the merger.

Certain officers and directors of TorreyPines and Raptor participate in arrangements that provide them with interests in the merger that are different from yours, including, among others, their continued service as an officer or director of the combined company, retention and severance benefits, continued indemnification and the potential ability to sell an increased number of shares of common stock of the combined company. For example, each of TorreyPines three executive officers are party to employment agreements with TPTX, Inc., a wholly-owned subsidiary of TorreyPines, that will become effective on the closing of the merger, assuming the TorreyPines stockholders approve the merger. Pursuant to the employment agreements each of the current TorreyPines executive officers will be paid by TPTX, Inc. following the merger through February 28, 2010, whether or not they remain employees of TPTX, Inc. following the merger. In addition, the employment agreements provide for bonus payments to each of the executives in the event that TPTX, Inc. is able to secure funding, a partnership, sale or similar transaction related to NGX426 in excess of $10 million prior to February 28, 2010. Additionally, following the consummation of the merger, all of Raptor s directors will continue to serve on the board of directors of the combined company and the management team of the combined company is expected to be composed of the management team of Raptor. Further, all of Raptor s directors and executive officers hold options to purchase shares of Raptor common stock, which options will be assumed by TorreyPines and become options to purchase shares of TorreyPines common stock following the consummation of the merger.

These interests, among others, may influence the officers and directors of TorreyPines and Raptor to support or approve the merger. For a more detailed discussion see the sections titled, The Merger Interests of TorreyPines Directors and Executive Officers in the Merger and The Merger Interests of Raptor s Directors and Executive Officers in the Merger in this joint proxy statement/prospectus.

The exchange ratio is not adjustable based on the market price of TorreyPines or Raptor common stock so the merger consideration at the closing may have a larger or smaller value than at the time the merger agreement was signed.

The merger agreement describes the method for calculating the exchange ratio for the Raptor common stock, and that exchange ratio is only subject to adjustment to account for (i) stock splits, stock dividends, reverse stock splits, reclassifications, recapitalizations or similar events, such as the reverse stock split discussed in this joint proxy statement/prospectus and (ii) certain additional shares of Raptor common stock that may be issued following the execution of the merger agreement and prior to the effective time of the merger. Any changes in the market price of the TorreyPines or Raptor common stock will not affect the number of shares Raptor stockholders will be entitled to receive pursuant to the merger without taking into effect the proposed reverse stock split. Therefore, if the market price of TorreyPines common stock declines from the market price on the date of the merger agreement prior to the closing of the merger, Raptor stockholders could receive merger consideration with considerably less value. Similarly, if the market price of the TorreyPines common stock increases from the market price on the date of the merger agreement prior to the closing of the merger, Raptor stockholders could receive merger consideration with considerably more value than their shares of Raptor common stock and the TorreyPines stockholders immediately prior to the merger will not be compensated for the increased market value of the TorreyPines common stock. The merger agreement does not include a price-based termination right. Because the exchange ratio does not adjust as a result of changes in the value of TorreyPines common stock for each one percentage point that the market value of TorreyPines common stock declines, there is a concomitant one percentage point decline in the value of the total merger consideration issued to Raptor stockholders. For example, on July 27, 2009, the date of the merger agreement, the closing price of TorreyPines common stock, as reported on the NASDAQ Global Market, was $0.09 per share. Assuming that a total of 303, 982,102 shares of TorreyPines common stock are issued to Raptor stockholders upon the closing of the merger at a per share value of $0.09 per share, the aggregate merger consideration to be issued to Raptor stockholders in the merger would be approximately $27.4 million. If, however, the closing price of TorreyPines common stock prior to the date of closing of the merger had declined from $0.09 per share to, for example, $0.07 per share, a

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decline of 22%, the aggregate merger consideration to be issued to Raptor stockholders in the merger would decrease from approximately $27.4 million to approximately $21.3 million, a decline of $6.2 million or 22%.

The merger may be completed even though material adverse changes may result from the announcement of the merger, industry-wide changes and other causes.

In general, either TorreyPines or Raptor can refuse to complete the merger if there is a material adverse change affecting the other party between July 27, 2009, the date of the merger agreement, and the closing. However, certain types of changes do not permit either party to refuse to complete the merger, even if such change would have a material adverse effect on TorreyPines or Raptor, including:

- changes due to the announcement or pendency of the merger;
- changes attributable to the U.S. economy or industry in which TorreyPines or Raptor competes;
- changes resulting from or relating to any change in accounting requirements or principles or any change in applicable laws, rules or regulations or the interpretation thereof; or
- changes resulting from a change in the stock price or trading volume of TorreyPines or Raptor, excluding any underlying effect that may have caused such change.

If adverse changes occur but TorreyPines and Raptor still complete the merger, the combined company s stock price may suffer. This in turn may reduce the value of the merger to the stockholders of Raptor.

The market price of the combined company s common stock may decline as a result of the merger.

The market price of the combined company s common stock may decline as a result of the merger for a number of reasons including if:

- a decline in the liquidity of the combined company s stock following the merger;
- the combined company does not achieve the perceived benefits of the merger as rapidly or to the extent anticipated by financial or industry analysts;
- the effect of the merger on the combined company s business and prospects is not consistent with the expectations of financial or industry analysts; or
- investors react negatively to the effect on the combined company s business and prospects from the merger.

TorreyPines and Raptor stockholders may not realize a benefit from the merger commensurate with the ownership dilution they will experience in connection with the merger.

If the combined company is unable to realize the strategic and financial benefits currently anticipated from the merger, TorreyPines stockholders will have experienced substantial dilution and Raptor s stockholders will have experienced dilution, of their respective ownership interests without receiving any commensurate benefit.

During the pendency of the merger, TorreyPines and Raptor may not be able to enter into a business combination with another party at a favorable price because of restrictions in the merger agreement, which could adversely affect their respective business.

Covenants in the merger agreement impede the ability of TorreyPines and Raptor to make acquisitions or complete other transactions that are not in the ordinary course of business pending completion of the merger. As a result, if the merger is not completed, the parties may be at a disadvantage to their competitors. In addition, while the merger agreement is in effect and subject to very narrowly defined exceptions, neither party will directly or indirectly:

solicit, initiate, encourage, induce or knowingly facilitate the making, submission or announcement of, any acquisition proposal, as defined below, or any action that could reasonably be expected to lead to an acquisition proposal;

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furnish any information regarding such party or any of its subsidiaries to any person in connection with or in response to an acquisition proposal or an inquiry or indication of interest that could reasonably be expected to lead to an acquisition proposal;

engage in discussions or negotiations with any person with respect to any acquisition proposal;

approve, endorse or recommend an acquisition proposal; or

enter into any letter of intent or similar document or any contract contemplating or otherwise relating to an acquisition transaction, as defined below.

Any such transaction could be favorable to such party s stockholders.

Certain provisions of the merger agreement may discourage third parties from submitting alternative takeover proposals, including proposals that may be superior to the arrangements contemplated by the merger agreement.

The terms of the merger agreement prohibit each of TorreyPines and Raptor from soliciting alternative takeover proposals or cooperating with persons making unsolicited takeover proposals, except in limited circumstances when such party s board of directors determines in its good faith judgment that an unsolicited alternative takeover proposal is or is reasonably likely to lead to a superior takeover proposal and is reasonably capable of being consummated and that failure to cooperate with the proponent of the proposal could reasonably be considered a breach of the board s fiduciary duties.

Because Raptor s business will constitute the substantial majority of the business of the combined company after the closing of the merger, if any of the events described in Risks Related to Raptor occur, those events could cause the potential benefits of the merger not to be realized and the market price of the combined company s common stock to decline.

Because of TorreyPines limited operations, the combined company s business immediately following the merger will primarily be the business conducted by Raptor immediately prior to the merger. As a result, the risks described below under Risks Related to Raptor are significant risks to the combined company if the merger is completed. To the extent any of the events in the risks described below under Risks Related to Raptor occur, those events could cause the potential benefits of the merger not to be realized and the market price of the combined company s common stock to decline.

Risks Related to TorreyPines

In addition to the other information contained in this joint proxy statement/prospectus, you should carefully consider the material risks described below. As discussed above, TorreyPines has entered into the merger agreement with merger sub and Raptor pursuant to which merger sub will merge with and into Raptor, with Raptor as the surviving corporation becoming a wholly-owned subsidiary of TorreyPines. TorreyPines has effectively ceased all business operations related to the development of its product candidates to focus its efforts on the completion of the merger with Raptor and a possible strategic transaction related to its product candidates to the extent permitted under the merger agreement. Following the completion of the merger, the current management and board of directors of TorreyPines will have no control over the ultimate decisions regarding the combined company s operations and business, including whether the combined company will elect to dispose of TorreyPines product candidates in a strategic transaction, reinitiate their development, abandon them entirely or any combination of the foregoing. Most of the TorreyPines risk factors described below relate to TorreyPines current product candidates and related matters, and will only be relevant if the combined company attempts to continue to develop TorreyPines product candidates, which it may never do. Prior to executing the merger agreement with Raptor, TorreyPines board of directors approved a Plan of Liquidation and Dissolution

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and called a stockholder meeting to vote on that plan, which meeting was cancelled as a condition to the execution of the merger agreement. If TorreyPines is unable to complete the merger or another financing or strategic transaction, it does not expect to be able to continue as a going concern and may be required to liquidate in a voluntary dissolution under Delaware law or to seek protection under the provisions of the U.S. Bankruptcy Code. Most, if not all, of the combined company s business immediately following the merger will be the business conducted by Raptor immediately prior to the merger, and most if not all of the risk factors related to TorreyPines business in this joint proxy statement/prospectus will change from those described herein based on TorreyPines business to date and otherwise may no longer be applicable to the combined company. TorreyPines encourages you to review the section titled, Risk Related to Raptor appearing elsewhere in this joint proxy statement/prospectus for a description of the substantial portion of the expected risks of the combined company if the merger is approved and completed.

TorreyPines may not be able to complete the merger with Raptor and failure to do so could adversely affect its business.

TorreyPines cannot assure you that it will close the pending merger with Raptor in a timely manner or at all. TorreyPines consideration and completion of the merger is subject to a variety of risks that could materially and adversely affect TorreyPines business and financial results, including risks that it will forego strategic opportunities while the closing of the merger is pending; and risks inherent in negotiating and completing any transaction. In particular, one condition to the closing of the merger is that TorreyPines must have Net Cash (as defined in the merger agreement) upon the closing of the merger greater than zero dollars. While TorreyPines has and will continue to expend substantial effort to limit its expenses and preserve its remaining cash, unforeseen liabilities or expenses, in some cases over which it has no control, may arise that could make satisfaction of this closing condition difficult or impossible. If TorreyPines does not close the merger with Raptor, TorreyPines board of directors may elect to attempt to complete another strategic transaction similar to the merger or otherwise, or may determine that TorreyPines should file for bankruptcy, cease operations or liquidate and dissolve.

Net Cash is defined in the merger agreement, generally, as the sum of (a) (i) TorreyPines cash and cash equivalents, short-term investments, net and restricted cash, and (ii) all tax refunds and refunds of prepaid expenses due and owing to TorreyPines or any of its subsidiaries that have not been received as of the closing of the merger agreement, minus (b) the sum of all liabilities and obligations of TorreyPines and any of its subsidiaries (other than all costs and expenses which are the exclusive responsibility of Raptor as described in the merger agreement).

TorreyPines may not be able to continue as a going concern. TorreyPines will need substantial additional funds to continue operations, which the merger with Raptor may not provide and which TorreyPines may not be able to raise on favorable terms, or at all.

TorreyPines would need substantial additional funds in order to initiate any further preclinical studies and clinical trials and to fund its development operations and has not been able to obtain any such financing. TorreyPines independent registered public accounting firm has included an explanatory paragraph in their report on TorreyPines 2008 financial statements related to the uncertainty and substantial doubt of TorreyPines ability to continue as a going concern. TorreyPines believes that its cash and cash equivalents, which were approximately $1.2 million at June 30, 2009, will only fund its operations, independent of the merger with Raptor, through the third quarter, and possibly into the fourth quarter, of 2009. Although TorreyPines intends that the merger with Raptor will enable it to have sufficient funds to continue as a going concern, there is no assurance that the combined entity will have sufficient capital to fund its operations beyond the first quarter of 2010 or be able to complete a future financing or corporate transaction, either on favorable terms or at all. If the merger is not completed and TorreyPines is unable to complete a financing or strategic transaction, it does not expect to be able to continue as a going concern and may be required to liquidate in a voluntary dissolution under Delaware law or to seek protection under the provisions of the U.S. Bankruptcy Code.

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TorreyPines forecast of the period of time through which its financial resources will be adequate to support its operations is a forward-looking statement and involves risks and uncertainties, and actual results could vary as a result of a number of factors, including the factors discussed elsewhere in these risk factors. TorreyPines has based this estimate on assumptions that may prove to be wrong, and TorreyPines could utilize its available capital resources sooner than it currently expects. If TorreyPines is able to obtain funds through arrangements with collaborative partners or others that require TorreyPines to relinquish rights to intellectual property or product candidates that it would otherwise seek to develop or commercialize itself this may have a material adverse effect on TorreyPines business, results of operations, financial condition or cash flow.

TorreyPines may need to liquidate in a voluntary dissolution under Delaware law or to seek protection under the provisions of the U.S. Bankruptcy Code, and in that event, it is unlikely that stockholders would receive any value for their shares.

TorreyPines has incurred net operating losses every year since TorreyPines inception. As of June 30, 2009, TorreyPines had an accumulated deficit of approximately $121.9 million and has been unable to raise the necessary capital to continue TorreyPines existing operations. TorreyPines is currently working to complete the proposed merger with Raptor. TorreyPines cannot assure its stockholders that any actions that it takes would raise or generate sufficient capital to fully address the uncertainties of its financial position. As a result, TorreyPines may be unable to realize value from its assets and discharge its liabilities in the normal course of business. If TorreyPines is unable to settle its obligations to its creditors or if TorreyPines is unable to consummate the merger with Raptor it would likely need to liquidate in a voluntary dissolution under Delaware law or to seek protection under the provisions of the U.S. Bankruptcy Code. In that event, TorreyPines or a trustee appointed by the court may be required to liquidate TorreyPines assets. In such event, TorreyPines might realize significantly less value from its assets than their carrying values on its financial statements. The funds resulting from the liquidation of TorreyPines assets would be used first to satisfy obligations to creditors before any funds would be available to TorreyPines stockholders, and any shortfall in the proceeds would directly reduce the amounts available for distribution, if any, to TorreyPines creditors and to TorreyPines stockholders. In the event TorreyPines is required to liquidate under Delaware law or the federal bankruptcy laws, it is highly unlikely that stockholders would receive any value for their shares. TorreyPines board of directors approved a Plan of Liquidation and Dissolution on May 19, 2009. TorreyPines previously convened a special meeting of its stockholders to consider the Plan of Liquidation and Dissolution, which meeting was adjourned twice because of insufficient support from TorreyPines stockholders and which its board of directors cancelled in connection with TorreyPines execution of the merger agreement. In the event TorreyPines is unable to complete the merger with Raptor, it is likely that it will seek protection under the provisions of the U.S. Bankruptcy Code or, if TorreyPines board of directors calls another special meeting of its stockholders to consider the Plan of Liquidation and Dissolution and TorreyPines stockholders approve the Plan of Liquidation and Dissolution, liquidate in a voluntary dissolution under Delaware law.

TorreyPines is seeking to maximize the value of its assets, and address its liabilities and raise additional capital for its existing business. TorreyPines is attempting to pursue asset out-licenses, asset sales, mergers or similar strategic transactions with respect to its product candidates. TorreyPines may be unable to satisfy its liabilities and can provide no assurances that it can be successful in completing the merger with Raptor or executing a strategic transaction with respect to its product candidates.

Due to TorreyPines financial position, it is unable to initiate further preclinical studies or clinical trials. TorreyPines is actively working to complete the merger with Raptor with the goal of maximizing the value of its assets. There are substantial challenges and risks which will make it difficult to successfully implement the merger. For example, under the terms of the merger agreement, TorreyPines would need Raptor s consent to complete any strategic transaction with respect to TorreyPines product candidates. Even if TorreyPines decides to pursue a strategic transaction with respect to its product candidates, it may be unable to do so on acceptable terms, if at all. In the event TorreyPines is unable to complete the merger with Raptor and, if the merger in not consummated, is unable to complete a strategic transaction with respect to its product candidates, TorreyPines

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may be forced to liquidate in a voluntary dissolution under Delaware law or to seek protection under the provisions of the U.S. Bankruptcy Code.

Stockholders should recognize that in TorreyPines efforts to address its liabilities and fund future operations and development of its product candidates, if TorreyPines is unable to complete the merger with Raptor it may pursue strategic alternatives that result in the stockholders of TorreyPines having little or no continuing interest in the assets of TorreyPines as stockholders or otherwise. In such circumstances, TorreyPines will continue to evaluate TorreyPines alternatives in light of its cash position, including the possibility that it may need to liquidate in a voluntary dissolution under Delaware law or to seek protection under the provisions of the U.S. Bankruptcy Code.

TorreyPines is currently not in compliance with NASDAQ rules regarding the minimum bid price or the minimum required stockholders equity and is at risk of being delisted from the NASDAQ Global Market, which could prevent TorreyPines from completing the merger with Raptor and may subject it to the SEC s penny stock rules and decrease the liquidity of TorreyPines common stock.

TorreyPines received a NASDAQ staff deficiency letter dated August 21, 2008 indicating that, for the prior 30 consecutive days, the bid price for TorreyPines common stock had closed below the minimum bid price of $1.00 per share as required for continued inclusion of the NASDAQ Global Market under Marketplace Rule 4450(a)(5) (now Rule 5450(a)(1)). In accordance with Marketplace Rule 4450(e)(2) (now Rule 5450(a)(1)), TorreyPines had 180 calendar days to regain compliance with the minimum bid price requirement of $1.00 per share. In addition, as of March 25, 2009, the market value of TorreyPines publicly held shares was less than $5 million, which is the minimum market value of publicly held shares required for continued listing under the NASDAQ Global Market s Marketplace Rules. However, NASDAQ temporarily suspended, through July 20, 2009, the application of the continued listing requirements related to minimum bid price and minimum market value of publicly held shares for listing on the NASDAQ Global Market. Assuming the suspension is not extended, TorreyPines will have until November 19, 2009, to regain compliance with the minimum bid price requirement of $1.00 per share. If TorreyPines does not regain compliance by the end of such period, and does not elect or is unable to transfer to the NASDAQ Capital Market, NASDAQ will provide written notification that TorreyPines common stock will be delisted, after which TorreyPines may appeal the staff determination to the NASDAQ Listing Qualifications Panel if it so chooses.

In addition, as of December 31, 2008, TorreyPines stockholders equity was less than $10 million, which is the minimum required stockholders equity for continued listing on the NASDAQ Global Market. On March 31, 2009 TorreyPines received a letter from the Listing Qualifications Department of NASDAQ notifying TorreyPines that based on its stockholders equity as reported in its Annual Report on Form 10-K for the year ended December 31, 2008, TorreyPines does not comply with the minimum stockholders equity requirement of $10 million for continued listing on The NASDAQ Global Market as set forth in NASDAQ Marketplace Rule 4450(a)(3) (now Rule 5450(b)(1)(A)). TorreyPines provided a plan to regain compliance with the minimum stockholder s equity requirement to NASDAQ and TorreyPines was granted an extension through July 14, 2009 to gain compliance. On July 14, 2009 TorreyPines received a letter from the Listing Qualifications Staff of The NASDAQ Stock Market notifying TorreyPines that it did not comply with the minimum $10 million stockholders equity requirement for continued listing set forth in Listing Rule 5450(b)(1)(A). TorreyPines requested a hearing before the NASDAQ Listing Qualifications Panel to review the Staff determination to delist TorreyPines common stock. The request for a hearing stayed the Staff determination to delist TorreyPines common stock until the Panel renders a determination following the hearing. The hearing is scheduled for August 20, 2009.

If following the NASDAQ Listing Qualifications Panel hearing, TorreyPines has not been granted additional time to regain compliance with the NASDAQ listing requirements, TorreyPines expects that it would be delisted from the NASDAQ Global Market. One of the conditions to the completion of the merger with Raptor is that TorreyPines continue to be listed on either the NASDAQ Capital Market or, if agreed to by Raptor, the

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NASDAQ Global Market, as of the closing of the merger. If TorreyPines is delisted from the NASDAQ Global Market and is not listed on the NASDAQ Capital Market, it would be unable to complete the merger without Raptor s waiver of this listing condition, which it does not expect Raptor would grant. Following any such delisting, TorreyPines common stock may be traded over-the-counter on the OTC Bulletin Board or in the pink sheets. These alternative markets, however, are generally considered to be less efficient than, and not as broad as, the NASDAQ Global Market. Many OTC Bulletin Board stocks trade less frequently and in smaller volumes than securities traded on the NASDAQ markets, which could have a material adverse effect on the liquidity of TorreyPines common stock. If TorreyPines common stock is delisted from the NASDAQ Global Market, there may be a limited market for TorreyPines stock, trading in TorreyPines stock may become more difficult and TorreyPines share price could decrease even further. In addition, if TorreyPines common stock is delisted, TorreyPines ability to raise additional capital may be impaired.

Specifically, you may not be able to resell your shares of common stock at or above the price you paid for such shares or at all. In addition, class action litigation has often been instituted against companies whose securities have experienced periods of volatility in market price. Any such litigation brought against TorreyPines could result in substantial costs and a diversion of management s attention and resources, which could hurt TorreyPines business, operating results and financial condition.

In addition, TorreyPines common stock may become subject to penny stock rules. The SEC generally defines penny stock as an equity security that has a market price of less than $5.00 per share, subject to certain exceptions. TorreyPines is not currently subject to the penny stock rules because TorreyPines common stock qualifies for an exception to the SEC s penny stock rules for companies that have an equity security that is quoted on the NASDAQ Stock Market. However, if TorreyPines is delisted, TorreyPines common stock would become subject to the penny stock rules, which impose additional sales practice requirements on broker-dealers who sell TorreyPines common stock. If TorreyPines common stock was considered penny stock, the ability of broker-dealers to sell TorreyPines common stock and the ability of TorreyPines stockholders to sell their shares in the secondary market would be limited and, as a result, the market liquidity for TorreyPines common stock would be adversely affected. TorreyPines cannot assure stockholders that trading in TorreyPines securities will not be subject to these or other regulations in the future.

TorreyPines, through its wholly-owned subsidiary TPTX, Inc., entered into employment agreements with each of its key executives that may require material payments in connection with their continued service with TPTX, Inc. following the closing of the merger.

As part of the execution of the Merger Agreement, TorreyPines, through its subsidiary TPTX, Inc., entered into second amended and restated employment agreements with each of its three key executive officers which agreements would become effective upon the closing of the merger and would remain effective through February 28, 2010 unless sooner terminated. Pursuant to the amended and restated employment agreements, each of the executives will continue to receive his or her current base salary through February 28, 2010 and the executives would also be eligible for certain incentive payments related to strategic transactions that may be completed with respect to NGX426. These payments (excluding the possible incentive payments) will reduce TorreyPines Net Cash at the closing of the merger, which may result in a closing condition to the merger not being satisfied.

TorreyPines will need substantial additional funding and may be unable to raise capital when needed, which would force it to delay further, reduce or eliminate its development programs or commercialization efforts.

TorreyPines will need to raise substantial additional capital in the future and additional funding requirements will depend on, and could increase significantly as a result of, many factors, including:

- the rate of progress and cost of clinical trials;
- the scope of its clinical trials and other development activities;

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the prioritization and number of clinical development programs it pursues;

the terms and timing of any collaborative, licensing and other arrangements that it may establish;

the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights;

the costs and timing of regulatory approvals;

the costs of goods and manufacturing expenses; and

the costs of establishing or contracting for sales and marketing capabilities.

TorreyPines does not anticipate that it will generate significant continuing revenue for several years, if at all. Until TorreyPines can generate significant continuing revenue, if ever, it expect to satisfy its future cash needs through public or private equity offerings, debt financings or strategic partnerships and licensing arrangements, as well as through interest income earned on cash balances. TorreyPines cannot be certain that its immediate funding needs or future additional funding needs will be available on acceptable terms, or at all. If the near term funds that TorreyPines needs to continue operations do not become available, it may be required to cease operations, seek protection under the provisions of the U.S. Bankruptcy Code or liquidate and dissolve.

TorreyPines may have difficulty, or may be unable to, restart its clinical development programs

In the first quarter of 2009 TorreyPines suspended development of its clinical stage product candidates, NGX426 and tezampanel. In addition, on March 31, 2009 TorreyPines terminated all but three employees. In order to restart the clinical and preclinical work for NGX426 and tezampanel, TorreyPines will need to hire the appropriate employees or consultants. If TorreyPines is unable to identify and retain such individuals it will be difficult to restart the program. Additionally, TorreyPines has incurred delays created by suspension of work on the program and will need to re-engage third parties to prepare materials and conduct the necessary clinical and preclinical work. TorreyPines may not be successful in restarting its clinical programs. Furthermore, if the merger with Raptor is completed, Raptor s current board of directors and management will succeed TorreyPines current board of directors and management. In such case, TorreyPines will have no control over these development programs and its successor board of directors and management may choose to divest such programs or abandon them altogether.

TorreyPines product candidates are at an early stage of development. TorreyPines cannot be certain that any of its product candidates will be successfully developed, receive regulatory approval, or be commercialized.

TorreyPines has two product candidates, both at an early stage of development and TorreyPines does not have any products that are commercially available. TorreyPines two ionotropic glutamate receptor antagonists, NGX426 and tezampanel are clinical stage product candidates. TorreyPines will need to perform additional development work and conduct further preclinical testing and clinical trials for both product candidates before it can seek the regulatory approvals necessary to begin commercial sales.

Success in preclinical testing and early clinical trials does not mean that later clinical trials will be successful. Companies frequently suffer significant setbacks in later stage clinical trials, even after earlier clinical trials have shown promising results. In future clinical trials with larger or somewhat different populations, results from early clinical trials may not be reproduced and analysis of new or additional data may not demonstrate sufficient safety and efficacy to support regulatory approval of a product candidate.

Additionally, preclinical testing and clinical trials are expensive, can take many years, and have an uncertain outcome. Product candidates may not be successful in clinical trials for a number of reasons, including, but not limited to, the failure of a product candidate to be safe and efficacious, the results of later stage clinical trials not confirming earlier clinical results, or clinical trial results not being acceptable to the FDA or other regulatory agencies.

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There is no certainty that the safety and efficacy results of TorreyPines Phase I trial of NGX426 in a capsaicin induced pain model announced in December 2008 or of TorreyPines Phase IIb clinical trial for tezampanel in acute migraine announced in October 2007 are predictive of results in subsequent trials or are meaningful indicators of the safety and efficacy of the compounds. TorreyPines will be required to perform additional clinical testing in order to obtain regulatory approval of its product candidates and the results of such additional clinical testing may not replicate what has been demonstrated to date regarding the safety and efficacy. Additionally, further testing may not result in data that supports regulatory approval.

TorreyPines does not anticipate that any of its current product candidates will be eligible to receive regulatory approval and begin commercialization for a number of years, if at all. Even if TorreyPines were to ultimately receive regulatory approval for one or more of its product candidates, it may be unable to successfully commercialize them for a variety of reasons including:

- the availability of alternative treatments;
- the product not being cost effective to manufacture and sell;
- limited acceptance in the marketplace; and
- the effect of competition with other marketed products.

The success of TorreyPines product candidates may also be limited by the incidence and severity of any adverse events or undesirable side effects. Additionally, any regulatory approval to market a product may be subject to the imposition by such regulatory agency of limitations on the indicated uses. These limitations may reduce the size of the market for the product. If TorreyPines fails to commercialize one or more of its current product candidates, its business, results of operations, financial condition, and prospects for future growth may be materially and adversely affected.

Delays in the commencement or completion of clinical testing of TorreyPines product candidates could result in increased costs to it and delay TorreyPines ability to generate significant revenues.

TorreyPines cannot predict whether it will encounter problems with any of its future clinical trials that will cause it or regulatory authorities to delay or suspend TorreyPines clinical trials, or delay the analysis of data from such clinical trials. Any of the following factors could delay the clinical development of TorreyPines product candidates:

- discussions with the FDA or comparable foreign authorities regarding the scope or design of one or more clinical trials;
- delays in receiving, or the inability to obtain, required approvals from institutional review boards or other reviewing entities at clinical trial sites selected for participation in a clinical trial;
- delays or slower than anticipated enrollment of participants into clinical trials;
- lower than anticipated retention rate of participants in clinical trials;
- need to repeat clinical trials as a result of inconclusive or negative results or unforeseen complications in testing;

inadequate supply or deficient quality of product candidate materials or other materials necessary to conduct TorreyPines clinical trials;

unfavorable FDA inspection and review of a clinical trial site or records of any clinical or preclinical investigation;

serious, unexpected adverse events or undesirable side effects experienced by participants in the clinical trials that delay or preclude regulatory approval or limit the commercial use or market acceptance if approved;

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findings that the clinical trial participants are being exposed to unacceptable health risks;

placement by the FDA of a clinical hold on a clinical trial;

restrictions on or post-approval commitments with regard to any regulatory approval TorreyPines ultimately obtain that renders a product candidate not commercially viable; and

unanticipated cost overruns in preclinical studies and clinical trials.

In addition, once a clinical trial has started, it may be suspended or terminated by TorreyPines or the FDA or other regulatory authorities due to a number of factors, including:

failure to conduct the clinical trial in accordance with regulatory requirements;

inspection of the clinical trial operations or clinical trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold;

negative clinical trial results;

adverse events or negative side-effects experienced by the clinical trial participants; or

lack of adequate funding to continue the clinical trial.

The FDA may not accept any or all of the efficacy endpoints and they may ultimately decide that the endpoints are inadequate to demonstrate the statistically significant efficacy levels required for regulatory approval. TorreyPines failure to adequately demonstrate the safety and efficacy of its product candidates would jeopardize its ability to achieve regulatory approval for, and ultimately to commercialize, the product candidates.

Clinical trials require sufficient participant enrollment, which is a function of many factors, including the size of the target population, the nature of the clinical trial protocol, the proximity of participants to clinical trial sites, the availability of effective treatments for the relevant disorder or disease, the eligibility criteria for TorreyPines clinical trials and the number of competing clinical trials. Delays in enrollment can result in increased costs and longer development times. Failure to enroll participants in TorreyPines clinical trials could delay the completion of the clinical trials beyond current expectations. In addition, the FDA could require TorreyPines to conduct clinical trials with a larger number of participants than it may project for any of its product candidates. As a result of these factors, TorreyPines may not be able to enroll a sufficient number of participants in a timely or cost-effective manner.

Additionally, enrolled participants may drop out of clinical trials, which could impair the validity or statistical significance of the clinical trials. A number of factors can lead participants in a clinical trial to discontinue participating in the clinical trial, including, but not limited to: the inclusion of a placebo arm in the clinical trial; possible lack of effect of the product candidate being tested at one or more of the dose levels being tested; adverse side effects experienced by the participant, whether or not related to the product candidate; and the availability of alternative treatment options.

TorreyPines, the FDA or other applicable regulatory authorities may suspend clinical trials of a product candidate at any time if TorreyPines or they believe the participants in such clinical trials, or in independent third-party clinical trials for product candidates based on similar technologies, are being exposed to unacceptable health risks or for other reasons. In addition, it is impossible to predict whether legislative changes will be enacted, or whether FDA regulations, guidance or interpretations will be changed, or what the impact of such changes, if any, may be.

If TorreyPines experiences any such problems, it may not have the financial resources to continue development of the product candidate that is affected or the development of any of its other product candidates. If TorreyPines experiences significant delays in the commencement or completion of clinical testing, financial results and the commercial prospects for the product candidates will be harmed and costs will increase.

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Additionally, any significant delays in the commencement or completion of clinical testing will delay TorreyPines ability to generate significant revenue.

TorreyPines relies on third parties to assist it in conducting clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, TorreyPines may not be able to obtain regulatory approval for or commercialize its product candidates.

TorreyPines relies on, and intends to continue to rely on, third parties, such as contract research organizations, medical institutions, clinical investigators and contract laboratories, to conduct clinical trials of its product candidates. TorreyPines reliance on these third parties for development activities reduces its control over these activities. If these third parties do not successfully carry out their contractual duties or obligations or meet expected deadlines, or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to TorreyPines clinical protocols or for other reasons, its clinical trials may be extended, delayed or terminated. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, TorreyPines may be required to replace them. Although TorreyPines believes there are a number of third party contractors it could engage to continue these activities, replacing a third party contractor may result in a delay of the affected trial. Accordingly, TorreyPines may not be able to obtain regulatory approval for or successfully commercialize its product candidates.

TorreyPines has licensed rights to product candidates NGX426 and tezampanel from Eli Lilly and Company, or Eli Lilly. Eli Lilly has rights of termination under the license agreement, which if exercised would adversely affect TorreyPines business.

In April 2003, TorreyPines entered into an agreement with Eli Lilly to obtain an exclusive license from Eli Lilly to their ionotropic glutamate receptor antagonist assets NGX426 and tezampanel. Pursuant to the license agreement TorreyPines has obligations to make payments to Eli Lilly under the agreement and to use commercially reasonable efforts to develop and commercialize the product candidates, including achievement of specified development events within specified timeframes. Eli Lilly may terminate the agreement for uncured material breach of the agreement by TorreyPines, including any breach of TorreyPines development and commercialization obligations. If Eli Lilly were to terminate the agreement, TorreyPines would lose rights to the ionotropic glutamate receptor antagonist product candidates, and its business would be adversely affected.

If TorreyPines fails to enter into and maintain collaborations for its product candidates, it may have to reduce or delay product development or increase expenditures.

TorreyPines strategy for developing, manufacturing, and commercializing potential products includes establishing and maintaining collaborations with pharmaceutical and biotechnology companies to advance some of TorreyPines programs and share expenditures with partners on those programs. TorreyPines may not be able to negotiate future collaborations on acceptable terms, if at all. If TorreyPines is not able to establish and maintain collaborative arrangements, TorreyPines may have to reduce or delay further development of some programs or undertake the development activities at TorreyPines own expense. If TorreyPines elects to increase capital expenditures to fund development programs on its own, it will need to obtain additional capital, which may not be available on acceptable terms or at all. Even if TorreyPines does succeed in securing such collaborations, it may not be able to maintain them if, for example, objectives under the agreement are not met, the agreement is terminated or not renewed, development or approval of a product candidate is delayed or sales of an approved drug are disappointing. Furthermore, any delay in entering into collaborations could delay the development and commercialization of TorreyPines product candidates and reduce their competitiveness, even if they reach the market. Any such delay related to TorreyPines collaborations could adversely affect TorreyPines business.

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If TorreyPines strategic partners do not devote adequate resources to the development and commercialization of TorreyPines product candidates, TorreyPines may not be able to commercialize its products and achieve revenues.

TorreyPines may enter into collaborations with other strategic partners with respect to its product candidates. If TorreyPines enters into any such collaborations, it may have limited or no control over the amount and timing of resources that its partners dedicate to the development of its product candidates. TorreyPines ability to commercialize products it develops with its partners and generate royalties from product sales will depend on the partner s ability to assist TorreyPines in establishing the safety and efficacy of TorreyPines product candidates, obtaining regulatory approvals and achieving market acceptance of products. TorreyPines partners may elect to delay or terminate development of a product candidate, independently develop products that could compete with TorreyPines products, or not commit sufficient resources to the marketing and distribution of products under the collaboration. If TorreyPines partners fail to perform as expected under the collaborative agreements, TorreyPines potential for revenue from the related product candidates will be dramatically reduced. In addition, revenue from TorreyPines future collaborations may consist of contingent payments, such as payments for achieving development and commercialization milestones and royalties payable on sales of any successfully developed drugs. The milestone, royalty or other revenue that TorreyPines may receive under these collaborations will depend upon both TorreyPines ability and its partner s ability to successfully develop, introduce, market and sell new products. In some cases, TorreyPines will not be involved in these processes and, accordingly, will depend entirely on its partners.

TorreyPines does not have internal manufacturing capabilities. If TorreyPines fails to develop and maintain supply relationships with collaborators or other third party manufacturers, TorreyPines may be unable to develop or commercialize its products.

TorreyPines ability to develop and commercialize its products depends in part on TorreyPines ability to manufacture, or arrange for future collaborators or other third parties to manufacture, its products at a competitive cost, in accordance with regulatory requirements and in sufficient quantities for clinical testing and eventual commercialization. None of TorreyPines product candidates have been manufactured on a commercial scale. TorreyPines and its third-party manufacturers may encounter difficulties with the small- and large-scale formulation and manufacturing processes required to manufacture its product candidates, resulting in delays in clinical trials and regulatory submissions, in the commercialization of product candidates or, if any product candidate is approved, in the recall or withdrawal of the product from the market. TorreyPines inability to enter into or maintain agreements with capable third-party manufacturers on acceptable terms could delay or prevent the commercialization of its products, which would adversely affect its ability to generate revenue and could prevent it from achieving profitability.

TorreyPines will need to identify and reach agreement with third parties for the supply of its product candidates for future clinical trials. TorreyPines does not have long-term supply agreements with third parties, and TorreyPines may not be able to enter into supply agreements with them in a timely manner or on acceptable terms, if at all. These third parties may also be subject to capacity constraints that would cause them to limit the amount of TorreyPines product candidates they can produce or the chemicals that TorreyPines can purchase. Any interruption or delay TorreyPines experiences in the supply of its product candidates may impede or delay such product candidates clinical development and cause TorreyPines to incur increased expenses associated with identifying and qualifying one or more alternate suppliers.

In addition, TorreyPines, its future collaborators or other third-party manufacturers of its products must comply with current good manufacturing practice, or cGMP, requirements enforced by the FDA through its facilities inspection program. These requirements include quality control, quality assurance and the maintenance of records and documentation. In addition, product manufacturing facilities in California are subject to licensing requirements of the California Department of Health Services and may be inspected by the California Department of Health Services at any time. TorreyPines, its collaborators or other third-party manufacturers of

its products 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 or delay in product approval, product seizure or recall, or withdrawal of product approval.

TorreyPines currently has no marketing or sales staff. If TorreyPines is unable to enter into or maintain collaborations with marketing partners or if it is unable to develop its own sales and marketing capabilities, TorreyPines may not be successful in commercializing its potential products and it may be unable to generate significant revenues.

TorreyPines may elect to commercialize some of the products it is developing on its own, with or without a partner, where those products can be effectively marketed and sold in concentrated markets that do not require a large sales force to be competitive. TorreyPines currently has no sales, marketing or distribution capabilities. To be able to commercialize TorreyPines own products, it will need to establish its own specialized sales force and marketing organization with technical expertise and with supporting distribution capabilities. Developing such an organization is expensive and time consuming and could delay or limit TorreyPines ability to commercialize products.

To commercialize any product candidate that TorreyPines decides not to market on its own, it will depend on collaborations with third parties that have established distribution systems and direct sales forces. If TorreyPines is unable to enter into such collaborations on acceptable terms, it may not be able to successfully commercialize those products.

To the extent that TorreyPines enters into arrangements with collaborators or other third parties to perform sales and marketing services, its product revenue is likely to be lower than if it directly marketed and sold its product candidates. If TorreyPines is unable to establish adequate sales and marketing capabilities, independently or with others, it may not be able to generate significant revenue and may not become profitable and the price of its common stock may be negatively affected.

NGX426 and tezampanel belong to a new class of compounds. There are no compounds in this class that have received regulatory approval for any indication. Therefore, TorreyPines does not know whether its product candidates will yield commercially viable products or receive regulatory approval.

NGX426 and tezampanel are ionotropic glutamate receptor antagonists of the AMPA and kainite subtype. They are part of a new class of compounds that block the binding of glutamate to AMPA and kainite receptors and, in turn, stop the transmission of pain signals. NGX426 and tezampanel may represent a novel approach to the treatment of numerous pain and non-pain diseases and disorders. There are currently no approved products that are ionotropic glutamate receptor antagonists of the AMPA and kainite subtype. As a result, TorreyPines cannot be certain that NGX426 and tezampanel will result in commercially viable drugs.

If TorreyPines product candidates do not achieve market acceptance among physicians, patients, health care payers and the medical community, they will not be commercially successful and TorreyPines business will be adversely affected.

The degree of market acceptance of any of TorreyPines approved product candidates among physicians, patients, health care payors and the medical community will depend on a number of factors, including:

- acceptable evidence of safety and efficacy;
- relative convenience and ease of administration;
- the prevalence and severity of any adverse side effects;
- availability of alternative treatments;
- pricing and cost effectiveness;

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effectiveness of sales and marketing strategies; and

ability to obtain sufficient third-party coverage or reimbursement.

If TorreyPines is unable to achieve market acceptance for its product candidates, then such product candidates will not be commercially successful and TorreyPines business will be adversely affected.

If TorreyPines fails to attract and keep key management it may be unable to develop or commercialize its product candidates successfully.

TorreyPines success depends on its continued ability to attract, retain and motivate highly qualified management and scientific personnel. The loss of the services of any principal member of TorreyPines senior management team could delay or prevent the commercialization of its product candidates. TorreyPines employs these individuals on an at-will basis and their employment can be terminated by TorreyPines or such employees at any time, for any reason and with or without notice, subject to the terms contained in their respective employment agreements and offer letters.

Companies and universities that have licensed product candidates to TorreyPines for clinical development and marketing are sophisticated competitors that could develop similar products to compete with TorreyPines products.

Licensing TorreyPines 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 TorreyPines. TorreyPines partners 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 to TorreyPines. By virtue of the previous research that led to the discovery of the drugs or product candidates that they licensed to TorreyPines, 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.

Changes in, or interpretations of, accounting rules and regulations could result in unfavorable accounting charges or require TorreyPines to change its compensation policies.

Accounting methods and policies for biopharmaceutical companies, including policies governing revenue recognition, expenses, accounting for stock options and in-process research and development costs are subject to further review, interpretation and guidance from relevant accounting authorities, including the SEC. Changes to, or interpretations of, accounting methods or policies in the future may result in unfavorable accounting charges or may require TorreyPines to change its compensation policies to avoid such charges.

TorreyPines management will be required to devote substantial time to comply with public company regulations.

As a public company, TorreyPines will incur significant legal, accounting and other expenses. In addition, the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, as well as rules subsequently implemented by the SEC and the NASDAQ Global Market, impose various requirements on public companies, including corporate governance practices. TorreyPines management and other personnel will have to meet these requirements. Moreover, these rules and regulations will increase TorreyPines legal and financial compliance costs and will make some activities more time-consuming and costly.

In addition, the Sarbanes-Oxley Act requires, among other things, that TorreyPines maintain effective internal controls for financial reporting and disclosure controls and procedures. In particular, TorreyPines must perform system and process evaluation and testing of its internal controls over financial reporting to allow

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management to report on the effectiveness of its internal controls over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. TorreyPines compliance with Section 404 will require that it incur substantial accounting and related expense and expend significant management efforts. TorreyPines will need to hire additional accounting and financial staff to satisfy the on-going requirements of Section 404. Moreover, if TorreyPines is not able to comply with the requirements of Section 404, or if it or its independent registered public accounting firm identifies deficiencies in TorreyPines internal controls over financial reporting that are deemed to be material weaknesses, the market price of TorreyPines stock could decline and TorreyPines could be subject to sanctions or investigations by the NASDAQ Global Market, SEC or other regulatory authorities.

TorreyPines is a defendant in a class action lawsuit which, if determined adversely, could have a material adverse affect on it.

A class action securities lawsuit was filed against TorreyPines, as described in the section titled, TorreyPines Business Legal Proceedings in this joint proxy statement/prospectus. TorreyPines is defending against this action vigorously; however, TorreyPines does not know what the outcome of the proceedings will be and, if it does not prevail, it may be required to pay substantial damages or settlement amounts. Furthermore, regardless of the outcome, TorreyPines may incur significant defense costs, and the time and attention of its key management may be diverted from normal business operations. If TorreyPines is ultimately required to pay significant defense costs, damages or settlement amounts, such payments could materially and adversely affect its operations and results. TorreyPines has purchased liability insurance, however, if any costs or expenses associated with the litigation exceed the insurance coverage, TorreyPines 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 its business, financial condition, results of operations and cash flows. In any event, publicity surrounding the lawsuits and/or any outcome unfavorable to TorreyPines could adversely affect its reputation and stock price. The uncertainty associated with substantial unresolved lawsuits could harm TorreyPines business, financial condition and reputation.

TorreyPines has certain obligations to indemnify its officers and directors and to advance expenses to such officers and directors. Although TorreyPines has purchased liability insurance for its directors and officers, if its insurance carriers should deny coverage, or if the indemnification costs exceed the insurance coverage, TorreyPines may be forced to bear some or all of these indemnification costs directly, which could be substantial and may have an adverse effect on its business, financial condition, results of operations and cash flows. If the cost of TorreyPines liability insurance increases significantly, or if this insurance becomes unavailable, TorreyPines may not be able to maintain or increase its levels of insurance coverage for its directors and officers, which could make it difficult to attract or retain qualified directors and officers.

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

The nature of TorreyPines business exposes them to potential liability risks inherent in the testing, manufacturing and marketing of its drug product candidates. While TorreyPines products are clinically tested, TorreyPines products could potentially harm people or allegedly harm people, and TorreyPines 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 TorreyPines obtain may not be enforceable and may not protect TorreyPines from liability or the costs of product liability litigation. Although TorreyPines carries clinical product liability insurance, it may not be sufficient to cover future claims. TorreyPines currently does not have any clinical or product liability claims or threats of claims filed against it.

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Risks Related to TorreyPines Intellectual Property

TorreyPines success depends upon its ability to protect its intellectual property and proprietary technologies.

TorreyPines commercial success depends on obtaining and maintaining patent protection and trade secret protection of its product candidates, proprietary technologies and their uses, as well as successfully defending its patents against third- party challenges. TorreyPines will only be able to protect its product candidates, proprietary technologies and their uses from unauthorized use by third parties to the extent that valid and enforceable patents or trade secrets cover them.

The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in biotechnology patents has emerged to date in the U.S. The biotechnology patent situation outside the U.S. is even more uncertain. Changes in either the patent laws or in interpretations of patent laws in the U.S. and other countries may diminish the value of TorreyPines intellectual property. Accordingly, TorreyPines cannot predict the breadth of claims that may be allowed or enforced in its patents or in third-party patents.

The degree of future protection for TorreyPines proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect its rights or permit TorreyPines to gain or keep its competitive advantage. For example:

- TorreyPines or its licensors might not have been the first to make the inventions covered by each of its pending patent applications and issued patents;
- TorreyPines or its licensors might not have been the first to file patent applications for these inventions;
- others may independently develop similar or alternative technologies or duplicate any of TorreyPines technologies;
- TorreyPines issued patents may not provide a basis for commercially viable products, may not provide it with any competitive advantages, or may be challenged by third parties;
- TorreyPines issued patents may not be valid or enforceable;
- TorreyPines may not develop additional proprietary technologies that are patentable; and
- the patents of others may have an adverse effect on TorreyPines business.

Proprietary trade secrets and unpatented know-how are also very important to TorreyPines business. Although TorreyPines has taken steps to protect its trade secrets and unpatented know-how, including entering into confidentiality agreements with third parties and proprietary information and inventions agreements with employees, consultants and advisors, third parties may still obtain this information. Enforcing a claim that a third party illegally obtained and is using TorreyPines trade secrets or unpatented know-how is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the U.S. may be less willing to protect this information. Moreover, TorreyPines competitors may independently develop equivalent knowledge, methods and know-how.

If TorreyPines is sued for infringing intellectual property rights of third parties, it will be costly and time consuming, and an unfavorable outcome in that litigation would have a material adverse effect on its business.

TorreyPines commercial success depends upon its ability and the ability of any of its collaborators to develop, manufacture, market, and sell its product candidates and use its proprietary technologies without infringing the proprietary rights of third parties. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which TorreyPines is developing products.

Because patent applications can take many years to issue, there may be currently pending applications, unknown

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to TorreyPines, which may later result in issued patents that its product candidates or proprietary technologies may infringe. TorreyPines has not conducted a complete search of existing patents to identify existing patents that its product candidates or proprietary technologies may inadvertently infringe.

TorreyPines may be exposed to future litigation by the companies holding these patents or other third parties based on claims that its product candidates and/or proprietary technologies infringe their intellectual property rights. If one of these patents was found to cover TorreyPines product candidates, proprietary technologies or their uses, TorreyPines or its collaborators could be required to pay damages and could be unable to commercialize its product candidates or use its proprietary technologies unless TorreyPines obtained a license to the patent. A license to these patents may not be available to TorreyPines or its collaborators on acceptable terms, if at all.

There is a substantial amount of litigation involving patent and other intellectual property rights in the biotechnology and biopharmaceutical industries generally. If a third party claims that TorreyPines or its collaborators infringe on its technology, it may face a number of issues, including:

- infringement and other intellectual property claims which, with or without merit, may be expensive and time-consuming to litigate and may divert management s attention from its core business;
- substantial damages for infringement, including treble damages and attorneys fees, as well as damages for products development using allegedly infringing drug discovery tools or methods which TorreyPines may have to pay if a court decides that the product or proprietary technology at issue infringes on or violates the third party s rights;
- a court prohibiting TorreyPines from selling or licensing the product or using the proprietary technology unless the third party licenses its technology to TorreyPines, which it is not required to do;
- if a license is available from the third party, TorreyPines may have to pay substantial royalties, fees and/or grant cross licenses to its technology; and
- redesigning TorreyPines products or processes so they do not infringe, which may not be possible or may require substantial funds and time.

TorreyPines may also be subject to claims that it or its employees, who were previously employed at universities or other biotechnology or pharmaceutical companies, have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. If TorreyPines fails in defending such claims, in addition to paying monetary damages, it may lose valuable intellectual property rights or personnel. A loss of key personnel or their work product could hamper or prevent TorreyPines ability to commercialize certain potential drugs, which could severely harm its business. Even if TorreyPines is successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

Risks Related to TorreyPines Industry

TorreyPines product candidates are subject to extensive regulation, which can be costly and time consuming, cause unanticipated delays or prevent the receipt of the required approvals to commercialize TorreyPines product candidates.

The clinical development, manufacturing, labeling, storage, record-keeping, future advertising, promotion, export, marketing and distribution of TorreyPines product candidates are subject to extensive regulation by the FDA and other regulatory agencies in the U.S. and by comparable foreign governmental authorities. The process of obtaining these approvals is expensive, often takes many years, and can vary substantially based upon the type, complexity and novelty of the products involved. Approval policies or regulations may change. In addition, although members of TorreyPines management have drug development and regulatory experience, as a company TorreyPines has not previously filed the marketing applications necessary to gain regulatory approvals for any

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product. This lack of experience may impede TorreyPines ability to obtain FDA marketing approval in a timely manner, if at all, for the product candidates it is developing and commercializing. TorreyPines will not be able to commercialize its product candidates in the U.S. until it obtains FDA approval and in other countries until it obtains approval by comparable governmental authorities. Any delay in obtaining, or inability to obtain, these approvals would prevent TorreyPines from commercializing its product candidates.

Even if any of TorreyPines product candidates receive regulatory approval, they may still face future development and regulatory difficulties.

If any of TorreyPines product candidates receive regulatory approval, the FDA and foreign regulatory authorities may still impose significant restrictions on the uses or marketing of the product candidates or impose on-going requirements for post-approval studies. In addition, regulatory agencies subject a product, its manufacturer and the manufacturer s facilities to continuing review and periodic inspections. If previously unknown problems with a product or its manufacturing facility are discovered, a regulatory agency may impose restrictions on that product, TorreyPines, or its partners, including requiring withdrawal of the product from the market. TorreyPines product candidates will also be subject to on-going FDA requirements for submission of safety and other post-market information. If TorreyPines product candidates fail to comply with applicable regulatory requirements, a regulatory agency may:

- issue warning letters;
- impose civil or criminal penalties;
- suspend regulatory approval;
- suspend any on-going clinical trials;
- refuse to approve pending applications or supplements to approved applications filed by TorreyPines or its collaborators;
- impose restrictions on operations, including costly new manufacturing requirements; or
- seize or detain products or require a product recall.

In order to market any products outside of the U.S., TorreyPines and its partners must establish and comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy. Approval procedures vary among countries and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries might differ from that required to obtain FDA approval. The regulatory approval process in other countries may include all of the risks detailed above regarding FDA approval in the U.S. Regulatory approval in one country does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country may negatively impact the regulatory process in others. Failure to obtain regulatory approval in other countries or any delay or setback in obtaining such approval could have the same adverse effects described above regarding FDA approval in the U.S., including the risk that TorreyPines product candidates may not be approved for all indications requested, which could limit the uses of its product candidates and adversely impact potential royalties and product sales, and that such approval may be subject to limitations on the indicated uses for which the product may be marketed or require costly, post-marketing follow-up studies.

If TorreyPines and its partners fail to comply with applicable foreign regulatory requirements, TorreyPines and its partners may be subject to fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

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If TorreyPines competitors have products that are approved faster, marketed more effectively or demonstrated to be more effective than TorreyPines products, then TorreyPines commercial opportunity will be reduced or eliminated.

The biotechnology and biopharmaceutical industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. TorreyPines face competition from many different sources, including commercial pharmaceutical and biotechnology enterprises, academic institutions, government agencies and private and public research institutions. Due to the high demand for treatments in the areas in which TorreyPines is competing, research is intense and new treatments are being sought out and developed by TorreyPines competitors.

In addition, many other competitors are developing products for the treatment of the diseases TorreyPines is targeting and if successful, these products could compete with TorreyPines products. If TorreyPines receives approval to market and sell any of its product candidates, it may compete with these companies and their products as well as others in varying stages of development.

Many of TorreyPines competitors have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, clinical trials, regulatory approvals and marketing approved products than TorreyPines does. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. TorreyPines competitors may succeed in developing technologies and therapies that are more effective, better tolerated or less costly than theirs, or that would render its product candidates obsolete and noncompetitive. TorreyPines competitors may succeed in obtaining approvals from the FDA and foreign regulatory authorities for their products sooner than TorreyPines does. TorreyPines will also face competition from these third parties in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, and in acquiring and in-licensing technologies and products complementary to TorreyPines programs or advantageous to its business.

TorreyPines is subject to uncertainty relating to health care reform measures and reimbursement policies which, if not favorable to its product candidates, could hinder or prevent the commercial success of its product candidates.

The continuing efforts of the government, insurance companies, managed care organizations and other payors of health care costs to contain or reduce costs of health care may adversely affect TorreyPines:

- ability to set a price TorreyPines believe is fair for its products;
- ability to generate revenues and achieve profitability;
- future revenues and profitability of potential customers, suppliers and collaborators; and
- the availability of capital.

In certain foreign markets, the pricing of prescription drugs is subject to government control. In the U.S., given recent federal and state government initiatives directed at lowering the total cost of health care, Congress and state legislatures will likely continue to focus on health care reform, the cost of prescription drugs and the reform of the Medicare and Medicaid systems. For example, a new Medicare prescription drug benefit program began in 2006. While TorreyPines cannot predict the full outcome of the implementation of this legislation or whether any future legislative or regulatory proposals affecting its business will be adopted, the announcement or adoption of these proposals could materially and adversely affect TorreyPines business, financial condition, and results of operations.

TorreyPines ability to commercialize its product candidates successfully will depend in part on the extent to which governmental authorities, private health insurers and other organizations establish appropriate reimbursement levels for the cost of its products and related treatments. Third-party payors are increasingly

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challenging the prices charged for medical products and services. Also, the trend toward managed health care in the U.S., which could significantly influence the purchase of health care services and products, as well as legislative proposals to reform health care or reduce government insurance programs, may result in lower prices for TorreyPines product candidates or exclusion of its product candidates from reimbursement programs. The cost containment measures that health care payors and providers are instituting and the effect of any health care reform could materially and adversely affect TorreyPines results of operations.

Product liability claims may harm TorreyPines business if its insurance coverage for those claims is inadequate.

TorreyPines faces an inherent risk of product liability exposure related to the testing of its product candidates in human clinical trials, and will face an even greater risk if it sells its product candidates commercially. An individual may bring a liability claim against TorreyPines if one of its product candidates causes, or merely appears to have caused, an injury. If TorreyPines is unable to successfully defend itself against any such product liability claim, it will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for TorreyPines product candidates;
- injury to TorreyPines reputation;
- withdrawal of clinical trial participants;
- costs of related litigation;
- substantial monetary awards to patients or other claimants;
- loss of revenues; and
- the inability to commercialize TorreyPines product candidates.

TorreyPines has product liability insurance that covers its clinical trials, up to an annual aggregate limit of $5.0 million. TorreyPines intends to expand its insurance coverage to include the sale of commercial products if marketing approval is obtained for any of its product candidates. However, insurance coverage is increasingly expensive. TorreyPines may not be able to maintain insurance coverage at a reasonable cost and it may not be able to obtain insurance coverage that will be adequate to satisfy any liability that may arise.

TorreyPines uses hazardous chemicals and biological materials in its business. Any claims relating to improper handling, storage or disposal of these materials could be time-consuming and costly.

TorreyPines development processes involve the controlled use of hazardous materials, including chemicals and biological materials. TorreyPines operations produce hazardous waste products. TorreyPines cannot eliminate the risk of accidental contamination or discharge and any resultant injury from those materials. Federal, state and local laws and regulations govern the use, manufacture, storage, handling and disposal of hazardous materials. TorreyPines may be sued for any injury or contamination that results from its use or the use by third parties of these materials. Compliance with environmental laws and regulations may be expensive, and current or future environmental regulations may impair TorreyPines development and production efforts.

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Risks Related to TorreyPines Common Stock

TorreyPines stock price has been, and is expected to continue to be, volatile.

The market price of TorreyPines common stock could be subject to significant fluctuations. Market prices for securities of early-stage pharmaceutical, biotechnology and other life sciences companies have historically been particularly volatile. Some of the factors that may cause the market price of TorreyPines common stock to fluctuate include:

- announcements related to developments involving the merger with Raptor and Raptor s business, including developments relating to Raptor s product candidates and its clinical trial or preclinical study results;
- the results of any future clinical trials of TorreyPines or Raptor s product candidates;
- the results of any future preclinical studies of TorreyPines or Raptor s product 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 TorreyPines or Raptor s product candidates;
- the initiation of, material developments in, or conclusion of litigation to enforce or defend any of TorreyPines or Raptor s intellectual property rights;
- general and industry-specific economic conditions that may affect TorreyPines development expenditures;
- the results of clinical trials conducted by others on drugs that would compete with TorreyPines or Raptor s product candidates;
- issues in manufacturing TorreyPines or Raptor s product candidates or any approved products;
- the loss of key employees by TorreyPines or Raptor;
- the introduction of technological innovations or new commercial products by TorreyPines competitors;
- failure of any of TorreyPines or Raptor s product candidates, if approved, to achieve commercial success;
- changes in estimates or recommendations by securities analysts, if any, who cover TorreyPines common stock;

future sales of TorreyPines common stock;

changes in the structure of health care payment systems; and

period-to-period fluctuations in TorreyPines 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 TorreyPines 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, if instituted, could result in substantial costs and diversion of management attention and resources, which could significantly harm TorreyPines profitability and reputation.

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Anti-takeover provisions in TorreyPines stockholder rights plan and in TorreyPines 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 difficult.

TorreyPines is a party to a stockholder rights plan, also referred to as a poison pill, which is intended to deter a hostile takeover of TorreyPines by making such proposed acquisition more expensive and less desirable to the potential acquirer. The stockholder rights plan and TorreyPines 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 TorreyPines common stock.

TorreyPines largest stockholders may take actions that are contrary to your interests, including selling their stock.

A small number of TorreyPines stockholders hold a significant amount of TorreyPines outstanding stock. These stockholders may support competing transactions and have interests that are different from yours. In addition, the average number of shares of TorreyPines stock that trade each day is generally low. As a result, sales of a large number of shares of TorreyPines stock by these large stockholders or other stockholders within a short period of time could adversely affect TorreyPines stock price.

TorreyPines management has broad discretion over the use of its cash and, while management has expended significant effort to preserve cash, TorreyPines may not use its remaining cash effectively, which could adversely affect its results of operations.

TorreyPines management has significant flexibility in applying its cash resources and could use these resources for corporate purposes that do not increase TorreyPines market value, or in ways with which TorreyPines stockholders may not agree. TorreyPines may use its cash resources for corporate purposes that do not yield a significant return or any return at all for its stockholders, which may cause TorreyPines stock price to decline.

Raising additional funds by issuing securities or through collaboration and licensing arrangements may cause dilution to existing stockholders, restrict operations or require TorreyPines to relinquish proprietary rights.

TorreyPines may raise additional funds through public or private equity offerings, debt financings or corporate collaboration and licensing arrangements. To the extent that TorreyPines raises additional capital by issuing equity securities, its existing stockholders ownership will be diluted. Any debt financing TorreyPines enters into may involve covenants that restrict its operations. These restrictive covenants may include limitations on additional borrowing, specific restrictions on the use of TorreyPines assets as well as prohibitions on its ability to create liens, pay dividends, redeem stock or make investments. In addition, if TorreyPines raise additional funds through collaboration and licensing arrangements, it may be necessary to relinquish potentially valuable rights to its potential products or proprietary technologies, or grant licenses on terms that are not favorable to TorreyPines.

There is only a limited trading market for TorreyPines common stock and it is possible that investors may not be able to sell their shares easily.

There is currently only a limited trading market for TorreyPines common stock. TorreyPines common stock trades on the NASDAQ Global Market under the symbol TPTX with very limited trading volume. TorreyPines cannot assure investors that a substantial trading market will be sustained for its common stock.

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Risks Related to Raptor

In addition to the other information contained in this joint proxy statement/prospectus, you should carefully consider the material risks described below. As discussed above, TorreyPines has entered into the merger agreement with merger sub and Raptor pursuant to which merger sub will merge with and into Raptor, with Raptor as the surviving corporation becoming a wholly-owned subsidiary of TorreyPines.

Risks Related to Raptor s Business

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

Raptor s condensed consolidated financial statements as of May 31, 2009 have been prepared assuming that it will continue as a going concern. As of May 31, 2009, Raptor had an accumulated deficit of approximately $19.9 million. Raptor expects to continue to incur losses for the foreseeable future and will have to raise substantial cash to fund its planned operations.

Raptor believes that its cash and cash equivalents balances as of August 14, 2009, will be sufficient to meet its obligations into the first calendar quarter of 2010. Raptor is currently in the process of reviewing strategic partnerships and collaborations in order to fully fund its preclinical and clinical programs through the end of 2010. If Raptor is not able to close a strategic transaction, it anticipates raising additional capital in the fourth calendar quarter of 2009. These estimates are based on assumptions that may prove to be wrong. In addition to the activities described herein above, Raptor anticipates that it will need to raise funds in the future for the continued development of its drug development programs. Raptor 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 Raptor s stockholders. Additional financing, may not be available in amounts or on terms satisfactory to Raptor or at all. Raptor may be unable to raise additional financing due to a variety of factors, including its financial condition, the status of its research and development programs, and the general condition of the financial markets. If Raptor fails to raise significant additional financing, it will have to delay or terminate some or all of its research and development programs, its financial condition and operating results will be adversely affected and it may have to cease its operations.

If Raptor obtains significant additional financing, it expects to continue to spend substantial amounts of capital on its operations for the foreseeable future. The amount of additional capital it will need depends on many factors, including:

- the progress, timing and scope of its 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 its existing collaborative, licensing and other corporate relationships or any new collaborative, licensing and other commercial relationships that it may establish.

Moreover, Raptor s 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 Raptor expects to enter into:

- additional licenses and collaborative agreements;

contracts for manufacturing, clinical and preclinical research, consulting, maintenance and administrative services; and

financing facilities.

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Raptor is an early development stage company and has not generated any revenues to date and has a limited operating history. Many of Raptor s drug product candidates are in the concept stage and have not undergone significant testing in preclinical studies or any testing in clinical trials. Moreover, Raptor cannot be certain that its research and development efforts will be successful or, if successful, that its drug product candidates will ever be approved for sale or generate commercial revenues. Raptor has a limited relevant operating history upon which an evaluation of its performance and prospects can be made. Raptor is 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.

Raptor will need to make important progress towards achieving at least one of its major clinical objectives, as outlined in the section titled, Raptor s Management s Discussion and Analysis of Financial Conditions and Results of Operations in this joint proxy statement/prospectus or Raptor s ability to continue as a going concern will be adversely impacted by limiting its ability to raise additional capital.

The current disruptions in the financial markets could affect Raptor s 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 Raptor s 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 Raptor s ability to raise other types of financing.

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

All of Raptor s 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 it can market them.

Raptor cannot predict if or when any of the drug product candidates it intends to develop will be approved for marketing. There are many reasons that Raptor may fail in its efforts to develop its drug product candidates. These include:

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

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the proprietary rights of other parties may prevent Raptor or its potential collaborative partners from marketing its drug product candidates.

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

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

Raptor has 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 Raptor s product development programs. These agreements may be terminated, and all rights to the technologies and product candidates will be lost, if Raptor fails to perform its obligations under these agreements and licenses in accordance with their terms including, but not limited to, Raptor s ability to make all payments due under such agreements. Raptor s inability to continue to maintain these technologies could materially adversely affect Raptor s business, prospects, financial condition, and operating results. In addition, Raptor s business strategy depends on the successful development of these licensed and acquired technologies into commercial products, and, therefore, any limitations on Raptor s ability to utilize these technologies may impair its ability to develop, out-license, market and sell its product candidates, delay new product introductions, and/or adversely affect its reputation, any of which could have a material adverse effect on Raptor s business, prospects, financial condition, and operating results.

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

Raptor 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 Raptor upon the occurrence of certain events, including if Raptor enters into certain bankruptcy proceedings or if Raptor materially breaches its payment obligations and fail to remedy the breach within the permitted cure periods. Although Raptor is not currently involved in any bankruptcy proceedings or in breach of these agreements, there is a risk that it may be in the future, giving BioMarin, Washington University and UCSD the right to terminate their respective agreements with Raptor. Raptor has 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, Raptor would be forced to assign back to BioMarin, in the case of the BioMarin agreement, all of Raptor s rights, title and interest in and to the intellectual property related to the RAP technology, would lose Raptor s rights to the Mesd technology, in the case of the Washington University agreement and would lose Raptor s rights to DR Cysteamine, in the case of UCSD. Under such circumstances, Raptor would have no further right to use or exploit the patents, copyrights or trademarks in those respective technologies. If this happens, Raptor will have to delay or terminate some or all of its research and development programs, Raptor s financial condition and operating results will be adversely affected, and it may have to cease its operations. If Raptor loses its rights to the intellectual property related to the RAP technology purchased by Raptor from BioMarin, Raptor s agreement with Roche would likely be terminated and any milestone or royalty payments from Roche to Raptor would thereafter cease to accrue.

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If Raptor fails to compete successfully with respect to acquisitions, joint venture and other collaboration opportunities, it may be limited in its ability to develop its drug product candidates.

Raptor s competitors compete with Raptor 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 Raptor s competitors successfully enter into partnering arrangements or license agreements with academic research institutions, Raptor will then be precluded from pursuing those specific opportunities. Since each of these opportunities is unique, Raptor may not be able to find a substitute. Other companies have already begun many drug development programs, which may target diseases that Raptor is 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 Raptor. While these organizations primarily have educational or basic research objectives, they may develop proprietary technology and acquire patents that Raptor may need for the development of its drug product candidates. Raptor will attempt to license this proprietary technology, if available. These licenses may not be available to Raptor on acceptable terms, if at all. If Raptor is unable to compete successfully with respect to acquisitions, joint venture and other collaboration opportunities, Raptor may be limited in its ability to develop new products.

If Raptor does not achieve its projected development goals in the time frames it announces and expects, the credibility of its management and its technology may be adversely affected and, as a result, Raptor s financial condition may suffer.

For planning purposes, Raptor estimates the timing of the accomplishment of various scientific, clinical, regulatory and other product development goals, which Raptor sometimes refers 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, Raptor 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 its estimates, in many cases for reasons beyond Raptor s control. If Raptor does not meet these milestones as publicly announced, its stockholders may lose confidence in Raptor s ability to meet these milestones and, as a result, the price of its common stock may decline.

Raptor s product development programs will require substantial additional future funding which could impact its operational and financial condition.

It will take several years before Raptor is able to develop marketable drug product candidates, if at all. Raptor s 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.

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

the pace of scientific progress in its research and development programs and the magnitude of these programs;

the scope and results of preclinical testing and human clinical trials;

Raptor s ability to obtain, and the time and costs involved in obtaining regulatory approvals;

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Raptor s 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;

Raptor s ability to establish additional collaborations;

changes in Raptor s existing collaborations;

the cost of manufacturing scale-up; and

the effectiveness of Raptor s commercialization activities.

Raptor bases its outlook regarding the need for funds on many uncertain variables. Such uncertainties include the success of Raptor s research initiatives, regulatory approvals, the timing of events outside its direct control such as negotiations with potential strategic partners and other factors. Any of these uncertain events can significantly change Raptor s 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 Raptor s operations and if Raptor is unable to obtain them on favorable terms, it may be required to cease or reduce further development or commercialization of its drug product programs, to sell some or all of its technology or assets, to merge with another entity or cease operations.

If Raptor fails to demonstrate efficacy in its preclinical studies and clinical trials Raptor s future business prospects, financial condition and operating results will be materially adversely affected.

The success of Raptor s development and commercialization efforts will be greatly dependent upon its 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. Raptor may decide to suspend further testing on its drug product candidates or technologies if, in the judgment of Raptor s 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 Raptor 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 Raptor s drug product candidates are safe for humans and effective for indicated uses. This failure would cause Raptor to abandon a drug product candidate and may delay development of other drug product candidates. Any delay in, or termination of, Raptor s preclinical testing or clinical trials will delay the filing of its investigational new drug application, or IND, and new drug application, or NDA, as applicable, with the FDA and, ultimately, Raptor s ability to commercialize its drug product candidates and generate product revenues. In addition, some of Raptor s 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 Raptor s 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;

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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.

Raptor s ability to sustain its 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 Raptor s 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 Raptor s clinical trials would have a material adverse effect on its future business prospects, financial condition and operating results.

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

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

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

Raptor does not currently manufacture its 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. Raptor s 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, Raptor s 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 Raptor s third party manufacturer and key supplier facilities as part of their review of any Raptor NDAs. If Raptor s 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

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facilities are applied on the basis of the specific facility being used to produce supplies. As a result, if a manufacturer for Raptor 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. Raptor 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 Raptor third party manufacturer s or key supplier s failure to adhere to applicable laws or for other reasons, Raptor may not be able to obtain regulatory approval for or successfully commercialize its products.

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

As part of Raptor s business strategy, Raptor intends 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 Raptor s drug products is particularly limited, orphan drug designation is especially important for its products that are eligible for orphan drug designation. For eligible drugs, Raptor plans to rely on the exclusivity period under Orphan Drug Act designation to maintain a competitive position. If Raptor does not obtain orphan drug exclusivity for its drug products that do not have patent protection, Raptor s competitors may then sell the same drug to treat the same condition and Raptor s revenues will be reduced.

Even though Raptor has 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 Raptor obtains orphan drug designation for its future drug product candidates, due to the uncertainties associated with developing pharmaceutical products, Raptor may not be the first to obtain marketing approval for any orphan indication. Further, even if Raptor obtains 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 Raptor s 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 Raptor s products will delay revenue from the sale of the products and will increase the capital necessary to fund these product development programs.

Although Raptor has received Orphan Drug Designations from the FDA as described above, Raptor s 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

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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 Raptor s 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 Raptor s 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 Raptor s products are small, Raptor must achieve significant market share and obtain high per-patient prices for its products to achieve profitability.

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

Raptor may not be able to market or generate sales of its products to the extent anticipated.

Assuming that Raptor is successful in developing its drug product candidates and receive regulatory clearances to market its products, Raptor s 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 Raptor s 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 Raptor s.
- Information from Raptor s competitors or the academic community indicating that current products or new products are more effective than Raptor s future products could, if and when it is generated, impede Raptor s market penetration or decrease its future market share.
- Physicians may be reluctant to switch from existing treatment methods, including traditional therapy agents, to Raptor s future products.
- The price for Raptor s future products, as well as pricing decisions by Raptor s competitors, may have an effect on Raptor s revenues.
- Raptor s 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 Raptor s future products.

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

Raptor s RAP technology has a potential clinical use as a drug transporter through the blood-brain barrier. However, Raptor does not know that its 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 its RAP technology, Raptor will certainly face many of the same issues that have caused these earlier attempts to fail. It is possible that:

Raptor or its collaborator/licensee will not be able to produce enough RAP drug product candidates for testing;

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the pharmacokinetics, or where the drug distributes in the body, of Raptor s 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 Raptor s RAP drug product candidates into the brain;

targeting of the selected receptors induces harmful side-effects which prevent their use as drugs; or

that Raptor or its collaborator/licensee s RAP drug product candidates themselves 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 Raptor s competitors succeed in developing products and technologies that are more effective than its own, or if scientific developments change Raptor s understanding of the potential scope and utility of its drug product candidates, then Raptor s technologies and future drug product candidates may be rendered less competitive.

Raptor faces significant competition from industry participants that are pursuing similar technologies that Raptor is pursuing and are developing pharmaceutical products that are competitive with Raptor s drug product candidates. Nearly all of Raptor s 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 Raptor does. With these additional resources, Raptor s competitors may be able to respond to the rapid and significant technological changes in the biotechnology and pharmaceutical industries faster than Raptor can. Raptor s future success will depend in large part on its ability to maintain a competitive position with respect to these technologies. Rapid technological development, as well as new scientific developments, may result in Raptor s compounds, drug product candidates or processes becoming obsolete before Raptor can recover any of the expenses incurred to develop them. For example, changes in Raptor s understanding of the appropriate population of patients who should be treated with a targeted therapy like Raptor is 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.

Raptor s 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 Raptor s agreements with them.

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

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

Licensing Raptor 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 Raptor. While Raptor seeks patent protection for all of its owned and licensed product candidates, Raptor s 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 Raptor. By virtue of the previous research that led to the discovery of the drugs or product candidates that they licensed or assigned to Raptor, 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 Raptor s future revenues from such product candidates.

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

Even if Raptor obtains FDA approval to market its potential products in the United States, Raptor s sales in the United States may be reduced if Raptor s 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, the Raptor s potential future revenues could be reduced.

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

The nature of Raptor s business exposes it to potential liability risks inherent in the testing, manufacturing and marketing of Raptor s drug product candidates. While Raptor is in clinical stage testing, its drug product candidates could potentially harm people or allegedly harm people and Raptor 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 Raptor obtains may not be enforceable and may not protect Raptor from liability or the costs of product liability litigation. Although Raptor currently carries a $3 million clinical product liability insurance policy, it may not be sufficient to cover future claims. Raptor currently does not have any clinical or product liability claims or threats of claims filed against it.

Raptor s future success depends, in part, on the continued service of its management team.

Raptor s success is dependent in part upon the availability of its senior executive officers, including its Chief Executive Officer, Dr. Christopher M. Starr, its Chief Scientific Officer, Dr. Todd C. Zankel, its Chief Financial Officer, Kim R. Tsuchimoto, Ted Daley, the President of Raptor s clinical development subsidiary and Dr. Patrice P. Rioux, Chief Medical Officer of Raptor s clinical development subsidiary. The loss or unavailability to Raptor of any of these individuals or key research and development personnel, and particularly if lost to competitors, could have a material adverse effect on Raptor s business, prospects, financial condition, and operating results. Raptor has no key-man insurance on any of its employees.

Raptor s success depends on its ability to manage its growth.

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

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

Raptor s 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 its facility and equipment, or that of its third-party manufacturers or single-source suppliers, which could materially impair Raptor s ability to continue its product development programs.

Raptor s 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. Raptor and the third-party manufacturers with whom it contracts and Raptor s 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, Raptor s ability to continue its product development programs, could be seriously, or potentially completely impaired. The insurance Raptor maintains may not be adequate to cover its losses resulting from disasters or other business interruptions.

Raptor will incur increased costs as a result of recently enacted and proposed changes in laws and regulations.

Raptor faces 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 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 Raptor s, including increases in consulting, auditing and legal fees. New rules could make it more difficult or more costly for Raptor to obtain certain types of insurance, including directors and officers liability insurance, and Raptor 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 Raptor to attract and retain qualified persons to serve on its board of directors, its board committees or as executive officers. Failure to comply with these new laws and regulations may impact market perception of Raptor s financial condition and could materially harm its business. Additionally, it is unclear what additional laws or regulations may develop, and Raptor cannot predict the ultimate impact of any future changes in law.

Risks Related to Raptor s Intellectual Property

If Raptor is unable to protect its proprietary technology, Raptor may not be able to compete as effectively and Raptor s business and financial prospects may be harmed.

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

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The patent positions of biopharmaceutical products are complex and uncertain.

Raptor owns or licenses patent applications related to certain of its drug product candidates. However, these patent applications do not ensure the protection of Raptor s intellectual property for a number of reasons, including the following:

- Raptor does not know whether its patent applications will result in issued patents. For example, Raptor may not have developed a method for treating a disease before others developed similar methods.

- Competitors may interfere with Raptor s patent process in a variety of ways. Competitors may claim that they invented the claimed invention prior to Raptor. Competitors may also claim that Raptor is infringing on their patents and therefore cannot practice Raptor s technology as claimed under its patents, if issued. Competitors may also contest Raptor s 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 Raptor s patents, if issued, are not valid for a number of reasons. If a court agrees, Raptor would lose that patent. As a company, Raptor has no meaningful experience with competitors interfering with its patents or patent applications.

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

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

- In addition, competitors also seek patent protection for their technology. Due to the number of patents in Raptor s field of technology, Raptor cannot be certain that it does not infringe on those patents or that Raptor will not infringe on patents granted in the future. If a patent holder believes Raptor s drug product candidate infringes on its patent, the patent holder may sue Raptor even if Raptor has received patent protection for Raptor s technology. If someone else claims Raptor infringes on their technology, Raptor would face a number of issues, including the following:

  - Defending a lawsuit takes significant time and can be very expensive.

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

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

  - Redesigning Raptor s drug product candidates so it does not infringe may not be possible or could require substantial funds and time.

It is also unclear whether Raptor s trade secrets are adequately protected. While Raptor uses reasonable efforts to protect its trade secrets, Raptor s employees or consultants may unintentionally or willfully disclose Raptor s information to competitors.

Enforcing a claim that someone else illegally obtained and is using Raptor s 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. Raptor s competitors may independently develop equivalent knowledge, methods and know-how.

Raptor 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 Raptor any exclusive rights to technology or products derived from these collaborations prior to entering into the relationship.

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If Raptor does not obtain required licenses or rights, Raptor could encounter delays in its product development efforts while it attempts 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 Raptor is sued for infringing intellectual property rights of other parties, such litigation will be costly and time consuming, and an unfavorable outcome would have a significant adverse effect on the business of Raptor.

Although Raptor believes that it would have valid defenses to allegation that its current product candidates, production methods and other activities infringe the valid and enforceable intellectual property rights of any third parties of which it is aware, Raptor cannot be certain that a third party will not challenge its position in the future. Other parties may own patent rights that might be infringed by Raptor s product candidates or other activities. There has been and Raptor believes that there will continue to be, significant litigation and demands for licenses in the life sciences industry regarding patent and other intellectual property rights. Competitors or other patent holders may assert that Raptor product candidates and the methods Raptor employs are covered by their patents. These parties could bring claims against Raptor that would cause it to incur substantial expenses and, if successful against Raptor, could cause it to pay substantial damages or possibly prevent it from commercializing its product candidates. Further, if a patent infringement suit were brought against Raptor, Raptor could be forced to stop or delay research or development of the product candidate that is the subject of the lawsuit.

As a result of patent infringement claims, or in order to avoid potential claims, Raptor may choose to seek, or be required to seek, a license from the third party and would likely be required to pay license fees or royalties or both. These licenses may not be available on acceptable terms, or at all. Even if Raptor was able to obtain a license, the rights may be non-exclusive, which would give competitors access to the same intellectual property. Ultimately, Raptor could be prevented from commercializing a product candidate, or be forced to cease some aspect of its business operations if, as a result of actual or threatened patent infringement clams, Raptor or its collaborators are unable to enter into licenses on acceptable terms. This could harm Raptor s business significantly.

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

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

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Risks Related to Raptor s Common Stock

Raptor is obligated to issue additional common stock based on its contractual obligations, if Raptor meets certain triggering events, if at all. When Raptor issues 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 Stockholders discussed elsewhere in this joint proxy statement/prospectus, relating to Raptor s acquisition of the Convivia assets and merger with Encode will result in dilution. Raptor may be required to make additional contingent payments of up to 3.1 million shares of its common stock, in the aggregate, under the terms of Raptor s 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 Raptor s existing stockholders.

In May and June 2008, pursuant to a securities purchase agreement for a private placement of units, Raptor issued 20 million shares of its common stock and two-year warrants to purchase up to, in the aggregate, 10 million shares of Raptor s common stock as well as five-year warrants to purchase up to, in the aggregate, 2.1 million shares of Raptor s common stock to placement agents in such private placement. On April 29, 2009, in order to reflect current market prices, Raptor notified the holders of warrants purchased in the May/June 2008 private placement that Raptor was offering, in exchange for such warrants, new warrants to purchase Raptor s 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, occured 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. Raptor received approximately $2.6 million of proceeds from warrant exercises that resulted in the issuance of 8,715,000 shares of Raptor s common stock pursuant to the exchange described above. These stock issuances and other future issuances of common stock underlying unexpired and unexercised warrants have and will result in, significant dilution to Raptor s stockholders.

In connection with other collaborations, joint ventures or license agreements that Raptor may enter into in the future, Raptor 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 Raptor s existing and future common stockholders.

There is no active trading market for Raptor s common stock and if a market for its common stock does not develop, Raptor s investors will be unable to sell their shares.

There is currently no active trading market for Raptor s common stock and such a market may not develop or be sustained. Shares of Raptor s common stock are eligible for quotation on the FINRA OTC Bulletin Board but there has been very limited trading of Raptor s common stock. Raptor cannot provide its investors with any assurance that a public market will materialize.

Further, the OTC Bulletin Board is not a listing service or exchange, but is instead a dealer quotation service for subscribing members. If Raptor s common stock is not quoted on the OTC Bulletin Board or if a public market for Raptor s common stock does not develop, then investors may not be able to resell the shares of Raptor s common stock that they have purchased and may lose all of their investment. If Raptor establishes a trading market for its common stock, the market price of its common stock may be significantly affected by factors such as actual or anticipated fluctuations in Raptor s operating results, Raptor s ability or perceived ability to reach corporate milestones, general market conditions and other factors. In addition, the stock market has from time to time experienced significant price and volume fluctuations that have particularly affected the market prices for the shares of development stage companies. As Raptor is a development stage company such fluctuations may negatively affect the market price of Raptor s common stock.

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Because Raptor does not intend to pay any cash dividends on its common stock, investors seeking dividend income or liquidity should not purchase shares of Raptor s common stock.

Raptor has not declared or paid any cash dividends on its common stock since its inception, and Raptor does not anticipate paying any such cash dividends for the foreseeable future. Investors seeking dividend income or liquidity should not invest in Raptor s common stock.

Raptor s stock is a penny stock. Trading of Raptor s 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 Raptor s stock.

Raptor s common stock is a penny stock. The SEC has adopted Rule 15g-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. Raptor s 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 Raptor s securities. Raptor believes that the penny stock rules discourage investor interest in and limit the marketability of Raptor s common stock.

In addition to the penny stock rules promulgated by the SEC, the 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 Raptor s common stock, which may limit your ability to buy and sell Raptor s stock.

Raptor s stock price may be volatile, and an investment in Raptor s stock could suffer a decline in value.

If Raptor establishes a trading market for its common stock, the market price of that stock is likely to fluctuate due to factors including:

- results of its preclinical studies and clinical trials;
- commencement and progress of its drug product candidates through the regulatory process;
- announcements of technological innovations or new products by Raptor or its competitors;
- government regulatory action affecting Raptor s drug product candidates or its competitors drug products in both the U.S. and foreign countries;

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developments or disputes concerning patent or proprietary rights;

general market conditions and fluctuations for the emerging growth biotechnology and pharmaceutical market sectors;

economic conditions and broad market fluctuations in the U.S. or abroad; and

actual or anticipated fluctuations in Raptor s operating results.

Anti-takeover provisions under Delaware law may make an acquisition of Raptor, which may be beneficial to its stockholders, more difficult.

Raptor is incorporated in Delaware. Certain anti-takeover provisions of Delaware law as currently in effect may make a change in control of Raptor more difficult, even if a change in control would be beneficial to the stockholders. In December 2008, Raptor entered into a stockholder rights plan with Nevada Agency and Transfer Company, as Rights Agent. The terms of the stockholder rights plan provide for a dividend distribution, as authorized and declared by Raptor s board of directors, of one preferred stock purchase right for each outstanding share of Raptor s common stock to stockholders of record on and after the close of business on December 19, 2008. Each such right entitles the registered holder to purchase from Raptor one one-thousandth of one share of Series A junior participating preferred stock, par value $0.001 per share, of Raptor, at a purchase price equal to $5.50 per right, subject to adjustment. The rights will, subject to certain exceptions, cause substantial dilution to a person or group that acquires 20% or more of Raptor s common stock on terms not approved by Raptor s board of directors. However, the rights may have the effect of making an acquisition of Raptor, which may be beneficial to its stockholders, more difficult, and the existence of such rights may prevent or reduce the likelihood of a third-party making an offer for an acquisition of Raptor. In connection with the stockholder rights plan, Raptor s board of directors designated 1,000,000 shares of preferred stock as Series A junior participating preferred stock, as set forth in the Certificate of Designation of Series A Junior Participating Preferred Stock. The Certificate of Designation, which amended Raptor s Certificate of Incorporation, was filed with the Secretary of State of the State of Delaware on December 9, 2008. On July 27, 2009, Raptor and the Rights Agent amended the stockholder rights plan to exclude the merger between TorreyPines and Raptor from becoming a triggering event under the plan.

Raptor s board of directors has the authority to issue up to 10,000,000 shares of preferred stock, none of which are issued or outstanding and to determine without any further action by Raptor s stockholders the terms of 9,000,000 shares of such preferred stock. The rights of holders of Raptor s common stock are subject to the rights of the holders of any preferred stock that may be issued. The issuance of preferred stock could make it more difficult for a third-party to acquire a majority of Raptor s outstanding voting stock. Raptor s charter contains provisions that may enable Raptor s management to resist an unwelcome takeover attempt by a third party, including: a prohibition on actions by written consent of Raptor s stockholders; the fact that stockholder meetings must be called by Raptor s board of directors; and provisions requiring stockholders to provide advance notice of proposals. Delaware law also prohibits corporations from engaging in a business combination with any holders of 15% or more of their capital stock until the holder has held the stock for three years unless, among other possibilities, the board of directors approves the transaction. Raptor s board of directors may use these provisions to prevent changes in the management and control of Raptor. Also, under applicable Delaware law, Raptor s board of directors may adopt additional anti-takeover measures in the future.

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Risks Related to the Combined Company

In determining whether you should approve the merger, the issuance of shares of TorreyPines common stock and other matters related to the merger, as the case may be, you should carefully read the following risk factors in addition to the risks described under Risk Factors Risks Related to TorreyPines and Risk Factors Risks Related to Raptor, which will also apply to the combined company.

The combined company s stock price is expected to be volatile, and the market price of its common stock may drop following the merger.

The market price of the combined company s common stock could be subject to significant fluctuations following the merger. Market prices for securities of early-stage pharmaceutical, biotechnology and other life sciences companies have historically been particularly volatile. Some of the factors that may cause the market price of the combined company s common stock to fluctuate include:

- the results of the combined company s current and any future clinical trials of its drug candidates;
- the results of ongoing preclinical studies and planned clinical trials of the combined company s 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 the combined company s drug candidates;
- the initiation of, material developments in, or conclusion of litigation to enforce or defend any of the combined company s intellectual property rights;
- failure of any of the combined company s drug candidates, if approved, to achieve commercial success;
- general and industry-specific economic conditions that may affect the combined company s research and development expenditures;
- the results of clinical trials conducted by others on drugs that would compete with the combined company s drug candidates;
- issues in manufacturing the combined company s drug candidates or any approved products;
- the loss of key employees;
- the introduction of technological innovations or new commercial products by competitors of the combined company;
- changes in estimates or recommendations by securities analysts, if any, who cover the combined company s common stock;
- future sales of the combined company s common stock;

changes in the structure of health care payment systems; and

period-to-period fluctuations in the combined company s 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 the combined company s 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, if instituted, could result in substantial costs and diversion of management attention and resources, which could significantly harm the combined company s profitability and reputation.

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The combined company s management will be required to devote substantial time to comply with public company regulations.

The Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, as well as rules subsequently implemented by the SEC and NASDAQ, impose various requirements on public companies, including with respect to corporate governance practices. The combined company s 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 the combined company maintain effective internal controls for financial reporting and disclosure controls and procedures. In particular, the combined company must perform system and process evaluation and testing of its internal controls over financial reporting to allow management to report on the effectiveness of its internal controls over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. The combined company s compliance with Section 404 will require that it incur substantial accounting and related expense and expend significant management efforts. The combined company may need to hire additional accounting and financial staff to satisfy the ongoing requirements of Section 404. Moreover, if the combined company is not able to comply with the requirements of Section 404, or if the combined company or its independent registered public accounting firm identifies deficiencies in its internal controls over financial reporting that are deemed to be material weaknesses, the market price of the combined company s stock could decline and the combined company could be subject to sanctions or investigations by NASDAQ, the SEC or other regulatory authorities.

Anti-takeover provisions in the combined company s stockholder rights plan and in its 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 the combined company difficult.

The combined company will be party to a stockholder rights plan, also referred to as a poison pill, which is intended to deter a hostile takeover of the combined company by making such proposed acquisition more expensive and less desirable to the potential acquirer. The stockholder rights plan and the combined company s certificate of incorporation and bylaws, as amended, will 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 the combined company s common stock.

The pro forma financial statements are presented for illustrative purposes only and may not be an indication of the combined company s financial condition or results of operations following the merger.

The pro forma financial statements contained in this proxy statement/prospectus are presented for illustrative purposes only and may not be an indication of the combined company s financial condition or results of operations following the merger for several reasons. For exampled, the pro forma financial statements have been derived from the historical financial statements of TorryPines and Raptor and certain adjustments and assumptions have been made regarding the combined company after giving effect to the merger. The information upon which these adjustments and assumptions have been made is preliminary, and these kinds of adjustments and assumptions are difficult to make with complete accuracy. Moreover, the pro forma financial statements do not reflect all costs that are expected to be incurred by the combined company in connection with the merger. For example, the impact of any incremental costs incurred in integrating the two companies is not reflected in the pro forma financial statements. As a result, the actual financial condition and results of operations of the combined company following the merger may not be consistent with, or evident from, these pro forma financial statements.

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The combined company may continue to incur losses for the foreseeable future, and might never achieve profitability.

TorreyPines began operations in 1997 and has incurred a net operating loss in each year since its inception, and TorreyPines may never achieve profitability. As of June 30, 2009, TorreyPines had an accumulated deficit of approximately $121.9 million. Raptor began operations in 2005 and has incurred a net operating loss in each year since its inception, and Raptor may never achieve profitability. As of May 31, 2009, Raptor had an accumulated deficit of approximately $19.9 million. Raptor expects to continue to incur losses for the foreseeable future and will have to raise substantial cash to fund its planned operations.

Raptor believes that its cash and cash equivalents balances as of August 14, 2009, will be sufficient to meet its obligations into the first calendar quarter of 2010. Raptor is currently in the process of reviewing strategic partnerships and collaborations in order to fully fund its preclinical and clinical programs through the end of 2010. If Raptor is not able to close a strategic transaction, it anticipates raising additional capital in the fourth calendar quarter of 2009. These estimates are based on assumptions that may prove to be wrong. In addition to the activities described herein above, Raptor anticipates that it will need to raise funds in the future for the continued development of its drug development programs. Raptor 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 Raptor s stockholders. Additional financing, may not be available in amounts or on terms satisfactory to Raptor or at all. Raptor may be unable to raise additional financing due to a variety of factors, including its financial condition, the status of its research and development programs, and the general condition of the financial markets. If Raptor fails to raise significant additional financing, it will have to delay or terminate some or all of its research and development programs, its financial condition and operating results will be adversely affected and it may have to cease its operations.

Based upon the combined company s plan to seek strategic partners or seek program-based funding for the TorreyPines pain programs within the TorreyPines subsidiary and the continuation of Raptor s existing plan of operations, the combined company anticipates that the cash estimated to be available at the time of the merger closing, should be sufficient to fund the combined company s operations into the first quarter of 2010. After the merger closing, the combined company will continue to seek strategic development partnerships for ex-US markets for some of its clinical programs, which may defer or negate the need to raise more capital in the fourth quarter of 2009. There can be no assurance that the combined company will be able to identify appropriate strategic development partners or, if it is able to, that it will be able to enter into mutually acceptable agreements with them on terms that are satisfactory to the combined company, or at all. If the combined company is unable to enter into such strategic partnerships, the combined company anticipates raising additional capital in the fourth quarter of 2009; however, there can be no assurance that the combined company will be able to obtain any funding as described herein.

The combined company may never become profitable, even if the combined company is able to commercialize additional products. The combined company will need to conduct significant research, development, testing and regulatory compliance activities that, together with projected general and administrative expenses, is expected to result in substantial increased operating losses for at least the next several years. Even if the combined company does achieve profitability, it may not be able to sustain or increase profitability on a quarterly or annual basis.

The combined company may be required to suspend, repeat or terminate its 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 the combined company s business and financial condition.

Before regulatory approval for any potential product can be obtained, the combined company must undertake extensive clinical testing on humans to demonstrate the tolerability and efficacy of the product, both on its own terms, and as compared to the other principal drugs on the market that have the same therapeutic

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indication. The combined company cannot assure you that it will obtain authorization to permit product candidates that are already in the preclinical development phase to enter the human clinical testing phase. In addition, the combined company cannot assure you that any authorized preclinical or clinical testing will be completed successfully within any specified time period by the combined company, or without significant additional resources or expertise to those originally expected to be necessary. The combined company cannot assure you 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, the combined company 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. The combined company will rely on third parties, such as contract research organizations and/or co-operative groups, to assist it 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 the combined company 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 the combined company s business and financial condition.

Even if the combined company s drug candidates are successful in clinical trials, the combined company may not be able to successfully commercialize them, which may adversely affect the combined company s future revenues and financial condition.

Since TorreyPines inception in 1997 and since Raptor began operations in 2002, both companies have dedicated substantially all of their resources to the research and development of their technologies and related compounds. All of TorreyPines and Raptor s compounds currently are preclinical or clinical development, and none have been submitted for marketing approval. The combined company s preclinical compounds may not enter human clinical trials on a timely basis, if at all, and the combined company may not develop any product candidates suitable for commercialization.

Prior to commercialization, each product candidate will require significant additional research, development and preclinical testing and extensive clinical investigation before submission of any regulatory application for marketing approval. Potential products that appear to be promising at early stages of development may not reach the market for a number of reasons, including that they may:

- be found ineffective or cause harmful side effects during preclinical testing or clinical trials;
- fail to receive necessary regulatory approvals;
- be difficult to manufacture on a large scale;
- be uneconomical to produce;
- fail to achieve market acceptance; or
- be precluded from commercialization by proprietary rights of third parties.

The combined company s product development efforts or the combined company s collaborative partners efforts may not be successfully completed and the combined company may not obtain required regulatory approvals. Any products, if introduced, may not be successfully marketed nor achieve customer acceptance, which may adversely affect the combined company s future revenues and financial condition.

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If the combined company fails to establish and maintain collaborations or if its partners do not perform, the combined company may be unable to develop and commercialize its product candidates, which may adversely affect the combined company s future revenues and financial condition.

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

The combined company s dependence on collaborative arrangements with third parties will subject it to a number of risks that could harm the combined company s ability to develop and commercialize products:

- collaborative arrangements might not be on terms favorable to the combined company;
- 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;
- the combined company 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 the combined company s products, 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 the combined company s;
- agreements with partners may expire or be terminated without renewal, or partners may breach collaboration agreements with the combined company;
- business combinations or significant changes in a partner s business strategy might adversely affect that partner s willingness or ability to complete its obligations to the combined company; and
- the terms and conditions of the relevant agreements may no longer be suitable.

TorreyPines and Raptor cannot assure you that the combined company will be able to negotiate future collaboration agreements or that those currently in existence will make it possible for the combined company to fulfill its objectives.

The combined company may not complete its clinical trials in the time expected, which could delay or prevent the commercialization of its products, which may adversely affect the combined company s future revenues and financial condition.

Although for planning purposes TorreyPines and Raptor 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 the combined company s product candidates may not commence nor be completed as forecasted. In certain circumstances the combined company will rely on academic institutions or clinical research organizations to conduct, supervise or monitor some or all aspects of clinical trials involving the combined company s products. The combined company will have less control over the timing and other aspects of these clinical trials than if it conducted them entirely on its own. These trials may not commence or be completed as either TorreyPines or Raptor expect. They may not be conducted successfully. Failure to commence or complete, or delays in, any of the combined company s planned clinical trials could delay or prevent the commercialization of the combined company s products and harm its

business and may adversely affect the combined company s future revenues and financial condition.

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If the combined company fails to keep pace with rapid technological change in the biotechnology and pharmaceutical industries, its products could become obsolete, which may adversely affect the combined company s future revenues and financial condition.

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

If the combined company loses key personnel or is unable to attract and retain additional personnel, the combined company may be unable to pursue collaborations or develop its own products, which could negatively impact the combined company s product candidate development timelines and may adversely affect the combined company s future revenues and financial condition.

The success of the merger will depend in part on the combined company s ability to retain personnel currently employed by Raptor and those key TorreyPines employees who continue employment with the combined company or an affiliate thereof for a transitional period after the merger. It is possible that these employees might decide not to remain with the combined company after the merger is completed. The loss of any key members of the combined company s scientific or management staff, or failure to attract or retain other key scientific employees, could prevent the combined company from pursuing collaborations or developing its products and core technologies. Recruiting and retaining qualified scientific personnel to perform research and development work are critical to the combined company s success. 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, the combined company will rely on consultants and advisors, including scientific and clinical advisors, to assist it in formulating its research and development strategy. All of the combined company s 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 the combined company. There is no assurance that the combined company 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, the combined company s development activities might be adversely affected, management s attention might be diverted from successfully integrating operations to hiring suitable replacements, and the combined company s business might suffer. In addition, the combined company might not be able to locate suitable replacements for any key employees that leave TorreyPines prior to closing the merger or Raptor, and the combined company may not be able to offer employment to potential replacements on reasonable terms, which could negatively impact the combined company s product candidate development timelines and may adversely affect the combined company s future revenues and financial condition.

TorreyPines stockholders will have limited ability to influence the combined company s actions and decisions following the merger.

Following the merger, original TorryPines stockholders will own 5 percent of the outstanding shares of common stock of the combined company. As a result, original TorryPines stockholders will have only limited ability to influence the combined company s business. Original TorryPines stockholders will not have separate approval rights with respect to any actions or decisions of the combined company or have separate representation on the combined company s board of directors.

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If the combined company is not successful in integrating TorreyPines and Raptor, then the benefits of the merger will not be fully realized and the market price of the combined company s common stock may be negatively affected.

The combined company may not achieve successful integration of TorreyPines and Raptor s assets in a timely manner, or at all, and the combined company may not realize the benefits and synergies of the merger to the extent, or in the timeframe, anticipated. TorreyPines and Raptor entered into the merger agreement with the expectation that the merger will result in benefits arising out of the combination of the companies. The successful integration of TorreyPines and Raptor will require, among other things, integration of assets. It is possible that the integration process could result in the loss of key employees, diversion of management s attention, the disruption or interruption of, or the loss of momentum in, on-going business or inconsistencies in standards, controls, procedures and policies, any of which could adversely affect either company s ability to maintain relationships with licensors, collaborators, partners, suppliers and employees or the combined company s ability to achieve the anticipated benefits of the merger, or could otherwise adversely affect the business and financial results of the combined company and, as a result, adversely affect the market price of the combined company s common stock and reduce the combined company s cash position.

TorreyPines and Raptor do not expect the combined company to pay cash dividends, and accordingly, stockholders must rely on stock appreciation for any return on their investment in the combined company.

TorreyPines and Raptor anticipate that the combined company will retain its earnings, if any, for future growth and therefore does not anticipate paying cash dividends in the future. As a result, only appreciation of the price of the combined company s common stock will provide a return to stockholders. Investors seeking cash dividends should not invest in the combined company s common stock.

NASDAQ considers the anticipated merger a reverse merger and therefore has required that TorreyPines submit a new listing application on behalf of the combined company, which requires certain actions on TorreyPines and Raptor s part which may not be successful and, if unsuccessful, could make it more difficult for holders of shares of the combined company to sell their shares.

NASDAQ considers the merger proposed in this joint proxy statement/prospectus as a reverse merger and has required that TorreyPines, on behalf of the combined company, submit a new listing application. NASDAQ may not approve the combined company s new listing application. If this occurs and the merger is still consummated, stockholders of the combined company may have difficulty converting shares into cash effectively. Additionally, as part of the new listing application, TorreyPines, on behalf of the combined company, will be required to submit, among other things, a plan for TorreyPines to conduct a reverse stock split. A reverse stock split would increase the per share trading price by a yet undetermined multiple. The change in share price may affect the volatility and liquidity of the combined company s stock after the merger, as well as the marketplace s perception of the stock. As a result, the relative price of the combined company s common stock may decline and/or fluctuate more than TorreyPines or Raptor s common stock has in the past.

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FORWARD-LOOKING STATEMENTS

This joint proxy statement/prospectus contains forward-looking statements of TorreyPines and Raptor within the meaning of the Private Securities Litigation Reform Act of 1995, which is applicable to TorreyPines and Raptor because they are each a public company subject to the reporting requirements of the Exchange Act. These forward-looking statements include:

- the potential value and other benefits created by the proposed merger for TorreyPines and Raptor s stockholders;
- the efficacy, safety and intended utilization of TorreyPines and Raptor s drug candidates;
- the conduct and results of TorreyPines and Raptor s research, discovery and preclinical efforts and clinical trials;
- TorreyPines and Raptor s plans regarding future research, discovery and preclinical efforts and clinical activities and collaborative, intellectual property and regulatory activities;
- the period in which each of TorreyPines and Raptor expects its cash will be available to fund its current operating plan, both before and after giving effect to the merger;
- the listing of the shares of TorreyPines common stock to be issued in the merger on the NASDAQ Capital Market and The NASDAQ Stock Market LLC s acceptance of the initial listing application in connection with the merger;
- the amount of net cash TorreyPines anticipates it will hold on the closing date of the merger;
- the exchange ratio, the amount of shares TorreyPines expects to issue in connection with the merger and the ratio for the reverse stock split; and
- each of TorreyPines and Raptor s results of operations, financial condition and businesses, and products and drug candidates under development and the expected impact of the proposed merger on the combined company s financial and operating performance.

Words such as anticipates, believes, forecast, potential, contemplates, expects, intends, plans, believes, seeks, estimates, 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, including the following:

- TorreyPines and Raptor may not be able to complete the proposed merger;
- The NASDAQ Stock Market LLC may not approve the listing of the shares of TorreyPines common stock to be issued in the merger on the NASDAQ Capital Market or may reject the initial listing application to be filed in connection with the merger;

TorreyPines net cash at closing may be lower than currently anticipated;

TorreyPines and Raptor s drug candidates that appear promising in early research and clinical trials may not demonstrate safety and efficacy in subsequent clinical trials;

risks associated with reliance on collaborative partners for further clinical trials and other development activities; and

risks involved with development and commercialization of drug candidates.

Many of the important factors that will determine these results and values are beyond TorreyPines and Raptor s ability to control or predict. You are cautioned not to put undue reliance on any forward-looking statements. Except as otherwise required by law, TorreyPines and Raptor do not assume any obligation to update any forward-looking statements. In evaluating the merger, you should carefully consider the discussion of risks and uncertainties in the section titled, Risk Factors in this joint proxy statement/prospectus.

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THE ANNUAL MEETING OF TORREYPINES STOCKHOLDERS

General

TorreyPines is furnishing this joint proxy statement/prospectus to holders of TorreyPines common stock in connection with the solicitation of proxies by the TorreyPines board of directors for use at the TorreyPines annual meeting to be held on [ ], 2009 and at any adjournment or postponement thereof. This joint proxy statement/prospectus is first being furnished to the stockholders of TorreyPines on or about [ ], 2009.

Date, Time and Place

The annual meeting of TorreyPines stockholders will be held on [ ], 2009, at Cooley Godward Kronish LLP at 4401 Eastgate Mall, San Diego, CA 92121 commencing at 10:00 a.m. local time.

Purposes of the TorreyPines Annual Meeting

The purposes of the TorreyPines annual meeting are:

1. To consider and vote upon a proposal to approve the issuance of TorreyPines common stock and the resulting change in control pursuant to the Agreement and Plan of Merger and Reorganization, dated as of July 27, 2009, by and among TorreyPines, ECP Acquisition, Inc., a wholly-owned subsidiary of TorreyPines, and Raptor Pharmaceuticals Corp., a Delaware corporation, as described in this joint proxy statement/prospectus.

2. To approve an amendment to TorreyPines certificate of incorporation effecting the reverse stock split, at one of seventeen reverse split ratios: 1-for-10, 1-for-11, 1-for-12, 1-for-13, 1-for-14, 1-for-15, 1-for-17, 1-for-20, 1-for-25, 1-for-30, 1-for-35, 1-for-40, 1-for-45, 1-for-50, 1-for-55, 1-for-60 or 1-for-70, as described in this joint proxy statement/prospectus.

3. To approve an amendment to TorreyPines certificate of incorporation to change the name TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp.

4. To elect the four directors nominated by the TorreyPines board of directors and named herein; provided, however, that if the merger is completed, it is anticipated that the TorreyPines board of directors will consist of the four people identified in this joint proxy statement/prospectus.

5. To consider and vote upon an adjournment of the TorreyPines annual meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of TorreyPines Proposal Nos. 1, 2 and 3.

6. To transact such other business as may properly come before the TorreyPines annual meeting or any adjournment, postponement or continuation thereof.

Recommendation of TorreyPines Board of Directors

The TorreyPines board of directors has determined and believes that the issuance of shares of TorreyPines common stock pursuant to the merger and the resulting change in control is advisable to, and in the best interests of, TorreyPines and its stockholders and has approved such items. The TorreyPines board of directors unanimously recommends that TorreyPines stockholders vote FOR TorreyPines Proposal No. 1 to approve the issuance of shares of TorreyPines common stock in the

merger and the resulting change in control.

The TorreyPines board of directors has determined and believes that it is advisable to, and in the best interests of, TorreyPines and its stockholders to approve an amendment to TorreyPines certificate of incorporation effecting the reverse stock split, as described in this joint proxy statement/prospectus.

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The TorreyPines board of directors unanimously recommends that TorreyPines stockholders vote FOR TorreyPines Proposal No. 2 to approve the amendment to TorreyPines certificate of incorporation effecting the reverse stock split, as described in this joint proxy statement/prospectus.

The TorreyPines board of directors has determined and believes that the amendment of TorreyPines certificate of incorporation to change the name of TorreyPines to Raptor Pharmaceutical Corp. is advisable to, and in the best interests of, TorreyPines and its stockholders and has approved such name change. The TorreyPines board of directors unanimously recommends that TorreyPines stockholders vote FOR TorreyPines Proposal No. 3 to approve the name change.

The TorreyPines board of directors unanimously recommends a vote FOR each named nominee in Proposal No. 4.

The TorreyPines board of directors has determined and believes that adjourning the TorreyPines annual meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of TorreyPines Proposal Nos. 1, 2 and 3 is advisable to, and in the best interests of, TorreyPines and its stockholders and has approved and adopted the proposal. The TorreyPines board of directors unanimously recommends that TorreyPines stockholders vote FOR TorreyPines Proposal No. 5 to adjourn the TorreyPines annual meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of TorreyPines Proposal Nos. 1, 2 and 3.

Record Date; Shares of Common Stock Outstanding and Entitled to Vote

TorreyPines has fixed the close of business on [ ], 2009 as the record date for determination of the holders of TorreyPines common stock entitled to notice of and to attend and vote at the TorreyPines annual meeting or any adjournment or postponement thereof. There were approximately [ ] holders of record of TorreyPines common stock at the close of business on the record date. At the close of business on the record date, [ ] shares of TorreyPines common stock were issued and outstanding. Each share of TorreyPines common stock entitles the holder thereof to one vote at the TorreyPines annual meeting on all matters properly presented at the TorreyPines annual meeting. See the section titled, Principal Stockholders of TorreyPines in this joint proxy statement/prospectus for information regarding persons known to the management of TorreyPines to be the beneficial owners of more than 5% of the outstanding shares of TorreyPines common stock.

Voting and Revocation of Proxies

The proxy accompanying this joint proxy statement/prospectus is solicited on behalf of the board of directors of TorreyPines for use at the TorreyPines annual meeting.

If you are a stockholder of record of TorreyPines as of the record date referred to above, you may vote in person at the TorreyPines annual meeting or vote by proxy using the enclosed proxy card. Whether or not you plan to attend the TorreyPines annual meeting, TorreyPines urges you to vote by proxy to ensure your vote is counted. You may still attend the TorreyPines annual meeting and vote in person if you have already voted by proxy.

To vote in person, come to the TorreyPines annual meeting and TorreyPines will give you a ballot when you arrive.

To vote using the proxy card, simply mark, sign and date your proxy card and return it promptly in the postage-paid envelope provided. If you return your signed proxy card to TorreyPines before the TorreyPines annual meeting, TorreyPines will vote your shares as you direct.

To vote over the telephone, dial the toll-free number on your proxy card or voting instruction form using a touch-tone phone and follow the recorded instructions. You will be asked to provide the company number and control number from the enclosed proxy card. Your vote must be received by [ ] p.m., Eastern Time on [ ], 2009 to be counted.

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To vote on the Internet, go to the website on the proxy card or voting instruction form to complete an electronic proxy card. You will be asked to provide the company number and control number from the enclosed proxy card. Your vote must be received by [ ] p.m., Eastern Time on [ ], 2009 to be counted.

If your TorreyPines shares are held by your broker as your nominee (that is, in street name), you will need to obtain a proxy card from the institution that holds your shares and follow the instructions included on that proxy card regarding how to instruct your broker to vote your TorreyPines shares. If you do not give instructions to your broker, your broker can vote your TorreyPines shares with respect to discretionary items but not with respect to non-discretionary items. On non-discretionary items for which you do not give your broker instructions, the TorreyPines shares will be treated as broker non-votes.

All properly executed proxies that are not revoked will be voted at the TorreyPines annual meeting and at any adjournments or postponements of the TorreyPines annual meeting in accordance with the instructions contained in the proxy. If a holder of TorreyPines common stock executes and returns a proxy and does not specify otherwise, the shares represented by that proxy will be voted FOR TorreyPines Proposal No. 1 to approve the issuance of shares of TorreyPines common stock in the merger, and for the resulting change in control; FOR TorreyPines Proposal No. 2 to approve an amendment to TorreyPines certificate of incorporation effecting the reverse stock split described in this joint proxy statement/prospectus; FOR TorreyPines Proposal No. 3 to approve an amendment to TorreyPines certificate of incorporation to change the name of TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp. ; FOR TorreyPines Proposal No. 4 for the election of each named nominee to TorreyPines board of directors; and FOR TorreyPines Proposal No. 5 to adjourn the TorreyPines annual meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of TorreyPines Proposal Nos. 1, 2 and 3 in accordance with the recommendation of the TorreyPines board of directors.

TorreyPines stockholders of record, other than those TorreyPines stockholders who have executed voting agreements, may change their vote at any time before their proxy is voted at the TorreyPines annual meeting in one of three ways. First, a stockholder of record of TorreyPines can send a written notice to the Secretary of TorreyPines stating that the stockholder would like to revoke its proxy. Second, a stockholder of record of TorreyPines can submit new proxy instructions either on a new proxy card, by telephone or via the Internet. Third, a stockholder of record of TorreyPines can attend the TorreyPines annual meeting and vote in person. Attendance alone will not revoke a proxy. If a stockholder of record of TorreyPines has instructed a broker to vote its shares of TorreyPines common stock, the stockholder must follow directions received from its broker to change those instructions.

Quorum and Vote of TorreyPines Stockholders Required

A quorum of stockholders is necessary to hold a valid meeting. The presence, in person or represented by proxy, at the TorreyPines annual meeting of the holders of a majority of the shares of TorreyPines common stock issued and outstanding and entitled to vote at the TorreyPines annual meeting is necessary to constitute a quorum at the meeting. If a quorum is not present at the TorreyPines annual meeting, TorreyPines expects that the meeting will be adjourned or postponed to solicit additional proxies.

Abstentions and broker non-votes will be counted towards a quorum. Approval of each of TorreyPines Proposal Nos. 1 and 5 requires the affirmative vote of the holders of a majority of the shares of TorreyPines common stock having voting power present in person or represented by proxy at the TorreyPines annual meeting. Approval of each of TorreyPines Proposal Nos. 2 and 3 requires the affirmative vote of the holders of a majority of the TorreyPines common stock having voting power outstanding on the record date for the TorreyPines annual meeting. For the election of directors (TorreyPines Proposal No. 4), the four nominees receiving the most **FOR** votes from the shares having voting power present in person or represented by proxy will be elected.

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Votes will be counted by the inspector of election appointed for the meeting, who will separately count **FOR**, with respect to proposals other than TorreyPines Proposal No. 4, and **AGAINST** votes, abstentions and broker non-votes. Abstentions will be counted towards the vote total for each proposal (other than the election of directors) and will have the same effect as **AGAINST** votes. Broker non-votes will have the same effect as **AGAINST** votes for Proposal Nos. 2 and 3. For TorreyPines Proposal Nos. 1 and 5, broker non-votes will have no effect and will not be counted towards the vote total.

If you do not submit a proxy card or vote at the TorreyPines annual meeting, your shares of TorreyPines common stock will not be counted as present for the purpose of determining a quorum and will have the same effect as votes against the amendment to TorreyPines certificate of incorporation effecting the reverse stock split and the amendment to TorreyPines certificate of incorporation to change the name of TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp., but will not affect the outcome of the election of directors and will not be counted for any purpose in determining whether to approve the issuance of shares of TorreyPines common stock in the merger, and for the resulting change in control or whether to adjourn the TorreyPines annual meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of TorreyPines Proposal Nos. 1, 2 and 3 in accordance with the recommendation of the TorreyPines board of directors.

At the record date for the TorreyPines annual meeting, the directors and executive officers of TorreyPines owned approximately [ ]% of the outstanding shares of TorreyPines common stock entitled to vote at the TorreyPines annual meeting. TorreyPines stockholders owning approximately [ ] shares of TorreyPines common stock, representing approximately [ ]% of the outstanding shares of TorreyPines common stock as of the record date, are subject to voting agreements. Each stockholder that entered into a voting agreement has agreed to vote all shares of TorreyPines common stock owned by him or her in favor of the approval of the issuance of the shares of TorreyPines common stock pursuant to the merger, the amendment to TorreyPines certificate of incorporation effecting the reverse stock split and the name change from TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp. and any action in furtherance of the foregoing, and against any matter that would result in a breach of the merger agreement by TorreyPines and any other action which is intended to, or could reasonably be expected to, impede, interfere with, delay, postpone, discourage or adversely affect the merger or any of the transactions contemplated by the merger agreement. All of these stockholders are officers and directors of TorreyPines. Please see the section titled, Agreements Related to the Merger Voting Agreements in this joint proxy statement/prospectus.

Solicitation of Proxies

In addition to solicitation by mail, the directors, officers, employees and agents of TorreyPines may solicit proxies from TorreyPines stockholders by personal interview, telephone, telegram or otherwise. TorreyPines and Raptor will pay the costs of the solicitation of their respective proxies. Raptor has agreed to pay all fees and expenses, other than fees and expenses of attorneys, accountants and financial advisors, incurred in connection with the filing with the SEC, printing and mailing of this joint proxy statement/prospectus (and the registration statement of which it is a part) and any amendments or supplements thereto. Arrangements will also be made with brokerage firms and other custodians, nominees and fiduciaries who are record holders of TorreyPines common stock for the forwarding of solicitation materials to the beneficial owners of TorreyPines common stock. TorreyPines and Raptor will pay the cost of reimbursing their respective applicable brokers, custodians, nominees and fiduciaries for the reasonable out-of-pocket expenses they incur in connection with the forwarding of solicitation materials.

Other Matters

As of the date of this joint proxy statement/prospectus, the TorreyPines board of directors does not know of any business to be presented at the TorreyPines annual meeting other than as set forth in the notice accompanying this joint proxy statement/prospectus. If any other matters should properly come before the TorreyPines annual meeting, it is intended that the shares represented by proxies will be voted with respect to such matters in accordance with the judgment of the persons voting the proxies.

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THE ANNUAL MEETING OF RAPTOR STOCKHOLDERS

General

Raptor is furnishing this joint proxy statement/prospectus to holders of Raptor common stock in connection with the solicitation of proxies by the Raptor board of directors for use at the Raptor annual meeting to be held on [ ], 2009 and at any adjournment or postponement thereof. This joint proxy statement/prospectus is first being furnished to stockholders of Raptor on or about [ ], 2009.

Date, Time and Place

The annual meeting of Raptor stockholders will be held on [ ], 2009 at 10:00 a.m., local time, at Raptor s corporate offices at 9 Commercial Blvd., Suite 200, Novato, CA 94949.

Purposes of the Raptor Annual Meeting

The purposes of the Raptor annual meeting are:

1. To consider and vote upon a proposal to adopt the merger agreement.

2. To elect four directors to serve until the next annual meeting of stockholders or until their respective successors are duly elected and qualified.

3. To ratify Raptor s Audit Committee s appointment of Burr, Pilger & Mayer, LLP as Raptor s independent registered public accounting firm for the fiscal year ending August 31, 2009.

4. To consider and vote on adjournment of the Raptor annual meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of the adoption of the merger agreement.

5. To transact such other business as may properly come before the Raptor annual meeting or any adjournment, postponement or continuations of the Raptor annual meeting.

Recommendations of Raptor s Board of Directors

The Raptor board of directors has determined and believes that the merger is advisable and fair to, and in the best interests of, Raptor and its stockholders and has approved the merger and the merger agreement. The Raptor board of directors unanimously recommends that Raptor stockholders vote FOR Raptor Proposal No. 1 to adopt the merger agreement.

The Raptor board of directors unanimously recommends that Raptor stockholders vote FOR Raptor Proposal No. 2 to elect its Board of Directors.

The Raptor board of directors unanimously recommends that Raptor stockholders vote FOR Raptor Proposal No. 3 to ratify the appointment of Burr, Pilger & Mayer, LLP as Raptor s independent registered public accounting firm for the year ending August 31, 2009.

The Raptor board of directors has concluded that the proposal to adjourn the Raptor annual meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of the adoption of the merger agreement is advisable to, and in the best interests of, Raptor and its stockholders and has approved and adopted the proposal. Accordingly, the Raptor board of directors unanimously recommends that Raptor stockholders vote FOR Raptor Proposal No. 4 to adjourn the Raptor annual meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of the adoption of the merger agreement.

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Record Date; Shares of Common Stock Outstanding and Entitled to Vote

Raptor has fixed the close of business on [ ], 2009 as the record date for determination of the holders of Raptor common stock entitled to notice of and to attend and vote at the Raptor annual meeting or at any adjournment or postponement thereof. There were approximately [ ] holders of record of Raptor common stock as of the close of business on the record date. As of the close of business on [ ], 2009, there were [ ] shares of Raptor common stock outstanding and entitled to vote. Each share of Raptor common stock entitles the holder thereof to one vote at the Raptor annual meeting on all matters properly presented at the Raptor annual meeting. See the section titled, Principal Stockholders of Raptor in this joint proxy statement/prospectus for information regarding persons known to the management of Raptor to be the beneficial owners of more than 5% of the outstanding shares of Raptor common stock.

Voting and Revocation of Proxies

The proxy accompanying this joint proxy statement/prospectus is solicited on behalf of the board of directors of Raptor for use at the Raptor annual meeting.

If you are a stockholder of record of Raptor as of the record date referred to above, you may vote in person at the Raptor annual meeting or vote by proxy using the enclosed proxy card. Whether or not you plan to attend the Raptor annual meeting, Raptor urges you to vote by proxy to ensure your vote is counted. You may still attend the Raptor annual meeting and vote in person if you have already voted by proxy.

To vote in person, come to the Raptor annual meeting and Raptor will give you a ballot when you arrive.

To vote using the proxy card, simply mark, sign and date your proxy card and return it promptly in the postage-paid envelope provided. If you return your signed proxy card to Raptor before the Raptor annual meeting, Raptor will vote your shares as you direct.

If your Raptor shares are held by your broker as your nominee (that is, in street name), you will need to obtain a proxy card from the institution that holds your shares and follow the instructions included on that proxy card regarding how to instruct your broker to vote your Raptor shares. If you do not give instructions to your broker, your broker can vote your Raptor shares with respect to discretionary items but not with respect to non-discretionary items. On non-discretionary items for which you do not give your broker instructions, the Raptor shares will be treated as broker non-votes.

All properly executed proxies that are not revoked will be voted at the Raptor annual meeting and at any adjournments or postponements of the Raptor annual meeting in accordance with the instructions contained in the proxy. If a holder of Raptor common stock executes and returns a proxy and does not specify otherwise, the shares represented by that proxy will be voted **FOR** Raptor Proposal No. 1 to adopt the merger agreement; **FOR** Raptor Proposal No. 2 for the election of four directors to serve until the next annual meeting of the stockholders or until their respective successors are duly elected and qualified; **FOR** Raptor Proposal No. 3 to ratify the appointment by the audit committee of Raptor s board of directors of Burr, Pilger & Mayer, LLP as Raptor s independent registered public accounting firm for the fiscal year ending August 31, 2009; and **FOR** Raptor Proposal No. 4 to adjourn the Raptor annual meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of the adoption of the merger agreement.

Raptor stockholders of record, other than those Raptor stockholders who have executed voting agreements, may change their vote at any time before their proxy is voted at the Raptor annual meeting in one of three ways. First, a stockholder of record of Raptor can send a written notice to the Secretary of Raptor stating that the stockholder would like to revoke its proxy. Second, a stockholder of record of Raptor can submit new proxy instructions on a new proxy card. Third, a stockholder of record of Raptor can attend the Raptor annual meeting and vote in person. Attendance alone will not revoke a proxy. If a stockholder of record of Raptor has instructed a broker to vote its shares of Raptor common stock, the stockholder must follow directions received from its broker to change those instructions.

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Quorum and Vote of Raptor Stockholders Required

A quorum of stockholders is necessary to hold a valid meeting. The presence, in person or by proxy, at the Raptor annual meeting of the holders of a majority of the shares of Raptor common stock issued and outstanding and entitled to vote at the Raptor annual meeting is necessary to constitute a quorum at the Raptor annual meeting. If a quorum is not present at the Raptor annual meeting, Raptor expects that the meeting will be adjourned or postponed to solicit additional proxies.

Abstentions and broker non-votes will be counted towards a quorum. Approval of Raptor Proposal No. 1 requires the affirmative vote of the holders of a majority of the shares of Raptor common stock outstanding on the record date and entitled to vote at the Raptor annual meeting. Approval of each of Raptor Proposal Nos. 3 and 4 requires the affirmative vote of the holders of a majority of the shares of Raptor common stock having voting power present in person or represented by proxy at the Raptor annual meeting. For the election of directors (Raptor Proposal No. 2), the affirmative vote of a plurality of the voting power of the shares present in person or represented by proxy at the Raptor annual meeting is required.

Votes will be counted by the inspector of election appointed for the meeting, who will separately count **FOR**, with respect to proposals other than Raptor Proposal No. 2, and **AGAINST** votes, abstentions and broker non-votes. Abstentions will be counted towards the vote total for each proposal (other than the election of directors) and will have the same effect as **AGAINST** votes. Broker non-votes will have the same effect as **AGAINST** votes for Proposal No. 1. For Raptor Proposal Nos. 3 and 4, broker non-votes will have no effect and will not be counted towards the vote total.

If you do not submit a proxy card or vote at the Raptor annual meeting, your shares of Raptor common stock will not be counted as present for the purpose of determining a quorum and will have the same effect as votes against the adoption of the merger agreement, but will not affect the outcome of the election of directors and will not be counted for any purpose in determining whether to ratify the selection of Burr, Pilger & Mayer, LLP as Raptor s registered public accounting firm for the fiscal year ending August 31, 2009 or whether to adjourn the Raptor annual meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of the adoption of the merger agreement.

At the record date for the Raptor annual meeting, the directors and executive officers of Raptor owned approximately [ ]% of the outstanding shares of Raptor common stock entitled to vote at the Raptor s annual meeting. As of July 27, 2009, stockholders of Raptor that collectively owned 7,412,500 shares of common stock, representing approximately 11% of the outstanding common stock of Raptor, have entered into agreements to vote their shares of common stock in favor of the adoption of the merger agreement and to adjourn the Raptor annual meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of the adoption of the merger agreement. All of these stockholders are officers and directors of Raptor. Please see the section titled, Agreements Related to the Merger Voting Agreements in this joint proxy statement/prospectus.

Solicitation of Proxies

In addition to solicitation by mail, the directors, officers, employees and agents of Raptor may solicit proxies from Raptor s stockholders by personal interview, telephone, telegram or otherwise. TorreyPines and Raptor will pay the costs of the solicitation of their respective proxies. Raptor has agreed to pay all fees and expenses, other than fees and expenses of attorneys, accountants and financial advisors, incurred in connection with the filing with the SEC, printing and mailing of this joint proxy statement/prospectus (and the registration statement of which it is a part) and any amendments or supplements thereto. Arrangements will also be made with brokerage firms and other custodians, nominees and fiduciaries who are record holders of Raptor common stock for the forwarding of solicitation materials to the beneficial owners of Raptor common stock. TorreyPines and Raptor will pay the cost of reimbursing their respective applicable brokers, custodians, nominees and fiduciaries for the reasonable out-of-pocket expenses they incur in connection with the forwarding of solicitation materials.

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Other Matters

As of the date of this joint proxy statement/prospectus, the Raptor board of directors does not know of any business to be presented at the Raptor annual meeting other than as set forth in the notice accompanying this joint proxy statement/prospectus. If any other matters should properly come before the Raptor annual meeting, it is intended that the shares represented by proxies will be voted with respect to such matters in accordance with the judgment of the persons voting the proxies.

Appraisal Rights

Under the DGCL, holders of Raptor common stock who do not vote in favor of the adoption of the merger agreement will have the ability to seek appraisal of the fair value of their shares as determined by the Delaware Court of Chancery if the merger is completed, but only if they submit a written demand for an appraisal prior to the vote on the adoption of the merger agreement and they comply with the other procedures under the DGCL. For more information, please see The Merger Appraisal Rights beginning on page 105 of this joint proxy statement/prospectus.

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THE MERGER

This section and the section titled, The Merger Agreement in this joint proxy statement/prospectus describe the material aspects of the merger, including the merger agreement. While TorreyPines and Raptor believe that this description covers the material terms of the merger and the merger agreement, it may not contain all of the information that is important to you. You should read carefully this entire joint proxy statement/prospectus for a more complete understanding of the merger and the merger agreement, including the merger agreement, attached as Annex A, and the other documents to which you are referred herein. See the section titled, Where You Can Find More Information in this joint proxy statement/prospectus.

Background of the Merger

On September 11, 2008, the board of directors and management of Raptor initiated a process to evaluate the advantages and disadvantages of various strategic options for Raptor that would allow Raptor to recapitalize the company and obtain a listing on a national exchange, including a reverse split or a merger transaction. As part of this process, they conducted a review of potential merger partners that included United States based public companies. In parallel, the board and management of Raptor performed an exploratory assessment of the risks associated with a reverse split.

On December 1, 2008, TorreyPines announced that oral administration of NGX426, its orally delivered clinical stage product candidate in development for the treatment of acute and chronic pain, demonstrated a statistically significant reduction in spontaneous pain, hyperalgesia (abnormally increased pain state) and allodynia (pain resulting from normally non-painful stimuli to the skin) compared to placebo following intradermal injections of capsaicin in a human experimental model of cutaneous pain, hyperalgesia and allodynia. This was the completion of the clinical trial of NGX426 that was initiated in June 2008. On December 2, 2008, TorreyPines announced positive results from its Phase II clinical trial evaluating three single doses of NGX267 as a treatment for xerostomia, or dry mouth, in patients with Sjögren s syndrome that was initiated in May 2008. NGX267 met the primary endpoint of a statistically significant increase in salivary flow production compared to placebo at all three doses: 10 mg, 15 mg, and 20 mg. These doses were safe and well tolerated with few reports of excessive sweating and gastrointestinal complaints.

On December 2, 2008, TorreyPines engaged JMP Securities LLC, or JMP, to evaluate a potential equity financing for TorreyPines to advance these product candidates. From December 2008 through March 2009, JMP contacted 55 potential investors. TorreyPines did not receive a term sheet from the efforts of JMP and the management and directors of TorreyPines.

Additionally, from December 2008 through March 2009, TorreyPines, with assistance from P2 Partners LLC, or P2 Partners, contacted over 80 prospective strategic partners, both domestic and international, to assist in advancing its product candidates. The list of prospects represented companies that were active in the pain, xerostomia or cognitive disorders markets or whom TorreyPines believed could have an interest in one or more of those markets. This resulted in approximately 25 companies signing non-disclosure agreements and receiving non-public evaluation materials. TorreyPines did not receive any expressions of interest as a result of these efforts.

In January 2009, TorreyPines implemented the first in a series of cost savings measures including reduction in office space with accompanying decrease in rent, scaled back use of third party consultants and implementation of a maintenance-only development plan for each of its three product candidates. This plan substantially reduced development expenditures by suspending all new clinical and preclinical projects and using internal resources to finalize all clinical reports from recently completed studies.

On March 2, 2009, as a further cost saving measure, TorreyPines reduced 50% of its remaining employees work schedules to 20 hours per week. At a March 19, 2009 meeting of TorreyPines board of directors, management recommended the implementation of additional cost saving measures because TorreyPines had not

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received any meaningful expressions of interest either from potential investors or potential strategic partners. TorreyPines board of directors after reviewing TorreyPines financial condition approved additional cost saving measures that included the termination of TorreyPines engagement with P2 Partners, a reduction of TorreyPines workforce to three employees (TorreyPines Chief Executive Officer, Chief Financial Officer, and Vice President and General Counsel) on March 31, 2009 and the repayment of TorreyPines outstanding debt to Comerica Bank in April 2009. The three remaining TorreyPines employees were tasked with assisting the board of directors in assessing and completing a possible strategic transaction. Additionally, TorreyPines board of directors established a Strategic Transactions Committee consisting of two independent directors, Drs. Peter Davis and Steven H. Ferris to evaluate potential strategic options for TorreyPines, including, but not limited to, a sale, financing or orderly liquidation and dissolution of TorreyPines. TorreyPines board of directors also reviewed the timing and procedures associated with an orderly dissolution and liquidation of TorreyPines and the amount of funding projected to be available to continue pursuing a strategic transaction in order to maximize returns to TorreyPines stockholders.

On April 1, 2009, Raptor learned that TorreyPines had initiated a reduction in staff and was considering strategic alternatives for TorreyPines, including a possible sale of the company as described in TorreyPines March 31, 2009 press release. Through Raptor s financial advisor, Beal Advisors, Raptor learned that TorreyPines was considering all potential structures for a strategic transaction, including an asset sale or reverse merger, as well as potential licensing or partnering arrangements related to its product candidates.

On April 3, 2009, Raptor s financial advisor had a conversation with Mr. Craig Johnson, Chief Financial Officer of TorreyPines, to discuss Raptor s interest in the company. Based on this preliminary discussion, the parties were sufficiently interested in discussing a merger, and as a result, Raptor and TorreyPines entered into a confidentiality agreement. The parties subsequently exchanged confidential management presentations. Based on continuing conversations between the parties, Raptor began to evaluate a merger with TorreyPines as a public shell.

On April 6, 2009, Raptor notified TorreyPines that Raptor would be postponing any further discussions with TorreyPines as Raptor was considering other acquisition opportunities. From April 7 to May 20, 2009, through its financial advisor, Raptor continued to provide to TorreyPines, and received from TorreyPines, periodic updates on their respective strategic transaction evaluation processes, while Raptor considered two other acquisition opportunities.

At a meeting of TorreyPines board of directors on April 14, 2009, the board of directors approved terminating the services of JMP and retaining the services of Merriman Curhan Ford, or Merriman, as TorreyPines financial advisor to assist in the evaluation of strategic options, including the possible sale of TorreyPines or its assets. From April 15, 2009 through May 19, 2009 Merriman and TorreyPines contacted more than 85 prospective strategic partners, more than half of whom had previously been contacted by TorreyPines or its previous advisors. These efforts resulted in 5 additional companies signing non-disclosure agreements and receiving non-public evaluation materials. As of May 19, 2009, TorreyPines had not received any written expression of interest with respect to a strategic transaction.

On May 19, 2009, TorreyPines board of directors held a meeting for the purpose of considering a Plan of Liquidation and Dissolution, or Plan of Dissolution, and the other alternatives available to TorreyPines and the board of directors received information concerning TorreyPines cash position and financial forecast. Also present at this meeting was a representative from Cooley Godward Kronish LLP, TorreyPines outside legal counsel, who presented a summary of the terms of the proposed plan of dissolution and discussed TorreyPines board of directors fiduciary duties. TorreyPines management presented its analysis of the alternatives available to TorreyPines and its assessment that it would be unlikely given TorreyPines then-current cash position that any assets would be available for distribution to the stockholders pursuant to the Plan of Dissolution. After lengthy discussions and consideration of TorreyPines financial position and the status of the partnering/licensing and strategic alternatives process, TorreyPines board of directors, upon recommendation of TorreyPines

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Strategic Transaction Committee, adopted the Plan of Dissolution and approved TorreyPines dissolution, subject to stockholder approval. TorreyPines board of directors concluded that after consideration of the financing and strategic alternatives available to the company, the Plan of Dissolution and TorreyPines liquidation and dissolution were advisable and in the best interests of TorreyPines and its stockholders. TorreyPines continued to seek a potential acquirer of its assets or TorreyPines as a whole as it proceeded with the dissolution process.

By May 20, 2009, Raptor s evaluation process of the two other acquisition opportunities it had been considering had ended and Raptor notified TorreyPines of this development.

On May 22, 2009, Raptor submitted to TorreyPines management a written, non-binding preliminary term sheet that proposed a merger between Raptor and TorreyPines that evaluated TorreyPines as a public shell with no assets. Raptor received additional confidential information regarding TorreyPines pharmaceutical product portfolio.

On May 27, 2009, Dr. Starr, Raptor s CEO, instructed Raptor s financial advisor to rescind the May 22 term sheet, and the financial advisor did so. TorreyPines was also informed that while Raptor remained interested in a possible merger transaction, any future discussions regarding a potential transaction would have to be more strategic in nature and would have to include the pharmaceutical assets of TorreyPines, specifically NGX426. TorreyPines subsequently submitted a development plan and proposed development budget for NGX426 to Raptor.

On June 1, 2009, the management teams of Raptor and TorreyPines had a conference call to introduce their respective management teams and discuss the development plans for NGX426.

On June 1, 2009, TorreyPines entered in a confidentiality agreement with Company A, which was interested in a possible merger with TorreyPines.

On June 4, 2009, the Raptor management team met with a third party investor, interested in potentially funding the further development of NGX426, to introduce the management team of Raptor and discuss Raptor s product portfolio and corporate development goals. The contemplated transaction with TorreyPines and the development plans for NGX426 were also discussed.

On June 5, 2009, Mr. Johnson, following conversations with the third party investor, communicated to Raptor s financial advisor that the initial feedback from the third party was that such party was generally not interested in further involvement in the potential transaction, but more specific feedback would be provided by the third party.

On June 11, 2009, Mr. Johnson provided additional feedback to Raptor s financial advisor that there was little to no interest from this third party at this time to act as an investor in the merger transaction between Raptor and TorreyPines. TorreyPines and Raptor agreed that there did not seem to be a path forward, but TorreyPines and Raptor agreed to update each other with any new information.

On June 15, 2009, following a meeting between members of TorreyPines management team and members of Company A s management team, TorreyPines received a non-binding term sheet from Company A regarding a possible merger with TorreyPines. The proposed merger transaction would have involved a multi-step process that would result in TorreyPines stockholders holding, at most, 20% of the combined company following the transaction, although the percentage could decrease substantially between signing a definitive agreement and the proposed completion of the final step in the proposed merger process approximately one year later. The proposed transaction was contingent upon TorreyPines having $400,000 at the closing of the transaction and had a high degree of execution risk of completion because of the multi-step process and a requirement that TorreyPines regain compliance with the NASDAQ Global Market continued listing requirements prior to consummation of the transaction.

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On June 19, 2009 TorreyPines filed its definitive proxy for its special meeting of stockholders to approve the Plan of Dissolution of TorreyPines. The definitive proxy highlighted the on-going efforts of TorreyPines to complete an asset sale or sale of TorreyPines and noted that TorreyPines requested additional term sheets prior to June 30, 2009.

On June 23, 2009, Raptor s financial advisor called Mr. Johnson and provided an update on Raptor s internal discussions regarding pursuing a potential transaction with TorreyPines. Raptor s financial advisor and Mr. Johnson discussed potential deal structures under which a merger between Raptor and TorreyPines might be pursued on terms acceptable to both parties.

On June 24, 2009, Raptor discussed with its financial advisor its options with regard to a merger with TorreyPines. Raptor concluded that there remained sufficient interest in TorreyPines absent a third party investment in TorreyPines product candidates, tezampanel and NGX426.

On June 26, 2009, Raptor s financial advisor communicated to Mr. Johnson that Raptor remained interested in acquiring TorreyPines, including its existing product candidates, and proposed submitting another written non-binding preliminary term sheet to that effect. Mr. Johnson communicated to Raptor s financial advisor that TorreyPines would be willing to consider an offer.

On June 29, 2009, Raptor submitted a revised, written non-binding preliminary term sheet to TorreyPines that proposed a merger between the two companies. Such term sheet included the acquisition of TorreyPines as a whole, including its pharmaceutical assets, specifically NGX426, as well as retention of TorreyPines existing employees for a specified period after the completion of the merger.

On June 29 and 30, 2009, TorreyPines received one additional non-binding term sheet from Company B relating to a merger with TorreyPines and two non-binding term sheets related to the sale of TorreyPines assets, NGX426 and tezampanel from Company C and Company D, respectively. Following a review of these three additional proposals by the TorreyPines board of directors and discussions between members of the TorreyPines board of directors and management regarding the terms of the offers and the other strategic alternatives available to TorreyPines, TorreyPines management informed each of the parties interested in acquiring NGX426 and tezampanel, Company C and Company D, that each of their respective non-binding offers for TorreyPines assets needed to be substantially improved in order to be considered a reasonable alternative by TorreyPines board of directors to the offer received from either Company B or Raptor. Neither Company C nor Company D submitted a revised term sheet, and discussions with Company C and Company D thereafter ceased.

From June 29 to July 12, 2009, TorreyPines continued negotiations with Company B s financial advisor regarding the proposed term sheet. The term sheet initially proposed by Company B provided TorreyPines stockholders with approximately 1-2% of the combined company post-closing and satisfied TorreyPines creditors in full.

From June 29, 2009 to July 13, 2009, Raptor and TorreyPines, together with their respective legal counsel and financial advisors, continued their mutual due diligence and engaged in discussions regarding the proposed terms of the merger, including among other things the general structure of the merger, the relative ownership of the stockholders of TorreyPines and Raptor following the merger, the listing requirements of the combined company following the merger, and the retention and proposed activities of the existing management team at TorreyPines following the merger.

On July 9, 2009, TorreyPines announced the adjournment until July 16, 2009 of its special meeting of stockholders to approve the Plan of Dissolution of TorreyPines.

On July 13, 2009, Company B s financial advisor contacted TorreyPines management to indicate that the board of directors of Company B decided to withdraw their offer for TorreyPines.

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On July 14, 2009, the board of directors, management of, and legal counsel and financial advisor to Raptor met by conference call to discuss the proposed terms of the merger with TorreyPines. The Raptor board of directors discussed the proposed timeline for completing the merger with TorreyPines and proposed deal terms including among other things the general structure of the merger, the relative ownership of the stockholders of TorreyPines and Raptor following the merger, a range for the exchange ratio in the merger and potential adjustments to such exchange ratio and the retention and activities of TorreyPines management team following the merger. Following the discussion, the board of directors of Raptor unanimously approved the management of Raptor and its outside legal counsel to continue due diligence of TorreyPines and its subsidiaries and their operations, properties and assets, continue discussions related to a potential merger with TorreyPines and negotiate deal terms and definitive documentation related thereto, subject to approval of the final deal terms and definitive documentation by Raptor s board of directors.

From July 14 to July 23, 2009, TorreyPines and Raptor, together with their respective legal counsel and financial advisors, continued their mutual due diligence and engaged in negotiations regarding the merger agreement and voting agreements, including potential adjustments to the exchange ratio in the merger, Net Cash requirements of TorreyPines, the requirement that TorreyPines file a listing application as part of the merger and obtain conditional approval for listing of the combined company on the NASDAQ Capital Market, the requirement that TorreyPines effect a reverse stock split in connection with the merger, the terms of retaining the existing management team of TorreyPines following the merger and their specific activities and obligations, termination rights and representations and warranties and covenants of the parties. Final agreement on these and other issues was reached over the course of numerous discussions involving members of TorreyPines and Raptor s respective management, financial advisors and legal counsel.

On July 16, 2009, TorreyPines announced the adjournment until July 30, 2009 of its special meeting of stockholders to approve the Plan of Dissolution of TorreyPines.

On July 20, 2009, the TorreyPines board of directors held a meeting to evaluate the terms of the draft agreement with Raptor and progress toward a final agreement with Raptor. Based on the terms and the likelihood of signing the draft agreement with Raptor, TorreyPines informed Company A that TorreyPines would not be moving forward with Company A.

On July 23, 2009, the final merger documentation was distributed for review to the boards of directors of TorreyPines and Raptor.

On July 24, 2009, the board of directors of Raptor held a meeting to discuss the proposed merger with TorreyPines. Following a discussion of the final terms, a review of the merger documentation, including a discussion of the proposed exchange ratio and listing of the combined company following the merger, the board of directors of Raptor unanimously approved the merger, the merger agreement, the voting agreements and the transactions contemplated by the merger agreement and recommended the adoption of the merger agreement by the stockholders of Raptor.

On July 24, 2009, the board of directors of TorreyPines held a meeting to discuss the proposed merger with Raptor. Following a discussion of all the strategic alternatives available to TorreyPines, including continuing to pursue the dissolution of the company or a possible bankruptcy, pursuing the offers received for tezampanel and NGX426, and after a review of the final terms of the draft merger agreement with Raptor and the related ancillary documents, including a discussion of the proposed exchange ratio and a valuation comparison to the other potential offers presented to TorreyPines, the board of directors of TorreyPines determined that the Raptor merger was the best strategic alternative available to TorreyPines and its stockholders, and unanimously approved the merger, the merger agreement, the voting agreements and the transactions contemplated by the merger agreement and recommended the issuance of the shares to Raptor stockholders, the amendment of TorreyPines certificate of incorporation for the reverse stock split and to change the name of TorreyPines following the merger and the nomination of the Raptor directors to the TorreyPines board of directors following

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the merger, all as set forth in the merger agreement, for approval by the stockholders of TorreyPines. The board of directors of TorreyPines also approved the cancellation of the adjourned stockholders meeting related to TorreyPines proposed Plan of Dissolution as required by Raptor as a condition to signing the merger agreement.

On July 27, 2009, a definitive merger agreement was signed between Raptor, TorreyPines and merger sub. In addition, certain directors and officers of Raptor executed voting agreements with TorreyPines and certain directors and officers of TorreyPines executed voting agreements with Raptor. Prior to the opening of trading markets on July 28, 2009, the parties issued a joint press release announcing the execution of the merger agreement.

On July 30, 2009, TorreyPines announced the cancellation of its special meeting of stockholders to approve the Plan of Dissolution of TorreyPines.

Reasons for the Merger

The following discussion of the parties reasons for the merger contains a number of forward-looking statements that reflect the currents views of Raptor and/or TorreyPines with respect to future events that may have an effect on their future financial performance. Forward-looking statements are subject to risks and uncertainties. Actual results and outcomes may differ materially from the results and outcomes discussed in the forward-looking statements. Cautionary statements that identify important factors that could cause or contribute to differences in results and outcomes include those discussed in the sections titled, Risk Factors and Forward Looking Statements in this joint proxy statement/prospectus.

Mutual Reasons for the Merger

TorreyPines and Raptor believe that the merger will result in a biopharmaceutical company with the following potential advantages:

Pipeline. The combined company will have an expanded product candidate pipeline that is more diversified, and targets unmet and underserved markets. The pipeline will consist of six clinical programs either in, or ready to begin, Phase II or Phase III clinical trials as well as three preclinical programs, one of which is partnered with a large pharmaceutical company.

Markets. The combined company can better manage clinical development risk by having development capabilities across a wider spectrum of diseases and markets. Raptor s orphan product strategy of applying reformulated versions of already approved compounds to new disease indications may provide a balance to the development risks of TorreyPines novel compounds for the potential treatment of pain. The orphan and non-orphan markets that may be addressed by the clinical and preclinical stage programs of the combined company represent well documented underserved or unmet medical needs.

Capital Structure. The combined company provides the opportunity to combine and reorganize both TorreyPines and Raptor s capital structure and the contemplated listing on the NASDAQ Capital Market may provide the combined company with access to a more liquid market for the combined company s common stock.

Management Team. The combined company will be led by an experienced senior management team from Raptor who has significant experience in the development, registration, and commercialization of product candidates and a board of directors with representation from Raptor. The existing senior management team from TorreyPines will remain with a wholly-owned subsidiary of the combined company for a transition period and will focus on advancing TorreyPines product candidates for the treatment of moderate to severe pain.

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TorreyPines Reasons for the Merger

The TorreyPines board of directors approved the merger based on a number of factors, including the following:

Strategic Alternatives. The consideration of TorreyPines efforts to pursue strategic alternatives to the merger, including engaging in a merger transaction with another company, an asset sale or licensing/partnering transaction for TorreyPines pain program or undertaking a bankruptcy or liquidation of TorreyPines; and

Stockholder Opportunity. The opportunity for TorreyPines stockholders to participate in the short and long-term value of Raptor s preclinical and clinical development programs as a result of the merger.

In addition to considering the strategic factors outlined above, the TorreyPines board of directors considered the following factors in reaching its conclusion to approve the merger and to recommend that the TorreyPines stockholders approve the issuance of shares of TorreyPines common stock in the merger and the resulting change of control of TorreyPines, all of which it viewed as supporting its decision to approve the business combination with Raptor:

the results of the due diligence review of Raptor s business and operations by TorreyPines management and financial advisors which review supported TorreyPines belief that the addition of the Raptor programs would broaden the combined company s pipeline;

the aggregate value to be received by TorreyPines stockholders in the merger;

the terms and conditions of the merger agreement, including the following related factors:

the determination that the relative percentage ownership of TorreyPines stockholders and Raptor stockholders is consistent with market practice for a merger of this type and captures the respective ownership interests of the TorreyPines and Raptor stockholders in the combined company based on TorreyPines perceived valuations of each company at the time of the TorreyPines board of directors approval of the merger agreement;

the expectation that the merger will be treated as a reorganization for United States federal income tax purposes, with the result that in the merger TorreyPines stockholders will generally not recognize taxable gain or loss for United States federal income tax purposes;

the nature of the conditions to Raptor s obligation to consummate the merger and the perceived risk of non-satisfaction of such conditions;

the limited number and nature of the conditions to Raptor s obligation to consummate the merger;

TorreyPines rights under the merger agreement to consider certain unsolicited acquisition proposals under certain circumstances should TorreyPines receive a superior proposal;

the no solicitation provisions governing Raptor s ability to engage in negotiations with, provide any confidential information or data to, and otherwise have discussions with, any person relating to an alternative acquisition proposal;

the belief that the terms of the merger agreement, including the parties representations, warranties and covenants, and the conditions to their respective obligations, are reasonable under the circumstances; and

the voting agreements entered into by officers and directors of Raptor representing approximately 11% of the outstanding capital stock as of July 27, 2009, pursuant to which those officers and directors agreed, solely in their capacity as stockholders, to vote all of their shares of Raptor capital stock in favor of adoption of the merger agreement;

the likelihood of retaining key Raptor employees to help manage the combined company;

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the likelihood that the merger will be consummated on a timely basis, including the likelihood that the merger will receive all necessary regulatory approvals;

the opportunity for TorreyPines stockholders to potentially participate in the short and long-term value of Raptor s product candidate development programs as a result of the merger;

the belief that the combination with Raptor would result in a combined company with the potential for future growth and value as compared to TorreyPines;

the possibility that the combined entity would be able to take advantage of the potential benefits resulting from Raptor s experienced management team;

the reimbursement of up to $250,000 for incurred expenses payable by Raptor and the circumstances under which it is payable are typical for transactions of this size and type; and

its understanding of Raptor s business including its product candidates, Raptor s experienced management team, and the prospects for value creation for TorreyPines stockholders in connection with the merger.

In the course of its deliberations, TorreyPines board of directors also considered a variety of risks and other countervailing factors related to entering into the merger agreement, including:

the possibility that the merger might not be completed and the potential adverse effect of the public announcement of the merger on the reputation of TorreyPines and TorreyPines ability to obtain financing in the future in the event the merger is not completed;

the risk that TorreyPines may be delisted from the NASDAQ Global Market, may not be able to qualify the shares to be issued in the merger for listing on the NASDAQ Capital Market, or that The NASDAQ Stock Market LLC may reject the initial listing application that TorreyPines will be required to file in connection with the merger;

the risk that Raptor may terminate the merger agreement if TorreyPines Net Cash balance at closing is not greater than zero dollars;

the risk that Raptor may terminate the merger agreement;

the requirement under the terms of the merger agreement that TorreyPines reimburse Raptor up to $250,000 of incurred expenses under certain circumstances, and that TorreyPines obligation to pay the expense reimbursement may deter third parties from proposing or pursuing alternative business combinations that might result in greater value to TorreyPines stockholders than the merger;

the immediate and substantial dilution of equity interest and voting power of TorreyPines stockholders upon completion of the merger;

the restrictions on the conduct of TorreyPines business prior to the consummation of the merger, which, subject to specific limitations, may delay or prevent it from taking certain actions during the time that the merger agreement remains in effect;

the risks, challenges and costs inherent in combining the operations of the two companies and the substantial expenses to be incurred in connection with the merger, including the possibility that delays or difficulties in completing the integration could adversely affect the combined company s operating results and preclude the achievement of some of the benefits anticipated from the merger;

the possible volatility, at least in the short term, of the trading price of TorreyPines common stock resulting from the merger announcement;

the risk of diverting management s attention from other strategic priorities to implement merger integration efforts;

the risk that the merger might not be consummated in a timely manner or at all;

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the risk to TorreyPines business, operations and financial results in the event that the merger is not consummated;

the strategic direction of the combined company s board of directors;

the interest of TorreyPines directors and officers may be different in certain respects from the interests of TorreyPines stockholders; and

various other risks associated with the combined company and the merger, including the risks associated with obtaining a positive Raptor stockholder vote and those described in the section titled, Risk Factors in this joint proxy statement/prospectus.

The foregoing information and factors considered by TorreyPines board of directors are not intended to be exhaustive but are believed to include all of the material factors considered by TorreyPines board of directors. In view of the wide variety of factors considered in connection with its evaluation of the merger and the complexity of these matters, TorreyPines board of directors did not find it useful, and did not attempt, to quantify, rank or otherwise assign relative weights to these factors. In considering the factors described above, individual members of TorreyPines board of directors may have given different weight to different factors. TorreyPines board of directors conducted an overall analysis of the factors described above, including thorough discussions with, and questioning of, TorreyPines management and TorreyPines legal and financial advisors, and considered the factors overall to be favorable to, and to support, its determination.

TorreyPines board of directors unanimously determined that the merger agreement and the merger are advisable, fair to and in the best interest of TorreyPines stockholders and unanimously approved the merger agreement.

The foregoing discussion of TorreyPines board of directors considerations concerning the merger is forward looking in nature. This information should be read in light of the discussions under the heading Forward-Looking Statements.

Raptor s Reasons for the Merger

Raptor s board of directors approved the merger based on a number of factors, including the following:

Expanded Pipeline. The combined company will have an expanded product candidate pipeline that is more diversified, and targets unmet and underserved markets. The pipeline will consist of six clinical programs either in, or ready to begin, Phase II or Phase III clinical trials as well as three preclinical programs, one of which is partnered with a large pharmaceutical company.

Markets. The combined company can better manage clinical development risk by having development capabilities across a wider spectrum of diseases and markets. Raptor s orphan product strategy of applying reformulated versions of already approved compounds to new disease indications may provide a balance to the development risks of TorreyPines novel compounds for the potential treatment of pain. The orphan and non-orphan markets that may be addressed by the clinical and preclinical stage programs of the combined company represent well documented underserved or unmet medical needs.

Capital Structure. The combined company provides the opportunity to combine and reorganize both TorreyPines and Raptor s capital structure and the contemplated listing on the NASDAQ Capital Market may provide the combined company with access to a more liquid market for the combined company s common stock.

In addition to considering the strategic factors outlined above, the Raptor board considered the following factors in reaching its conclusion to approve the merger, all of which it viewed as supporting its decision to approve the business combination with TorreyPines:

TorreyPines attractiveness as a merger partner, including the significant synergy between the product candidate pipelines of Raptor and TorreyPines;

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the results of the due diligence review of TorreyPines business and operations by Raptor s management, legal advisors and financial advisors which review supported Raptor s belief that the addition of the TorreyPines product candidates would broaden Raptor s product pipeline;

the aggregate value to be received by Raptor stockholders in the merger;

Raptor s ability to gain a NASDAQ listing and potentially increase its visability as a nationally listed company;

the terms and conditions of the merger agreement, including the following related factors:

- the determination that the relative percentage ownership of TorreyPines stockholders and Raptor stockholders is consistent with market practice for a merger of this type and captures the respective ownership interests of the TorreyPines and Raptor stockholders in the combined company based on Raptor s perceived valuations of each company at the time of the Raptor board of directors approval of the merger agreement;

- the expectation that the merger will be treated as a reorganization for United States federal income tax purposes, with the result that in the merger Raptor stockholders will generally not recognize taxable gain or loss for United States federal income tax purposes;

- the nature of the conditions to TorreyPines obligation to consummate the merger and the limited risk of non-satisfaction of such conditions;

- the limited number and nature of Raptor s obligation to consummate the merger;

- Raptor s rights under the merger agreement to consider certain unsolicited acquisition proposals under certain circumstances should Raptor receive a superior proposal;

- the no solicitation provisions governing TorreyPines ability to engage in negotiations with, provide any confidential information or data to, and otherwise have discussions with, any person relating to an alternative acquisition proposal;

- the belief that the terms of the merger agreement, including the parties representations, warranties, and covenants, and the conditions to their respective obligations, are reasonable under the circumstances; and

the fact that shares of TorreyPines common stock issued to Raptor stockholders will be registered on Form S-4 and will be freely tradable for Raptor stockholders;

the likelihood of retaining key TorreyPines employees to help manage TPTX, Inc. for a transition period;

the likelihood that the merger will be consummated on a timely basis, including the likelihood that the merger will receive all necessary regulatory approvals;

the opportunity for Raptor s stockholders to participate in the potential long-term value of TorreyPines product candidate development programs as a result of the merger;

the belief that the combination with TorreyPines would result in a combined company with the potential for enhanced future growth and value as compared to Raptor as an independent, stand-alone company;

the Raptor board of director s consideration of strategic alternatives to the merger, including engaging in a merger transaction with another company or continuing to operate Raptor on a stand-alone basis;

the reimbursement of up to $250,000 for incurred expenses payable by TorreyPines and the circumstances under which it is payable are typical for transactions of this size and type; and

its understanding of TorreyPines business including its product candidates, TorreyPines experienced management team, and the prospects for value creation for Raptor s stockholders in connection with the merger.

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In the course of its deliberations, Raptor s board of directors also considered a variety of risks and other countervailing factors related to entering into the merger agreement, including the following:

- the possibility that the merger might not be completed and the potential adverse effect of the public announcement of the merger on the reputation of Raptor and Raptor s ability to obtain financing in the future in the event the merger is not completed;
- the risk that TorreyPines may terminate the merger agreement;
- the requirement under the terms of the merger agreement that Raptor reimburse TorreyPines up to $250,000 of incurred expenses under certain circumstances, and that Raptor s obligation to pay the expense reimbursement may deter third parties from proposing or pursuing alternative business combinations that might result in greater value to Raptor stockholders than the merger;
- the risk of diverting management s attention from other strategic priorities to implement the merger and integrate each company s operations and infrastructure following the merger;
- the risk that the merger might not be consummated in a timely manner or at all;
- the risk to Raptor s business, operations and financial results in the event that the merger is not consummated;
- the interest of Raptor s directors and officers may be different in certain respects from the interest of Raptor s stockholders;
- the risks, challenges and costs of combining each company s operations and the substantial expenses to be incurred in connection with the merger, including the risks that delays or difficulties in completing integration activities and such other expenses, could adversely affect the combined company s operating results and preclude the achievement of some benefits anticipated from the merger; and
- various other applicable risks associated with the combined company and the merger, including the risks associated with obtaining a positive TorreyPines stockholder vote and including those described in the section titled, Risk Factors in this joint proxy statement/prospectus.

The foregoing information and factors considered by Raptor s board of directors are not intended to be exhaustive but are believed to include all of the material factors considered by Raptor s board of directors. In view of the wide variety of factors considered in connection with its evaluation of the merger and the complexity of these matters, the Raptor board of directors did not find it useful, and did not attempt, to quantify, rank or otherwise assign relative weights to these factors. In considering the factors described above, individual members of the Raptor board of directors may have given different weight to different factors. The Raptor board of directors conducted an overall analysis of the factors described above, including thorough discussions with, and questioning of, Raptor s management and Raptor s legal and financial advisors, and considered the factors overall to be favorable to, and to support, its determination.

Raptor s board of directors unanimously determined that the merger agreement and the merger are advisable, fair to and in the best interest of Raptor s stockholders and unanimously approved the merger agreement.

The foregoing discussion of Raptor s board of directors considerations concerning the merger is forward looking in nature. This information should be read in light of the discussions under the heading Forward-Looking Information.

Interests of TorreyPines Directors and Executive Officers in the Merger

In considering the recommendation of the TorreyPines board of directors with respect to issuing shares of TorreyPines common stock as contemplated by the merger agreement and the other matters to be acted upon by TorreyPines stockholders at the TorreyPines annual meeting, TorreyPines stockholders should be aware that

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certain members of the board of directors and executive officers of TorreyPines have interests in the merger that may be different from, or in addition to, the interests of TorreyPines stockholders. These interests relate to or arise from, among other things, the fact that TorreyPines executive officers have entered into amended and restated employment agreements with TPTX, Inc., a wholly-owned subsidiary or TorreyPines, which will become effective on the closing of the merger, assuming the TorreyPines stockholders approve the merger. Pursuant to the amended employment agreements each of the current TorreyPines executive officers will be paid by TPTX, Inc. following the merger through February 28, 2010, whether or not they remain employees of TPTX, Inc. following the merger. In addition, these employment agreements provide for bonus payments to each of these executives in the event that TPTX, Inc. is able to secure funding, a partnership, sale or similar transaction related to NGX426, TPTX s pain program product candidate, prior to February 28, 2010, in excess of $10 million, as described in further detail below under Amended Employment Agreements Following Merger .

Each member of TorreyPines board of directors was aware of these potential conflicts of interest and considered them, among other matters, in reaching their respective decisions to approve the merger agreement and the merger, and to recommend that TorreyPines stockholders approve the Proposal Nos. 1, 2 and 3 in connection with the merger, as described in this joint proxy statement/prospectus.

Ownership Interests

As of August 12, 2009, all directors and executive officers of TorreyPines, together with their affiliates, beneficially owned approximately 8.9% of the shares of TorreyPines common stock. The affirmative vote of the holders of a majority of the TorreyPines common stock having voting power present in person or represented by proxy at the TorreyPines annual meeting is required for approval of TorreyPines Proposal Nos. 1 and 5. The affirmative vote of the holders of a majority of the TorreyPines common stock having voting power outstanding on the record date for the TorreyPines annual meeting is required for approval of TorreyPines Proposal Nos. 2 and 3. For the election of directors (Proposal No. 4), the four nominees receiving the most **FOR** votes from the shares of TorreyPines common stock having voting power present in person or represented by proxy at the TorreyPines annual meeting will be elected.

Employment Agreements Currently in Effect

TorreyPines entered into employment agreements in 2008, as amended in 2009, with Evelyn Graham, its Chief Executive Officer, Craig Johnson, its Chief Financial Officer and Paul Schneider, its Vice President and General Counsel. Under these agreements, as amended, each executive will be entitled to certain severance benefits if his or her respective employment is terminated under either of the following circumstances:

- the executive s employment is terminated by TorreyPines without cause (as described below) at any time; or
- within the period commencing three (3) months before and ending twelve (12) months following the occurrence of a change of control.

For purposes of these agreements, cause is generally defined to mean: (a) executive s conviction of, or plea of guilty or no contest to, any felony or any crime involving fraud, dishonesty or moral turpitude under the laws of the United States or any state thereof; (b) executive s commission of (or attempted commission of), or participation in, a fraud or act of dishonesty against TorreyPines; (c) executive s material violation of any statutory duty owed to TorreyPines or material violation of any policy or rule of TorreyPines; (d) executive s unauthorized use or disclosure of TorreyPines confidential information or trade secrets; (e) executive s gross misconduct; or (f) executive s conduct that constitutes gross insubordination or habitual neglect of duties that is not cured within the reasonable period provided by the TorreyPines board of directors or a committee designated by the board of directors in its written notice to executive of such conduct.

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For purposes of these employment agreements, good reason is generally defined to mean: (a) a material breach of the employment agreement by TorreyPines; (b) a material reduction in the executive s duties, authority or responsibilities relative to the duties, or authority or responsibilities in effect immediately prior to such reduction; (c) a material reduction in the duties, authority or responsibilities of the supervisor to whom the executive is required to report, including a requirement that the executive report to a corporate officer or employee instead of reporting directly to the TorreyPines board of directors; (d) a material reduction in the executive s base salary or target bonus opportunity as in effect immediately prior to such reduction for any reason other than in connection with, and proportionate to, a company-wide pay reduction (provided that the executive s target bonus is part of the executive s base compensation for purposes of Section 409A, as defined below); or (e) an increase in the executive s one-way driving distance from the executive s principal personal residence to the principal office or business location at which the executive is required to perform services of more than 50 miles, except for required travel for TorreyPines business to an extent substantially consistent with executive s prior business travel obligations.

In the event of an executive s qualifying termination of employment, the executive will be entitled to receive the following:

- a continuation of pay of the executive s base salary during the period following the termination or resignation of the executive for a period equal to twelve (12) months, plus the greater of (i) the average of the three annual bonuses paid to the executive by TorreyPines prior to the date of termination or resignation, or (ii) the last annual bonus paid to the executive by TorreyPines prior to the date of termination or resignation;

- the right to continue participation for a one-year period in any group health plan sponsored by TorreyPines in which the executive was participating on the date of his or her termination or resignation, at a cost to the executive equal to the amount charged by TorreyPines to its then-current employees; and

- the immediate accelerated vesting of the number of shares that would have vested in accordance with the applicable vesting had executive remained employed by TorreyPines for an additional twelve (12) months as of the date of termination.

Set forth below is an estimate of the value of the severance benefits that would become payable to Ms. Graham and Messrs. Johnson and Schneider under the employment agreements, assuming a qualifying termination of each individual s employment and excluding the value of any accelerated vesting of stock options or lapsing of any post-termination stock option exercise restrictions. The amounts shown below are in addition to the values shown in the next table regarding the accelerated vesting of stock options.

Name and Principal Position	Severance Period	Total Severance Payments	Other Benefits
Evelyn Graham Chief Executive Officer	12 months	$ 507,500	Full acceleration of all outstanding options
Craig Johnson Vice President, Finance and Chief Financial Officer	12 months	$ 351,200	Full acceleration of all outstanding options
Paul Schneider Vice President and General Counsel	12 months	$ 272,125	Full acceleration of all outstanding options

Employment Agreements Following Merger

On July 27, 2009, TorreyPines and TPTX, Inc., or TPTX, a wholly-owned subsidiary of TorreyPines, entered into a second amended and restated employment agreement with each of Ms. Graham, Mr. Johnson and Mr. Schneider. The second amended and restated employment agreements amend and restate the previous employment agreement between TorreyPines, TPTX, Inc. and each of Ms. Graham, Mr. Johnson and Mr. Schneider, as applicable, described above. Each second amended and restated employment agreement was

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entered into in connection with the merger with Raptor and will become effective only upon the closing of the merger. Upon effectiveness each second amended and restated employment agreement shall replace and supersede all prior employment agreements between Ms. Graham, Mr. Johnson and Mr. Schneider, respectively, and TPTX, Inc. and/or TorreyPines.

Each second amended and restated agreement, once effective, will remain effective through February 28, 2010 and may be terminated by each of Ms. Graham, Mr. Johnson and Mr. Schneider, as applicable, or TPTX, as the employer, at any time, with or without cause. Each of Ms. Graham s, Mr. Johnson s and Mr. Schneider s second amended and restated employment agreement reflects their respective current annual base salary in effect at the time of the signing of the merger agreement of $350,000, $282,000 and $217,700, respectively. Each of those agreements states that the employee shall not be eligible for any bonus or receive or accrue any vacation.

Pursuant to the terms of each of Ms. Graham s, Mr. Johnson s and Mr. Schneider s second amended and restated employment agreement, in the event that Ms. Graham, Mr. Johnson and Mr. Schneider, as applicable, is terminated for any reason, such individual will be entitled to continue to receive their respective base salary through February 28, 2010.

In addition, if, following the effective time of each such second amended and restated employment agreement and prior to February 28, 2010, TPTX, Inc. (i) sells to a third party buyer any equity securities of TPTX, Inc. and the proceeds from such sale are used primarily for the development NGX426, (ii) completes a change of control transaction or (iii) enters into a partnership, option, or similar arrangement and such sale or equivalent transaction as described in clauses (i), (ii) or (iii) above is approved by the board of directors of TPTX, Inc. and is for aggregate cash consideration (net of all costs and expenses associated with the sale) received by TPTX, Inc. on or before February 28, 2010 of not less than $10 million, then promptly following the closing of such sale or equivalent transaction, (A) TPTX, Inc. shall pay to each of Ms. Graham, Mr. Johnson and Mr. Schneider, respectively, an amount equal to (a) 3.0% of the aggregate cash consideration (net of all costs and expenses associated with the sale or equivalent transaction) received by TPTX, Inc. in the sale or equivalent transaction multiplied by (b) a percentage equivalent to Ms. Graham s, Mr. Johnson s and Mr. Schneider s respective salary compared to the aggregate salary of these three individuals, payable in cash, and (B) TorreyPines shall pay to each of Ms. Graham, Mr. Johnson and Mr. Schneider an amount equal to (x) 2.0% of the aggregate cash consideration (net of all costs and expenses associated with the sale or equivalent transaction) received by TPTX, Inc. in the sale or equivalent transaction multiplied by (y) each of Ms. Graham s, Mr. Johnson s and Mr. Schneider s respective salary compared to the aggregate salary of these three individuals, payable in the form of TorreyPines common stock.

Stock Options

Each of TorreyPines executive officers and non-employee directors holds options to purchase shares of TorreyPines common stock. The options were granted under TorreyPines equity participation plans pursuant to a stock option agreement. Each option grant typically vests in a series of annual installments over a number of years. However, the option agreements provide that each option will vest and become exercisable as to all shares covered by such option upon the consummation of a merger involving TorreyPines, subject to certain exceptions that would not apply to the contemplated merger. As a result, all of the outstanding options held by TorreyPines executive officers and non-employee directors will immediately vest and become exercisable in full upon consummation of the merger.

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The following table shows the total number of option shares held as of June 30, 2009 by each director and executive officer of TorreyPines. The options have exercise prices ranging between $0.23 and $6.37 per share. Based on the difference between $0.14 (the closing price of a share of TorreyPines common stock as quoted on The NASDAQ Global Market on August 12, 2009) and the actual exercise price of each individual s unvested options, none of the unvested options held by TorreyPines executive officers and non-employee directors has any intrinsic value.

Name	Total Options Held	Vested	Unvested	Weighted Average Exercise Price Per Share
Executive Officers:				
Evelyn A. Graham	674,100	459,412	214,688	$ 0.57
Craig A. Johnson	574,100	392,745	181,355	$ 0.63
Paul R. Schneider	429,875	323,911	105,964	$ 1.24
Directors(1):				
Peter Davis	21,624	21,624	0	$ 4.01
Steven Ferris	45,687	45,687	0	$ 16.79
Steven Ratoff	56,662	56,662	0	$ 7.33

Indemnification of TorreyPines Officers and Directors

The merger agreement provides that, for a period of six years following the effective time of the merger, the combined company will, to the fullest extent permitted by Delaware law, indemnify and hold harmless all present and former directors and officers of TorreyPines against all claims, losses, liabilities, damages, judgments, fines and reasonable fees, costs and expenses, including attorneys fees and disbursements, incurred in connection with any claim, action, suit, proceeding or investigation, whether civil, criminal, administrative or investigative (other than any such proceeding as set forth under the section titled, TorreyPines Business Legal Proceedings in this joint proxy statement/prospectus), arising out of or pertaining to the fact that such person is or was a director or officer of TorreyPines. In addition, for a period of six years following the effective time of the merger, the certificate of incorporation and bylaws of the combined company and surviving company will contain provisions no less favorable with respect to indemnification, advancement of expenses and exculpation of present and former directors and officers of TorreyPines than are presently set forth in the certificate of incorporation and bylaws of TorreyPines.

The merger agreement also provides that, for a period of six years following the consummation of the merger, the combined company will maintain in effect a directors and officers liability insurance policy covering the directors and officers of TorreyPines, with coverage in amount and scope of at least $5 million of coverage containing terms and conditions that are not materially less favorable than TorreyPines existing policy as of the time the merger becomes effective; *provided*, *however*, that in no event shall Raptor be required to expend more than an amount equal to $65,000 for such insurance.

Interests of Raptor s Directors and Executive Officers in the Merger

In considering the recommendation of the Raptor board of directors with respect to adopting the merger agreement, Raptor s stockholders should be aware that certain members of the board of directors and executive officers of Raptor have interests in the merger that may be different from, or in addition to, interests they may have as Raptor s stockholders. Each of TorreyPines and Raptor s board of directors was aware of these potential conflicts of interest and considered them, among other matters, in reaching their respective decisions to approve the merger agreement and the merger, and, in the case of each board of directors, to recommend that their respective stockholders approve the TorreyPines and Raptor proposals, as applicable, contemplated by this joint proxy statement/prospectus to be presented to their stockholders for consideration at their respective stockholder meetings.

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Ownership Interests

As of June 30, 2009, all directors and executive officers of Raptor beneficially owned (including through ownership of options and warrants) approximately 15% of the shares of Raptor capital stock. Raptor cannot complete the merger unless the merger agreement is adopted by the affirmative vote of the holders of a majority of the shares of Raptor common stock outstanding on the record date and entitled to vote at the Raptor annual meeting. Certain Raptor officers and directors have also entered into voting agreements in connection with the merger. For a more detailed discussion of the voting agreements see the section titled, Agreements Related to the Merger Voting Agreements in this joint proxy statement/prospectus.

TorreyPines Board of Directors After the Merger

The merger agreement provides that, following the merger, the combined company will initially have a four member board of directors, comprised of Christopher M. Starr, Ph.D., Raymond W. Anderson, Erich Sager and Richard L. Franklin, M.D., Ph.D., the current directors of Raptor.

Stock Options

At the effective time of the merger, each outstanding stock option to purchase Raptor common stock not exercised prior to the merger will be assumed by TorreyPines and become exercisable (a) for such number of shares of TorreyPines common stock as is determined by multiplying the number of shares of Raptor common stock subject to the option by the exchange ratio and rounding that result down to the nearest whole number of shares of TorreyPines common stock, and (b) at a per share exercise price as is determined by dividing the existing exercise price of the option by the exchange ratio and rounding that result up to the nearest whole cent, not taking into effect the proposed reverse stock split.

The table below sets forth, as of June 30, 2009, information with respect to options held by each of Raptor s current executive officers and directors.

Name	Total Options Held	Vested	Unvested	Weighted Average Exercise Price Per Share
Executive Officers:				
Christopher M. Starr, Ph.D.	250,000	250,000	0	$ 0.66
Todd C. Zankel, Ph.D.	250,000	250,000	0	$ 0.66
Thomas E. Daley	250,000	86,457	163,543	$ 0.49
Kim R. Tsuchimoto, C.P.A.	327,500	287,498	40,002	$ 0.60
Patrice P. Rioux, M.D., Ph.D.	150,000	0	150,000	$ 0.20
Directors(1):				
Raymond W. Anderson	600,000	549,999	50,001	$ 0.60
Erich Sager	1,100,000	1,049,999	50,001	$ 0.60
Richard L. Franklin, M.D., Ph.D.	150,000	34,374	115,626	$ 0.52

(1) Christopher M. Starr, Ph.D., the chief executive officer of Raptor, is also a director of Raptor.

Stock Options and Warrants

Raptor has granted options to purchase shares of its common stock under its 2006 Equity Incentive Plan. Each outstanding option to purchase shares of Raptor common stock that is not exercised prior to the effective time of the merger will be assumed by TorreyPines at the effective time of the merger in accordance with the terms of the 2006 Equity Incentive Plan and the terms of the related stock option agreement and will become an option to purchase shares of TorreyPines common stock. The number of shares of TorreyPines common stock subject to each assumed option will be determined by multiplying the number of shares of Raptor common stock

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that was subject to each option prior to the effective time of the merger by the exchange ratio and rounding that result down to the nearest whole number of shares of TorreyPines common stock. The per share exercise price for the assumed options will be determined by dividing the per share exercise price of the Raptor common stock subject to each option as in effect immediately prior to the effective time of the merger by the exchange ratio and rounding that result up to the nearest whole cent, not taking into effect the proposed reverse stock split.

Raptor has issued warrants to purchase shares of its common stock. Each outstanding warrant to purchase shares of Raptor common stock not terminated or exercised at or prior to the merger will be assumed by TorreyPines at the effective time of the merger in accordance with its terms and will become a warrant to purchase shares of TorreyPines common stock. The number of shares of TorreyPines common stock subject to each assumed warrant will be determined by multiplying the number of shares of Raptor common stock, issuable upon exercise of such warrant, as applicable, that were subject to such warrant prior to the effective time of the merger by the exchange ratio and rounding that result down to the nearest whole number of shares of TorreyPines common stock. The per share exercise price for the assumed warrants will be determined by dividing the per share exercise price of the common stock subject to each warrant as in effect immediately prior to the effective time of the merger by the exchange ratio and rounding that result up to the nearest whole cent, not taking into effect the proposed reverse stock split.

For a more detailed discussion of the exchange ratio and possible adjustments to the exchange ratio to reflect certain events that could occur prior to closing, see the section titled, The Merger Agreement Merger Consideration and Adjustment in this joint proxy statement/prospectus. If there is no adjustment to the exchange ratio to reflect certain events that could occur prior to closing, the exchange ratio will be that number of shares of TorreyPines common stock equal to the 303,982,102 shares of TorreyPines common stock to be issued in the merger divided by 69,145,047 shares of Raptor common stock outstanding as of the signing of the merger agreement plus 350,000 shares of Raptor common stock issuable pursuant to Raptor stock options outstanding as of the signing of the merger agreement plus any additional shares of Raptor common stock and securities exercisable for or exchangeable or convertible into Raptor common stock that may be issued following the execution of the merger agreement and prior to the effective time of the merger, subject to adjustment to account for the reverse stock split to be implemented prior to the consummation of the merger.

Form of the Merger

The merger agreement provides that at the effective time, merger sub will be merged with and into Raptor. Upon the consummation of the merger, Raptor will continue as the surviving corporation and will be a wholly-owned subsidiary of TorreyPines.

After completion of the merger, assuming TorreyPines Proposal No. 3 is approved by TorreyPines stockholders at the TorreyPines annual meeting, TorreyPines will be renamed Raptor Pharmaceutical Corp. and expects to trade on the NASDAQ Capital Market under the symbol RPTP.

Merger Consideration and Adjustment

At the effective time of the merger,

- each share of Raptor common stock outstanding immediately prior to the effective time of the merger is expected to automatically convert into the right to receive the number of shares of TorreyPines common stock equal to the 303,982,102 shares of TorreyPines common stock to be issued in the merger divided by 69,145,047 shares of Raptor common stock outstanding as of the signing of the merger agreement plus 350,000 shares of Raptor common stock issuable pursuant to Raptor stock options outstanding as of the signing of the merger agreement plus any additional shares of Raptor common stock and securities exercisable for or exchangeable or convertible into Raptor common stock that may be issued following the execution of the merger agreement and prior to the effective time of the merger, subject to adjustment to account for the reverse stock split to be implemented prior to the consummation of the merger, which is referred to as the exchange ratio;

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each option to purchase shares of Raptor common stock outstanding and unexercised immediately prior to the effective time of the merger will be assumed by TorreyPines and will become an option to purchase shares of TorreyPines common stock equal to the product of the number of shares of Raptor common stock subject to the option multiplied by the exchange ratio, rounded down to the nearest whole number of shares of TorreyPines common stock, subject to adjustment to account for the reverse stock split to be implemented prior to the consummation of the merger; and

each warrant to purchase shares of Raptor common stock outstanding and unexercised immediately prior to the effective time of the merger will be assumed by TorreyPines and will become a warrant to purchase shares of TorreyPines common stock equal to the product of the number of shares of Raptor common stock issuable upon exercise of the Raptor warrant multiplied by the exchange ratio, rounded down to the nearest whole number of shares of TorreyPines common stock, subject to adjustment to account for the reverse stock split to be implemented prior to the consummation of the merger.

Immediately after the merger, based on the exchange ratio Raptor stockholders will hold 95% of the outstanding shares of common stock of the combined company with TorreyPines stockholders holding 5% of the outstanding shares of common stock of the combined company, in each case without taking into account any of the other shares of TorreyPines common stock that may be issuable pursuant to outstanding options or warrants to acquire TorreyPines common stock outstanding as of the signing of the merger agreement or any other shares of Raptor common stock that may be issuable pursuant to outstanding options or warrants, other than the 350,000 shares of Raptor common stock issuable pursuant to Raptor stock options included in the calculation of the exchange ratio. Other than the 350,000 shares of Raptor common stock issuable pursuant to Raptor stock options included in the calculation of the exchange ratio, none of the options to purchase shares of Raptor common stock or TorreyPines common stock, respectively, or warrants to purchase shares of Raptor common stock or TorreyPines common stock, respectively, were included in the calculation of the exchange ratio because such options and warrants were out-of-the-money as determined by the boards of directors of TorreyPines and Raptor, respectively, given that the exercise prices of such options and warrants were higher than the trading prices of the common stock for which such options and warrants were exercisable as of July 27, 2009, the date of the merger agreement. Assuming that all of such options and warrants were included in the calculation of the exchange ratio, then, immediately after the merger, based on the exchange ratio as calculated in such manner, Raptor stockholders would hold approximately 94.4% of the outstanding shares of common stock of the combined company on a fully-diluted basis, and TorreyPines stockholders would hold approximately 5.6% of the outstanding shares of common stock of the combined company on a fully-diluted basis.

The merger agreement does not include a price-based termination right, so there will be no adjustment to the total number of shares of TorreyPines common stock that Raptor stockholders will be entitled to receive for changes in the market price of TorreyPines common stock. Accordingly, the market value of the shares of TorreyPines common stock issued pursuant to the merger will depend on the market value of the shares of TorreyPines common stock at the time the merger closes, and could vary significantly from the market value on the date of this joint proxy statement/prospectus.

No fractional shares of TorreyPines common stock will be issuable pursuant to the merger to Raptor stockholders. Instead, each Raptor stockholder who would otherwise be entitled to receive a fraction of a share of TorreyPines common stock, after aggregating all fractional shares of TorreyPines common stock issuable to such stockholder, will be entitled to receive in cash the dollar amount, rounded to the nearest whole cent, without interest, determined by multiplying such fraction by the closing price of a share of TorreyPines common stock as quoted on the NASDAQ Global Market, on the date the merger becomes effective.

The merger agreement provides that, at the effective time of the merger, TorreyPines will deposit with an exchange agent acceptable to TorreyPines and Raptor stock certificates representing the shares of TorreyPines common stock issuable to the Raptor stockholders, and a sufficient amount of cash to make payments in lieu of fractional shares.

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The merger agreement provides that, promptly after the effective time of the merger, the exchange agent will mail to each record holder of Raptor common stock immediately prior to the effective time of the merger a letter of transmittal and instructions for surrendering and exchanging the record holder s Raptor stock certificates for shares of TorreyPines common stock. Upon surrender of a Raptor common stock certificate for exchange to the exchange agent, together with a duly signed letter of transmittal and such other documents as the exchange agent or TorreyPines may reasonably require, the Raptor stock certificate surrendered will be cancelled and the holder of the Raptor stock certificate will be entitled to receive the following:

- a certificate representing the number of whole shares of TorreyPines common stock that such holder has the right to receive pursuant to the provisions of the merger agreement;
- cash in lieu of any fractional share of TorreyPines common stock; and
- dividends or other distributions, if any, declared or made with respect to TorreyPines common stock with a record date after the effective time of the merger.

At the effective time of the merger, all holders of certificates representing shares of Raptor common stock that were outstanding immediately prior to the effective time of the merger will cease to have any rights as stockholders of Raptor. In addition, no transfer of Raptor common stock after the effective time of the merger will be registered on the stock transfer books of Raptor.

If any Raptor stock certificate has been lost, stolen or destroyed, TorreyPines or the exchange agent may, in their discretion, and as a condition to the delivery of any shares of TorreyPines common stock, require the owner of such lost, stolen or destroyed certificate to deliver an affidavit claiming such certificate has been lost, stolen or destroyed and post a bond indemnifying TorreyPines against any claim suffered by TorreyPines related to the lost, stolen or destroyed certificate or any TorreyPines common stock issued in exchange for such certificate as TorreyPines or the exchange agent may reasonably request.

From and after the effective time of the merger, until it is surrendered, each certificate that previously evidenced Raptor common stock will be deemed to represent only the right to receive shares of TorreyPines common stock and cash in lieu of any fractional share of TorreyPines common stock. TorreyPines will not pay dividends or other distributions on any shares of TorreyPines common stock to be issued in exchange for any unsurrendered Raptor stock certificate until the Raptor stock certificate is surrendered as provided in the merger agreement.

Effective Time of the Merger

The merger agreement requires the parties to consummate the merger after all of the conditions to the consummation of the merger contained in the merger agreement are satisfied or waived, including the adoption of the merger agreement by the stockholders of Raptor and the approval by the TorreyPines stockholders of the issuance of TorreyPines common stock and the resulting change in control of TorreyPines, the amendment to TorreyPines certificate of incorporation effecting the reverse stock split and the name change from TorreyPines Therapeutics, Inc. to Raptor Pharmaceuticals Corp. The merger will become effective upon the filing of a certificate of merger with the Secretary of State of the State of Delaware or at such later time as is agreed by TorreyPines and Raptor and specified in the certificate of merger. Neither TorreyPines nor Raptor can predict the exact timing of the consummation of the merger.

Regulatory Approvals

As of the date of this joint proxy statement/prospectus, neither TorreyPines nor Raptor is required to make filings or to obtain approvals or clearances from any antitrust regulatory authorities in the United States or other countries to consummate the merger. In the United States, TorreyPines must comply with applicable federal and state securities laws and the rules and regulations of the The NASDAQ Stock Market LLC in connection with the issuance of shares of TorreyPines common stock and the resulting change in control of TorreyPines and the filing of this joint proxy statement/prospectus with the SEC.

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Tax Treatment of the Merger

TorreyPines and Raptor intend the merger to qualify as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended, or the Code. Each of TorreyPines and Raptor will use its reasonable best efforts to cause the merger to qualify as a reorganization within the meaning of Section 368(a) of the Code, and not to, and not to permit or cause any affiliate or any subsidiary of TorreyPines or Raptor to, take any action or cause any action to be taken which would cause the merger to fail to qualify as a reorganization under Section 368(a) of the Code. For a description of the material United States federal tax considerations of the merger, see the section titled, Material United States Federal Income Tax Consequences of the Merger below. TorreyPines and Raptor will cooperate and use their reasonable best efforts in order for TorreyPines to obtain from Cooley Godward Kronish LLP, and Raptor to obtain from Paul, Hastings, Janofsky & Walker LLP, an opinion that the merger will qualify as a reorganization within the meaning of Section 368(a) of the Code.

Material United States Federal Income Tax Consequences of the Merger

The following discussion summarizes the anticipated material U.S. federal income tax consequences of the merger to Raptor stockholders who exchange their Raptor common stock for TorreyPines common stock in the merger. This summary is based upon current provisions of the Internal Revenue Code, existing regulations under the Internal Revenue Code and current administrative rulings and court decisions, all of which are subject to change. Any such change, which may or may not be retroactive, could alter the tax consequences to TorreyPines, Raptor or the stockholders of Raptor described in this summary. No attempt has been made to comment on all federal income tax consequences of the merger that may be relevant to particular Raptor stockholders, including stockholders:

- who are subject to special tax rules, such as dealers in securities, foreign persons, mutual funds, insurance companies and tax-exempt entities;
- who are subject to the alternative minimum tax provisions of the Internal Revenue Code;
- who acquired their shares in connection with stock option or stock purchase plans or in other compensatory transactions;
- who hold their shares as a hedge or as part of a hedging, straddle or other risk reduction strategy; or
- who do not hold their shares as capital assets.

In addition, the following discussion does not address the tax consequences of the merger under state, local and foreign tax laws. Furthermore, the following discussion does not address:

- the tax consequences of transactions effectuated before, after or at the same time as the merger, whether or not they are in connection with the merger, including, without limitation, transactions in which Raptor shares are acquired or TorreyPines shares are disposed of;
- the tax consequences to holders of options issued by Raptor that are assumed, exercised or converted, as the case may be, in connection with the merger; or
- the tax consequences of the receipt of TorreyPines shares other than in exchange for Raptor shares.

Accordingly, holders of Raptor common stock are advised and expected to consult their own tax advisors regarding the federal income tax consequences of the merger in light of their personal circumstances and the consequences under state, local and foreign tax laws.

Cooley Godward Kronish LLP has delivered to TorreyPines, and Paul, Hastings, Janofsky & Walker LLP has delivered to Raptor, an opinion stating that the merger will constitute a reorganization within the meaning of Section 368(a) of the Internal Revenue Code. These opinions are attached as Exhibits 8.1 and 8.2 to the registration statement on Form S-4 filed with the Securities and Exchange Commission, which includes this

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proxy statement/prospectus. The tax opinions discussed in this section assume and are conditioned upon the following:

- the truth and accuracy of the statements, covenants, representations and warranties contained in the merger agreement, in the tax representations received from TorreyPines, merger sub and Raptor to support the tax opinions and in all other instruments and documents related to the formation, organization and operation of TorreyPines, merger sub and Raptor examined by and relied upon by Cooley Godward Kronish LLP and Paul, Hastings, Janofsky & Walker LLP in connection with the merger;

- that original documents submitted to such counsel are authentic, that documents submitted to such counsel as copies conform to the original documents and that all of these documents have been (or will be by the effective time) duly and validly executed and delivered where due execution and delivery are a prerequisite to the effectiveness of these documents;

- that all covenants contained in the merger agreement and the tax representations described above are performed without waiver or breach of any material provision of these covenants; and

- that any representation or statement made to the best of knowledge or similarly qualified is correct without that qualification.

No ruling from the Internal Revenue Service has been or will be requested in connection with the merger. In addition, stockholders of Raptor should be aware that the tax opinions discussed in this section are not binding on the IRS or any court. The IRS could adopt a contrary position and a contrary position could be sustained by a court.

Subject to the assumptions and limitations discussed above, it is the opinion of Paul, Hastings, Janofsky & Walker LLP, tax counsel to Raptor, and Cooley Godward Kronish LLP, tax counsel to TorreyPines, that:

- the merger will be treated for federal income tax purposes as a reorganization;

- TorreyPines, merger sub and Raptor will each be a party to the reorganization;

- TorreyPines, merger sub and Raptor will not recognize any gain or loss solely as a result of the merger;

- stockholders of Raptor will not recognize any gain or loss upon the receipt of solely TorreyPines common stock for their Raptor common stock;

- the aggregate basis of the shares of TorreyPines common stock that are received by a Raptor stockholder in the merger (including any fractional share deemed received) will be the same as the aggregate basis of the shares of Raptor common stock surrendered in exchange therefor;

- the holding period of the shares of TorreyPines common stock received by a Raptor stockholder in the merger will include the holding period of the shares of Raptor common stock surrendered in the merger if such shares of Raptor common stock are held as capital assets at the effective time of the merger; and

a stockholder of Raptor who receives cash instead of a fractional share of TorreyPines common stock will recognize gain or loss equal to the difference, if any, between such stockholder s basis in the fractional share and the amount of cash received. Such gain or loss will be a capital gain or loss if the Raptor common stock is held by such stockholder as a capital asset at the effective time of the merger.

a stockholder of Raptor who exercises appraisal rights and receives cash in exchange for such stockholder s Raptor common stock will generally recognize gain or loss measured by the difference between the amount of cash received and the adjusted basis of the Raptor common stock surrendered.

In addition to the foregoing, there are other tax-related issues that you should be aware of, such as:

Reporting Requirements. Each Raptor stockholder that receives TorreyPines common stock in the merger will be required to file a statement with his, her or its federal income tax return setting forth the

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stockholder s basis in the Raptor stock surrendered and the fair market value of the TorreyPines stock and cash received in the merger, and to retain permanent records of these facts relating to the merger.

Backup Withholding. Unless an exemption applies under applicable law and regulations, the exchange agent is required to withhold, and will withhold, 28% of any cash payments to a Raptor stockholder in the merger unless the stockholder provides the appropriate form as described below.

Each Raptor stockholder should complete and sign the substitute Form W-9 included as part of the letter of transmittal to be sent to each Raptor stockholder, so as to provide the information, including such stockholder s taxpayer identification number, and certification necessary to avoid backup withholding, unless an applicable exemption exists and is proved in a manner satisfactory to TorreyPines and the exchange agent.

Consequences of IRS Challenge. A successful IRS challenge to the reorganization status of the merger would result in significant tax consequences. Raptor stockholders would recognize gain or loss with respect to each share of Raptor common stock surrendered in the merger. Such gain or loss would be equal to the difference between the stockholder s basis in such share and the sum of the fair market value, as of the effective time, of the TorreyPines common stock received in the merger and any cash received instead of a fractional share of TorreyPines common stock. In such event, a stockholder s aggregate basis in the TorreyPines common stock so received would equal its fair market value as of the effective time and the stockholder s holding period for such stock would begin the day after the merger is consummated.

THE SUMMARY OF MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES SET FORTH ABOVE IS INTENDED TO PROVIDE ONLY A GENERAL SUMMARY AND IS NOT INTENDED TO BE A COMPLETE ANALYSIS OR DESCRIPTION OF ALL POTENTIAL FEDERAL INCOME TAX CONSEQUENCES OF THE MERGER. IN ADDITION, THE SUMMARY DOES NOT ADDRESS TAX CONSEQUENCES THAT MAY VARY WITH, OR ARE CONTINGENT ON, INDIVIDUAL CIRCUMSTANCES. MOREOVER, THE SUMMARY DOES NOT ADDRESS ANY NON-INCOME TAX OR ANY FOREIGN, STATE OR LOCAL TAX CONSEQUENCES OF THE MERGER. THE SUMMARY DOES NOT ADDRESS THE TAX CONSEQUENCES OF ANY TRANSACTION OTHER THAN THE MERGER. ACCORDINGLY, EACH RAPTOR STOCKHOLDER IS STRONGLY URGED TO CONSULT WITH A TAX ADVISOR TO DETERMINE THE PARTICULAR FEDERAL, STATE, LOCAL OR FOREIGN INCOME OR OTHER TAX CONSEQUENCES OF THE MERGER TO SUCH STOCKHOLDER.

NASDAQ Stock Market Listing

TorreyPines common stock currently is listed on the NASDAQ Global Market under the symbol TPTX . TorreyPines has agreed to use its commercially reasonable efforts to obtain approval for listing of the combined company on the NASDAQ Capital Market or, to the extent agreed by the parties, the NASDAQ Global Market, of the TorreyPines common stock.

Prior to consummation of the merger, TorreyPines intends to file an initial listing application with the NASDAQ Capital Market. Acceptance of the initial listing application and the listing of the shares of TorreyPines common stock on the NASDAQ Capital Market is a condition to closing the merger. Because the listing standards of the NASDAQ Capital Market will require TorreyPines to have, among other things, a $4.00 per share minimum bid price, the reverse stock split will be necessary in order to consummate the merger, but there is no assurance that the reverse stock split will be sufficient from The NASDAQ Stock Market LLC s perspective in order to approve the listing application. If such application is accepted, TorreyPines anticipates that the combined company s common stock will be listed on the NASDAQ Capital Market upon the closing of the merger and will trade under the combined company s new name, Raptor Pharmaceutical Corp., and new trading symbol, RPTP.

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Conditions Precedent

The obligation of Raptor to complete the merger is subject to the satisfaction or waiver of the following conditions:

- TorreyPines must have obtained all necessary permits and authorizations under any state blue sky laws, the Securities Act and the Exchange Act relating to the issuance of the TorreyPines common stock to be issued in the merger and such permits and authorizations shall be in effect at the closing of the merger;
- TorreyPines must have more than $0 in Net Cash as measured on closing date of the merger agreement;
- TorreyPines must have completed the reverse stock split and the name change from TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp. ;
- TorreyPines must have delivered to Raptor written resignations of the officers and directors of TorreyPines and merger sub;
- the stockholders of Raptor holding not more than 10% of the Raptor common stock outstanding immediately prior to the effective time of the merger shall have exercised their dissenters rights under Section 262 of the DGCL; *provided*, *however*; that such percentage shall not include any shares of Raptor common stock held by a director or executive officer of Raptor or the 13,128,332 shares of Raptor common stock held by Aran Asset Management SA as of the date of the merger agreement;
- Raptor must have received the opinion of Paul, Hastings, Janofsky & Walker LLP, dated as of the closing date of the merger, to the effect that, on the basis of the facts, representations and assumptions set forth or referred to in such opinion, the merger will be treated for federal income tax purposes as a reorganization within the meaning of Section 368(a) of the Code;
- Each of TorreyPines existing directors must resign; and
- Raptor must have received an executed release and waiver of claims agreement from each of Evelyn Graham, Craig Johnson and Paul Schneider, TorreyPines Chief Executive Officer, Chief Financial Officer and Vice President and General Counsel, respectively.

Anticipated Accounting Treatment

The merger will be treated by TorreyPines as a reverse merger under the purchase method of accounting in accordance with United States generally accepted accounting principles. For accounting purposes, Raptor is considered to be acquiring TorreyPines in this transaction. Therefore, the aggregate consideration paid in connection with the merger, together with the direct costs of acquisition, will be allocated to TorreyPines tangible and intangible assets and liabilities based on their fair market values. The assets and liabilities and results of operations of TorreyPines will be consolidated into the results of operations of Raptor as of the effective time of the merger. These allocations will be based upon a valuation that has not yet been finalized.

Appraisal Rights

In connection with the merger, Raptor stockholders are entitled to appraisal rights under Section 262 of the DGCL, or Section 262, provided that they comply with the conditions established by Section 262.

The discussion below is not a complete summary regarding an Raptor stockholder s appraisal rights under Delaware law and is qualified in its entirety by reference to the text of the relevant provisions of Delaware law, which are attached to this joint proxy statement/prospectus as *Annex B*. Stockholders intending to exercise appraisal rights should carefully review *Annex B*. Failure to follow precisely any of the statutory

procedures set forth in *Annex B* may result in a termination or waiver of these rights.

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A record holder of shares of Raptor s common stock who makes the demand described below with respect to such shares, who continuously is the record holder of such shares through the effective time of the merger, who otherwise complies with the statutory requirements of Section 262 and who neither votes in favor of the merger nor consents thereto in writing will be entitled to an appraisal by the Delaware Court of Chancery, or the Delaware Court, of the fair value of his, her or its shares of Raptor s common stock in lieu of the consideration that such stockholder would otherwise be entitled to receive pursuant to the merger agreement. All references in this summary of appraisal rights to a stockholder or holders of shares of Raptor s common stock are to the record holder or holders of shares of Raptor s common stock. Except as set forth herein, stockholders of Raptor will not be entitled to appraisal rights in connection with the merger.

Under Section 262, where a merger is to be submitted for approval at a meeting of stockholders, such as the Raptor annual meeting, not less than 20 days prior to the meeting, a constituent corporation must notify each of the holders of its stock for whom appraisal rights are available that such appraisal rights are available and include in each such notice a copy of Section 262. This joint proxy statement/prospectus shall constitute such notice to the record holders of Raptor s common stock.

Stockholders who desire to exercise their appraisal rights must satisfy all of the conditions of Section 262. Those conditions include the following:

Stockholders electing to exercise appraisal rights must not vote for the adoption of the merger agreement. Voting for the adoption of the merger agreement will result in the waiver of appraisal rights. Also, because a submitted proxy not marked against or abstain will be voted for the proposal to adopt the merger agreement, the submission of a proxy not marked against or abstain will result in the waiver of appraisal rights.

A written demand for appraisal of shares must be filed with Raptor before the taking of the vote on the merger agreement at the annual meeting. The written demand for appraisal should specify the stockholder s name and mailing address, and that the stockholder is thereby demanding appraisal of his or her Raptor common stock. The written demand for appraisal of shares is in addition to and separate from a vote against the merger agreement or an abstention from such vote. That is, failure to return your proxy, voting against, or abstaining from voting on, the merger will not satisfy your obligation to make a written demand for appraisal.

A demand for appraisal must be executed by or for the stockholder of record, fully and correctly, as such stockholder s name appears on the stock certificate. If the shares are owned of record in a fiduciary capacity, such as by a trustee, guardian or custodian, this demand must be executed by or for the fiduciary. If the shares are owned by or for more than one person, as in a joint tenancy or tenancy in common, such demand must be executed by or for all joint owners. An authorized agent, including an agent for two or more joint owners, may execute the demand for appraisal for a stockholder of record. However, the agent must identify the record owner and expressly disclose the fact that, in exercising the demand, he is acting as agent for the record owner. A person having a beneficial interest in Raptor s common stock held of record in the name of another person, such as a broker or nominee, must act promptly to cause the record holder to follow the steps summarized below in a timely manner to perfect whatever appraisal rights the beneficial owners may have.

A stockholder who elects to exercise appraisal rights should mail or deliver his, her or its written demand to Raptor at 9 Commercial Blvd., Suite 200, Novato, CA 94949, Attention: Kim Tsuchimoto.

Within ten days after the effective time of the merger, Raptor must provide notice of the effective time of the merger to all Raptor stockholders who have complied with Section 262 and have not voted in favor of the adoption of the merger agreement.

Within 120 days after the effective time of the merger, either Raptor or any stockholder who has complied with the required conditions of Section 262 may commence an appraisal proceeding by filing a petition in the

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Delaware Court, with a copy served on Raptor in the case of a petition filed by a stockholder, demanding a determination of the fair value of the shares of all dissenting stockholders. There is no present intent on the part of Raptor to file an appraisal petition and stockholders seeking to exercise appraisal rights should not assume that Raptor will file such a petition or that Raptor will initiate any negotiations with respect to the fair value of such shares. Accordingly, holders of Raptor s common stock who desire to have their shares appraised should initiate any petitions necessary for the perfection of their appraisal rights within the time periods and in the manner prescribed in Section 262.

Within 120 days after the effective time of the merger, any stockholder who has satisfied the requirements of Section 262 will be entitled, upon written request, to receive from Raptor a statement setting forth the aggregate number of shares of Raptor s common stock not voting in favor of the adoption of the merger agreement and with respect to which demands for appraisal were received by Raptor and the aggregate number of holders of such shares. Such statement must be mailed within 10 days after the stockholder s request has been received by Raptor or within 10 days after the expiration of the period for the delivery of demands as described above, whichever is later. Notwithstanding the foregoing, a person who is the beneficial owner of shares of Raptor s common stock held either in a voting trust or by a nominee on behalf of such person may, in such person s own name, file a petition or request from the surviving corporation the statement described in this paragraph.

If a petition for an appraisal is timely filed and a copy thereof is served upon Raptor, Raptor will then be obligated, within 20 days after service, to file with the Register in Chancery a duly verified list containing the names and addresses of all stockholders who have demanded an appraisal of their shares and with whom agreements as to the value of their shares have not been reached. After notice to stockholders, as required by the Delaware Court, at the hearing on such petition, the Delaware Court will determine which stockholders are entitled to appraisal rights. The appraisal proceeding shall be conducted in accordance with the rules of the Delaware Court, including any rules specifically governing appraisal proceedings. The Delaware Court may require the stockholders who have demanded an appraisal for their shares and who hold stock represented by certificates to submit their certificates of stock to the Register in Chancery for notation thereon of the pendency of the appraisal proceedings; and if any stockholder fails to comply with such direction, the Delaware Court may dismiss the proceedings as to such stockholder. Where proceedings are not dismissed, the Delaware Court will appraise the shares of Raptor s common stock owned by such stockholders, determining the fair value of such shares exclusive of any element of value arising from the accomplishment or expectation of the merger, together with a fair rate of interest, if any, to be paid upon the amount determined to be the fair value. Unless the Delaware Court in its discretion determines otherwise for good cause shown, interest from the effective date of the merger through the date of payment of the judgment shall be compounded quarterly and shall accrue at 5% over the Federal Reserve discount rate (including any surcharge) as established from time to time during the period between the effective date of the merger and the date of payment of the judgment.

Although the board of directors of Raptor believes that the merger consideration is fair, no representation is made as to the outcome of the appraisal of fair value as determined by the Delaware Court and stockholders should recognize that such an appraisal could result in a determination of a value higher or lower than, or the same as, the consideration they would receive pursuant to the merger agreement. Moreover, Raptor does not anticipate offering more than the merger consideration to any stockholder exercising appraisal rights and reserves the right to assert, in any appraisal proceeding, that, for purposes of Section 262, the fair value of a share of Raptor s common stock is less than the merger consideration. In determining fair value , the Delaware Court is required to take into account all relevant factors. The cost of the appraisal proceeding, which does not include attorneys or experts fees, may be determined by the Delaware Court and taxed against the dissenting stockholder and/or Raptor as the Delaware Court deems equitable in the circumstances. Each dissenting stockholder is responsible for his or her attorneys and expert witness expenses, although, upon application of a dissenting stockholder, the Delaware Court may order that all or a portion of the expenses incurred by any dissenting stockholder in connection with the appraisal proceeding, including without limitation, reasonable attorneys fees and the fees and expenses of experts, be charged pro rata against the value of all shares of stock entitled to appraisal.

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Any stockholder who has duly demanded appraisal in compliance with Section 262 will not, after the effective time of the merger, be entitled to vote for any purpose any shares subject to such demand or to receive payment of dividends or other distributions on such shares, except for dividends or distributions payable to stockholders of record at a date prior to the effective time of the merger.

At any time within 60 days after the effective time of the merger, any stockholder who has not commenced an appraisal proceeding or joined that proceeding as a named party will have the right to withdraw his, her or its demand for appraisal and to accept the terms offered in the merger agreement. After this period, a stockholder may withdraw his, her or its demand for appraisal and receive payment for his, her or its shares as provided in the merger agreement only with the consent of Raptor. If no petition for appraisal is filed with the court within 120 days after the effective time of the merger, stockholders rights to appraisal, if available, will cease. Inasmuch as Raptor has no obligation to file such a petition, any stockholder who desires a petition to be filed is advised to file it on a timely basis. Any stockholder may withdraw such stockholder s demand for appraisal by delivering to Raptor a written withdrawal of his, her or its demand for appraisal and acceptance of the merger consideration, except (i) that any such attempt to withdraw made more than 60 days after the effective time of the merger will require written approval of Raptor and (ii) that no appraisal proceeding in the Delaware Court shall be dismissed as to any stockholder without the approval of the Delaware Court, and such approval may be conditioned upon such terms as the Delaware Court deems just; provided, however, that any stockholder who has not commenced an appraisal proceeding or joined that proceeding as a named party may withdraw his, her or its demand for appraisal and accept the merger consideration offered pursuant to the merger agreement within 60 days after the effective date of the merger.

Failure by any Raptor stockholder to comply fully with the procedures described above and set forth in *Annex B* to this joint proxy statement/prospectus may result in termination of such stockholder s appraisal rights. In view of the complexity of exercising appraisal rights under Delaware law, any Raptor stockholder considering exercising these rights should consult with legal counsel.

A stockholder who elects to exercise appraisal rights should mail or deliver his, her or its written demand to Raptor at 9 Commercial Blvd., Suite 200, Novato, CA 94949, Attention: Kim Tsuchimoto.

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THE MERGER AGREEMENT

The following is a summary of the material terms of the merger agreement. A copy of the merger agreement is attached as Annex A to this joint proxy statement/prospectus and is incorporated by reference into this joint proxy statement/prospectus. The merger agreement has been attached to this joint proxy statement/prospectus to provide you with information regarding its terms. It is not intended to provide any other factual information about TorreyPines, Raptor or merger sub. Such information can be found elsewhere in this proxy statement/prospectus and in the other public filings each of TorreyPines and Raptor makes with the Securities and Exchange Commission, which are available without charge at www.sec.gov. TorreyPines and Raptor encourage you to read the merger agreement in its entirety, as it is the legal document governing the merger, and the provisions of the merger agreement are not easily summarized. The following description does not purport to be complete and is qualified in its entirety by reference to the merger agreement. You should refer to the full text of the merger agreement for details of the merger and the terms and conditions of the merger agreement.

The merger agreement contains representations and warranties that TorreyPines and merger sub, on the one hand, and Raptor, on the other hand, have made to one another as of specific dates. These representations and warranties have been made for the benefit of the parties to the merger agreement and may be intended not as statements of fact but rather as a way of allocating the risk to one of the parties if those statements prove to be incorrect. In addition, the assertions embodied in the representations and warranties are qualified by information in confidential disclosure schedules exchanged by the parties in connection with signing the merger agreement. While TorreyPines and Raptor do not believe that these disclosure schedules contain information required to be publicly disclosed under the applicable securities laws, other than information that has already been so disclosed, the disclosure schedules do contain information that modifies, qualifies and creates exceptions to the representations and warranties set forth in the attached merger agreement. Accordingly, you should not rely on the representations and warranties as current characterizations of factual information about TorreyPines, merger sub or Raptor, because they were made as of specific dates, may be intended merely as a risk allocation mechanism between TorreyPines, merger sub and Raptor and are modified by the disclosure schedules.

Structure of the Merger

Under the merger agreement, merger sub, a wholly-owned subsidiary of TorreyPines formed by TorreyPines in connection with the merger, will merge with and into Raptor, with Raptor surviving and continuing as a wholly-owned subsidiary of TorreyPines.

Merger Consideration and Adjustment

At the effective time of the merger, pursuant to the merger agreement each share of Raptor common stock outstanding immediately prior to the effective time of the merger, other than shares of Raptor common stock held by Raptor, TorreyPines or any wholly-owned subsidiary of TorreyPines or Raptor, will be converted into the right to receive, upon surrender of the certificate representing such share of Raptor common stock in the manner provided in the merger agreement, the number of shares of TorreyPines common stock equal to the 303,982,102 shares of TorreyPines common stock to be issued in the merger divided by 69,145,047 shares of Raptor common stock outstanding as of the signing of the merger agreement plus 350,000 shares of Raptor common stock issuable pursuant to Raptor stock options outstanding as of the signing of the merger agreement plus any additional shares of Raptor common stock and securities exercisable for or exchangeable or convertible into Raptor common stock that may be issued following the execution of the merger agreement and prior to the effective time of the merger, subject to adjustment as described below, which is referred to as the exchange ratio.

The exchange ratio will be adjusted to account for the effect of (i) any stock split, the reverse stock split as described below, any reclassification, any recapitalization or any other like change with respect to TorreyPines common stock or Raptor s common stock occurring after the date of the merger agreement and prior to the

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effective time of the merger and (ii) certain additional shares of Raptor common stock and securities exercisable for or exchangeable or convertible into Raptor common stock that may be issued following the execution of the merger agreement and prior to the effective time of the merger.

Following the merger, assuming that TorreyPines Proposal No. 3 is approved by TorreyPines stockholders at the TorreyPines annual meeting, TorreyPines will be renamed Raptor Pharmaceutical Corp. and the common stock of the combined company is expected to trade on the NASDAQ Capital Market under the symbol RPTP . Immediately after the merger, Raptor stockholders will hold 95% of the outstanding shares of common stock of the combined company and TorreyPines stockholders will hold 5% of the outstanding shares of common stock of the combined company, in each case without taking into account any of the other shares of TorreyPines common stock that may be issuable pursuant to outstanding options or warrants to acquire TorreyPines common stock outstanding as of the signing of the merger agreement or any other shares of Raptor common stock that may be issuable pursuant to outstanding options or warrants, other than the 350,000 shares of Raptor common stock issuable pursuant to Raptor stock options included in the calculation of the exchange ratio.

The merger will be completed at the time of filing a certificate of merger with the Secretary of State of the State of Delaware or at such later time as may be specified in such certificate of merger with the consent of the parties to the merger agreement. The completion of the merger will take place on the date that is no later than three business days after the satisfaction or waiver of all of the conditions to completion of the merger set forth in the merger agreement. However, because the merger is subject to a number of conditions, neither TorreyPines nor Raptor can predict exactly when the closing will occur or if it will occur at all.

Assumption of Raptor Stock Options and Warrants

At the effective time of the merger, each outstanding stock option to purchase Raptor common stock not exercised immediately prior to the effective time of the merger, whether or not vested, will be assumed by TorreyPines and become exercisable (a) for such number of shares of TorreyPines common stock as is determined by multiplying the number of shares of Raptor common stock subject to the option by the exchange ratio and rounding that result down to the nearest whole number of shares of TorreyPines common stock, and (b) at a per share exercise price as is determined by dividing the existing exercise price of the option by the exchange ratio and rounding that result up to the nearest whole cent, subject to adjustment to account for the reverse stock split. Any restrictions on the exercise of any Raptor option assumed by TorreyPines will continue following the conversion and the term, exercisability, vesting schedules and other provisions of assumed Raptor options will generally remain unchanged; provided, that any Raptor options assumed by TorreyPines may be subject to adjustment to reflect changes in TorreyPines capitalization after the effective time of the merger and that the TorreyPines board of directors will succeed to the authority of the Raptor board with respect to each assumed Raptor option.

At the effective time of the merger, each outstanding warrant to purchase shares of Raptor common stock not terminated or exercised immediately prior to the effective time of the merger will be assumed by TorreyPines and will become exercisable (a) for such number of shares of TorreyPines common stock as is determined by multiplying the number of shares of Raptor common stock subject to each warrant by the exchange ratio and rounding that result down to the nearest whole number of shares of TorreyPines common stock, and (b) at a per share exercise price determined by dividing the per share exercise price of the Raptor common stock subject to each warrant as in effect immediately prior to the effective time of the merger by the exchange ratio and rounding that result up to the nearest whole cent, subject to adjustment to account for the reverse stock split.

All outstanding options and warrants, respectively, to purchase Raptor common stock will be assumed by TorreyPines in the merger and will become exercisable for shares of TorreyPines common stock based on the exchange ratio as discussed in the section titled, The Merger Stock Options and Warrants in this joint proxy statement/prospectus.

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Fractional Shares

TorreyPines will not issue any fractional shares of common stock in connection with the merger. Instead, the merger agreement provides that each holder of Raptor common stock who would otherwise be entitled to receive, after aggregating all fractional shares of TorreyPines common stock that would otherwise be received by such Raptor stockholder, a fraction of a share of TorreyPines common stock will be entitled to receive cash, without interest, in an amount equal to such fraction multiplied by the closing price of TorreyPines common stock on the date the merger is completed, as reported on the NASDAQ Global Market.

Exchange of Raptor Stock Certificates for TorreyPines Stock Certificates

The merger agreement provides that on or prior to the completion of the merger, TorreyPines and Raptor will select a reputable bank, transfer agent or trust company to act as exchange agent for the merger. Promptly after the effective time of the merger, TorreyPines will deposit with the exchange agent: (i) certificates representing the shares of TorreyPines common stock issuable to Raptor stockholders, and (ii) cash sufficient to make payments in lieu of fractional shares. In addition, promptly following the effective time of the merger, the exchange agent will mail to each record holder of Raptor common stock a letter of transmittal and instructions for surrendering the record holder s stock certificates in exchange for the merger consideration.

Holders of Raptor common stock who properly surrender their Raptor stock certificates in accordance with the exchange agent s instructions will receive:

- a certificate representing the number of whole shares of TorreyPines common stock to which such holder is entitled pursuant to the merger agreement; and
- cash in lieu of any fractional share of TorreyPines common stock.

The Raptor stock certificates so surrendered will be canceled. After the effective time of the merger, outstanding Raptor stock certificates that have not been surrendered will represent only the right to receive the shares of TorreyPines common stock (and any dividends or distributions with respect to such shares of TorreyPines common stock), and cash in lieu of fractional shares enumerated above. Following the completion of the merger, TorreyPines will not register any transfers of Raptor common stock on its stock transfer books.

Holders of Raptor common stock should not send in their Raptor stock certificates until they receive a letter of transmittal from the exchange agent with instructions for the surrender of Raptor stock certificates. In all cases, the certificates representing shares of TorreyPines common stock and cash in lieu of fractional shares will be delivered only in accordance with the procedures set forth in the letter of transmittal.

Distributions with Respect to Unexchanged Shares

Holders of Raptor common stock are not entitled to receive any dividends or other distributions on TorreyPines common stock until the merger is completed. After the merger is completed, holders of Raptor common stock will be entitled to receive dividends and other distributions declared or made after completion of the merger with respect to the number of shares of TorreyPines common stock that they are entitled to receive upon exchange of their Raptor common stock, but they will not be paid any such dividends or other distributions until they surrender their Raptor stock certificates to the exchange agent in accordance with the exchange agent s instructions. After surrender of the Raptor stock certificates, such holders will receive any such dividends or other distributions to which they are entitled without interest.

Lost, Stolen or Destroyed Stock Certificates

If any Raptor stock certificate has been lost, stolen or destroyed, TorreyPines or the exchange agent may, in its discretion and as a condition precedent to the issuance of any certificate representing TorreyPines common

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stock in exchange therefor pursuant to the merger agreement, require the owner of such certificate to deliver an affidavit claiming that such certificate has been lost, stolen or destroyed and a bond in such sum as TorreyPines or the exchange agent may reasonably direct as indemnity against any claim that may be made with respect to that certificate against TorreyPines, Raptor or the exchange agent.

Directors and Officers of TorreyPines Following the Merger

Effective as of the closing of the merger, the combined company s officers are expected to be Christopher M. Starr, Ph.D. (Chief Executive Officer), Todd C. Zankel, Ph.D. (Chief Scientific Officer), and Kim R. Tsuchimoto (Chief Financial Officer, Treasurer and Secretary), each of whom currently holds the same position at Raptor. The combined company will initially have a four member board of directors, comprised of the four individuals from Raptor s current board of directors, Christopher M. Starr, Ph.D., Raymond W. Anderson, Erich Sager and Richard L. Franklin, M.D., Ph.D.

Amendment to TorreyPines Certificate of Incorporation

The merger agreement provides that TorreyPines stockholders must approve, as a condition to closing the merger and in order to meet The NASDAQ Capital Market s initial listing standard of a $4.00 per share minimum bid price, the amendment to TorreyPines certificate of incorporation to effect a reverse stock split of TorreyPines common stock, which requires the affirmative vote of the holders of a majority of the shares of TorreyPines common stock having voting power outstanding on the record date for the TorreyPines annual meeting. Upon the effectiveness of the amendment to TorreyPines certificate of incorporation effecting the reverse stock split, or the split effective time, the issued shares of TorreyPines common stock immediately prior to the split effective time will be combined into a smaller number of shares. Depending on the ratio for the reverse stock split, each ten, eleven, twelve, thirteen, fourteen, fifteen, seventeen, twenty, twenty-five, thirty, thirty-five, forty, forty-five, fifty, fifty-five, sixty or seventy shares, of existing TorreyPines common stock held by a TorreyPines stockholder immediately prior to the split effective time will be converted into one new share of TorreyPines common stock. The number of shares of common stock issued and outstanding will therefore be reduced, depending upon the reverse stock split ratio determined by the TorreyPines board of directors and approved by the Raptor board of directors. The amendment to the restated certificate of incorporation that is filed to effect the reverse stock split, if any, will include only the reverse split ratio determined by the boards of directors of TorreyPines and Raptor, respectively, that causes the combined company s stock price to be at least $4.00 per share and which is determined to be in the best interests of the stockholders of TorreyPines and Raptor, respectively, and all of the other proposed amendments at different ratios will be abandoned. The exact split ratio will be publicly announced by TorreyPines.

Stockholders of record of TorreyPines common stock on the record date for the TorreyPines annual meeting will also be asked to approve the amendment to TorreyPines certificate of incorporation to change the name of the corporation from TorreyPines Therapeutics, Inc. to Raptor Pharmaceuticals Corp. upon consummation of the merger, which requires the affirmative vote of the holders of a majority of the shares of TorreyPines common stock having voting power outstanding on the record date for the TorreyPines annual meeting.

Conditions to the Completion of the Merger

Each party s obligation to complete the merger is subject to the satisfaction or waiver by each of the parties, at or prior to the effective time of the merger, of various conditions, which include the following:

- the registration statement on Form S-4, of which this joint proxy statement/prospectus is a part, must have been declared effective by the SEC in accordance with the Securities Act and must not be subject to any stop order, or any proceeding initiated or threatened by the SEC, seeking a stop order;

- stockholders of Raptor must have adopted the merger agreement, and stockholders of TorreyPines must have approved the issuance of TorreyPines common stock, and the amendment to TorreyPines

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certificate of incorporation effecting the reverse stock split and the name change from TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp. ;

TorreyPines must have caused the shares of TorreyPines common stock Raptor stockholders will be entitled to receive pursuant to the merger to be approved for listing on the NASDAQ Capital Market, of if agreed to by TorreyPines and Raptor, the NASDAQ Global Market, following the closing of the merger;

there must not have been issued and remain in effect any temporary restraining order, preliminary or permanent injunction or other order preventing the consummation of the merger, and no law, statute, rule, regulation, ruling or other legal requirement shall be in effect which has the effect of making the consummation of the merger illegal or otherwise prohibits or interferes with the consummation of the merger;

there must not be any legal proceeding pending by any governmental body: (1) challenging or seeking to restrain or prohibit the consummation of the merger or any other transaction contemplated by the merger agreement; (2) relating to the merger and seeking to obtain from TorreyPines, merger sub or Raptor any damages or other relief that may be material to TorreyPines or Raptor; (3) seeking to prohibit or limit in any material respect a Raptor s stockholder s ability to vote, receive dividends with respect to or otherwise exercise ownership rights with respect to the stock of TorreyPines; (4) that could materially and adversely affect the right or ability of TorreyPines or Raptor to own the assets or operate the business of TorreyPines or Raptor; (5) seeking to compel Raptor, TorreyPines or any of their respective subsidiaries to dispose of or hold separate any material assets as a result of the merger or any other transaction contemplated by the merger agreement; or (6) or which, if adversely determined, would reasonably be expected to have a material adverse affect on TorreyPines or Raptor.

In addition, each party s obligation to complete the merger is further subject to the satisfaction (or waiver by that party) of the following additional conditions:

all representations and warranties of the other non-affiliated party (or parties) in the merger agreement must be true and correct on the date of the merger agreement and on the closing date of the merger with the same force and effect as if made on the date on which the merger is to be completed or, if such representations and warranties address matters as of a particular date, then as of that particular date, except where the failure of these representations and warranties to be true and correct, disregarding any materiality qualifications, individually or in the aggregate, would not reasonably be expected to have a material adverse effect on the non-affiliated party (or parties) making the representations and warranties, or except to the extent that any representation and/or warranty shall not be true and correct due to those activities specifically permitted by the merger agreement, and such non-affiliated party (or parties) shall have delivered a certificate of its (or their) chief executive officer and chief financial officer to such effect;

the other non-affiliated party (or parties) to the merger agreement must have performed or complied with in all material respects all covenants and obligations required to be performed or complied with by it (or them) on or before the closing of the merger and such non-affiliated party (or parties) shall have delivered a certificate of one of its (or their) executive officers to such effect;

there shall not have occurred and be continuing a material adverse effect on the other non-affiliated party (or parties);

all consents from any third person required to be obtained by the other non-affiliated party (or parties) shall have been obtained, made or given and such consents must be in full force and effect at the closing of the merger; and

the other non-affiliated party (or parties) must have delivered the documents required under the merger agreement for the closing of the merger.

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In addition, the obligation of TorreyPines and the merger sub to complete the merger is further subject to the satisfaction or waiver of the following condition:

- TorreyPines must have received the opinion of Cooley Godward Kronish LLP, dated as of the closing date of the merger, to the effect that, on the basis of the facts, representations and assumptions set forth or referred to in such opinion, the merger will be treated for federal income tax purposes as a reorganization within the meaning of Section 368(a) of the Code.

In addition, the obligation of Raptor to complete the merger is further subject to the satisfaction or waiver of the following conditions:

- TorreyPines must have obtained all necessary permits and authorizations under any state blue sky laws, the Securities Act and the Exchange Act relating to the issuance of the TorreyPines common stock to be issued in the merger and such permits and authorizations shall be in effect at the closing of the merger;

- TorreyPines must have more than $0 in Net Cash as measured on closing date of the merger agreement;

- TorreyPines must have completed the reverse stock split and the name change from TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp. ;

- TorreyPines must have delivered to Raptor written resignations of the officers and directors of TorreyPines and merger sub;

- the stockholders of Raptor holding not more than 10% of the Raptor common stock outstanding immediately prior to the effective time of the merger shall have exercised their dissenters rights under Section 262 of the DGCL; *provided*, *however*; that such percentage shall not include any shares of Raptor common stock held by a director or executive officer of Raptor or the 13,128,332 shares of Raptor common stock held by Aran Asset Management SA as of the date of the merger agreement;

- Raptor must have received the opinion of Paul, Hastings, Janofsky & Walker LLP, dated as of the closing date of the merger, to the effect that, on the basis of the facts, representations and assumptions set forth or referred to in such opinion, the merger will be treated for federal income tax purposes as a reorganization within the meaning of Section 368(a) of the Code;

- Each of TorreyPines existing directors must resign; and

- Raptor must have received an executed release and waiver of claims agreement from each of Evelyn Graham, Craig Johnson and Paul Schneider, TorreyPines Chief Executive Officer, Chief Financial Officer and Vice President and General Counsel, respectively.

Net Cash is defined in the merger agreement, generally, as the sum of (a) (i) TorreyPines cash and cash equivalents, short-term investments, net and restricted cash, and (ii) all tax refunds and refunds of prepaid expenses due and owing to TorreyPines or any of its subsidiaries that have not been received as of the closing of the merger agreement, minus (b) the sum of all liabilities and obligations of TorreyPines and any of its subsidiaries (other than all costs and expenses which are the exclusive responsibility of Raptor as described in the merger agreement).

No Solicitation

Each of TorreyPines and Raptor agreed that, except as described below, TorreyPines and Raptor and any of their respective subsidiaries will not, nor will either party or any of its subsidiaries authorize or permit any of the officers, directors, employees, agents, attorneys, accountants, advisors and representatives retained by it or any of its subsidiaries to, directly or indirectly:

solicit, initiate, encourage, induce or knowingly facilitate the making, submission or announcement of, any acquisition proposal, as defined below, or any action that could reasonably be expected to lead to an acquisition proposal;

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furnish any information regarding such party or any of its subsidiaries to any person in connection with or in response to an acquisition proposal or an inquiry or indication of interest that could reasonably be expected to lead to an acquisition proposal;

engage in discussions or negotiations with any person with respect to any acquisition proposal;

approve, endorse or recommend an acquisition proposal; or

enter into any letter of intent or similar document or any contract contemplating or otherwise relating to an acquisition transaction, as defined below.

An acquisition proposal means any offer, proposal, inquiry or indication of interest (other than by a party to the merger agreement) with respect to an acquisition transaction, as defined below.

An acquisition transaction means any transaction or series of transactions involving:

any merger, consolidation, share exchange, business combination, issuance or acquisition of securities, tender offer, exchange offer or similar transaction: (1) in which Raptor, TorreyPines or merger sub (or any of their respective subsidiaries) is a constituent corporation, (2) in which any individual, entity, governmental entity, or group, as defined under applicable securities laws, directly or indirectly acquires beneficial or record ownership of securities representing more than 15% of the outstanding securities of any class of voting securities of Raptor, TorreyPines or merger sub or any of their respective subsidiaries or (3) in which Raptor, TorreyPines or merger sub or any of their respective subsidiaries issues or sells securities representing more than 15% of the outstanding voting securities of any class of voting securities of such party or any of its respective subsidiaries; and

any sale, lease (other than in the ordinary course of business), exchange, transfer, license (other than in the ordinary course of business), acquisition or disposition of any business or assets that constitute 15% or more of the consolidated net revenues, net income or book value of the assets (on a book value or fair market value basis) of Raptor, TorreyPines or merger sub and their respective subsidiaries, as applicable.

Notwithstanding the foregoing, the following transactions have been excluded from the definition of acquisition transaction and the non-solicitation provisions do not restrict any of the following activities:

any issuance of securities or series of issuances of securities by Raptor at any time, which is for capital-raising purposes;

any one or a series of transactions involving a licensing, partnership, joint or collaborative venture, co-development or co-promotion agreement or similar arrangement involving one or more of Raptor s product candidates or potential product candidates or the acquisition of assets, a business or a product line so long as such transactions, individually or in the aggregate, do not result in a change of control transaction (as defined below); or

contacting potential partners with regard to a potential transaction related to NGX426 as contemplated in the amended and restated employment agreements with TPTX, Inc. (as described in this joint proxy statement/prospectus), any contract for which, or the consummation of which, has been approved by Raptor in writing.

For purposes of the merger agreement, change of control transaction means (i) a merger, consolidation, amalgamation, share exchange, business combination, issuance of securities, acquisition of securities, reorganization, recapitalization, tender offer, exchange offer or other similar transaction as a result of which either (A) Raptor s stockholders immediately prior to such transaction in the aggregate cease to own at least 50% of the voting securities of the entity surviving or resulting from such transaction (or the ultimate parent entity thereof) or (B) in which a person or group (as defined in the Exchange Act and the rules promulgated thereunder) directly or indirectly acquires beneficial or record ownership of

securities representing 50% or more

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of Raptor s capital stock or (ii) a sale, lease, exchange, transfer, license or disposition of any business or other disposition of at least 50% of the assets (on a book value or fair market value basis) or intellectual property of Raptor and its subsidiaries, taken as a whole, as applicable, in a single transaction or a series of related transactions.

However, before obtaining the applicable TorreyPines or Raptor stockholder approvals required to consummate the merger, each party may furnish non-public information regarding such party to, and may enter into discussions or negotiations with, any third party in response to a superior proposal (as defined below) or a bona fide unsolicited written acquisition proposal made or received after the date of the merger agreement, that is reasonably likely to result in a superior proposal if:

- neither such party nor any representative of such party has breached the no solicitation provisions of the merger agreement described above;
- that party s board of directors concludes in good faith, after having taken into account the advice of outside legal counsel, that the failure to take such action is reasonably likely to result in a breach of the fiduciary duties of such board of directors under applicable legal requirements;
- such party gives the other party at least two business days prior notice of the identity of the third party and of such party s intention to furnish non-public information to, or enter into discussions or negotiations with, such third party before furnishing any non-public information or entering into discussions or negotiations with such person;
- such party receives from the third party an executed confidentiality agreement containing customary limitations on the use and disclosure of all nonpublic information furnished to such third party and standstill provisions at least as favorable to such party as those contained in the confidentiality agreement between TorreyPines and Raptor; and
- at least two business days prior to the furnishing of any non-public information to a third party, such party furnishes the same non-public information to the other party to the extent not previously furnished.

For purposes of the merger agreement, superior proposal means, with respect to a party to the merger agreement, an unsolicited, bona fide written offer made by a third person to enter into (i) a merger, consolidation, amalgamation, share exchange, business combination, issuance of securities, acquisition of securities, reorganization, recapitalization, tender offer, exchange offer or other similar transaction as a result of which either (A) such party s stockholders immediately prior to such transaction in the aggregate cease to own at least 50% of the voting securities of the entity surviving or resulting from such transaction (or the ultimate parent entity thereof) or (B) in which a person or group (as defined in the Exchange Act and the rules promulgated thereunder) directly or indirectly acquires beneficial or record ownership of securities representing 50% or more of such party s capital stock or (ii) a sale, lease, exchange transfer, license or disposition of any business or other disposition of at least 50% of the assets (on a book value or fair market value basis) of such party or its subsidiaries, taken as a whole, in a single transaction or a series of related transactions that: (a) was not obtained or made as a direct or indirect result of a breach of (or in violation of) the no-solicitation provisions of the merger agreement; and (b) is on terms and conditions that the board of directors of such party, determines, in its good faith judgment, after obtaining and taking into account such matters that its board of directors deems relevant following consultation with its outside legal counsel and financial advisor: (x) is more favorable, from a financial point of view, to such party s stockholders, than the terms of the merger; and (y) is reasonably capable of being consummated.

An offer shall not be deemed to be a superior proposal if (i) any financing required to consummate the transaction contemplated by such offer is not committed unless the board of directors of TorreyPines or Raptor, as applicable, determines in good faith, that any required financing is reasonably capable of being obtained by such third person, or (ii) the consummation of such transaction is contingent on any such financing being obtained.

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The merger agreement also provides that each party will as of the date of the merger agreement, cease and cause to be terminated any then-existing discussions with any third person that relate to any acquisition proposal, and further will promptly advise the other of the status and terms of, and keep the other party fully informed with respect to, any acquisition proposal or any inquiry or indication of interest that could reasonably be expected to lead to an acquisition proposal or request for nonpublic information relating to such party or its subsidiaries.

TorreyPines Stockholders Meeting; Obligation of the TorreyPines Board of Directors

TorreyPines has agreed to take all action necessary to call, give notice of and, as promptly as practicable after the registration statement (of which this joint proxy statement/prospectus is a part) is declared effective under the Securities Act, hold a meeting of its stockholders to vote on the issuance of the TorreyPines common stock to be issued in the merger, the amendment to TorreyPines certificate of incorporation effecting the reverse stock split and the name change from TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp. . TorreyPines obligation to call, give notice of and hold a stockholders meeting shall not be limited or otherwise affected by the commencement, public proposal, public disclosure or communication of any acquisition proposal, or by any withdrawal or modification of the TorreyPines board recommendation, as discussed below.

TorreyPines has also agreed to include a statement in this joint proxy statement/prospectus to the effect that the TorreyPines board of directors unanimously recommends that TorreyPines stockholders vote to approve the issuance of the TorreyPines common stock to be issued in the merger, the amendment to TorreyPines certificate of incorporation effecting the reverse stock split and the name change from TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp., such recommendation being referred to as the TorreyPines board recommendation. The merger agreement provides that the TorreyPines board recommendation may not be withdrawn or modified in a manner adverse to Raptor, and no resolution by the TorreyPines board of directors or any committee thereof to withdraw or modify the TorreyPines board recommendation in a manner adverse to Raptor may be adopted or proposed, except as provided below.

The merger agreement provides that the TorreyPines board of directors is entitled to withdrawn or modify the TorreyPines board recommendation in a manner adverse to Raptor under the following conditions: (i) if an acquisition proposal is made to TorreyPines and is not withdrawn; (ii) TorreyPines provides Raptor with at least three business days prior notice of any meeting of the TorreyPines board of directors at which such board will consider and determine whether such acquisition proposal is a superior proposal; (iii) the TorreyPines board of directors determines in good faith that such acquisition proposal constitutes a superior proposal; (iv) the TorreyPines board of directors determines in good faith, after taking into account such matters as it deems relevant following consultation with of TorreyPines outside legal counsel, that, in light of such superior proposal, the failure to withdraw or modify the TorreyPines board recommendation is reasonably likely to result in a breach of such board of directors fiduciary obligations under applicable law; and (v) none of TorreyPines nor any of its representatives shall have violated any of the solicitation restrictions on it as described above.

Raptors Stockholders Meeting; Obligation of the Raptor Board of Directors

Raptor has agreed to take all action necessary to call, give notice of and, as promptly as practicable after the registration statement (of which this joint proxy statement/prospectus is a part) is declared effective under the Securities Act, hold a meeting of its stockholders to vote on the adoption of the merger agreement. Raptor s obligation to call, give notice of and hold a stockholders meeting shall not be limited or otherwise affected by the commencement, public proposal, public disclosure or communication of any acquisition proposal, or by any withdrawal or modification of the Raptor board recommendation, as discussed below.

Raptor has also agreed to include a statement in this joint proxy statement/prospectus to the effect that the Raptor board of directors unanimously recommends that Raptor s stockholders vote to adopt the merger agreement at Raptor s stockholders meeting, such recommendation being referred to as the Raptor board recommendation. The merger agreement provides that the Raptor board recommendation may not be withdrawn

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or modified in a manner adverse to TorreyPines, and no resolution by the Raptor board of directors or any committee thereof to withdraw or modify the Raptor board recommendation in a manner adverse to TorreyPines may be adopted or proposed, except as provided below.

The merger agreement provides that the Raptor board of directors is entitled to withdrawn or modify the Raptor board recommendation in a manner adverse to TorreyPines under the following conditions: (i) if an acquisition proposal is made to Raptor and is not withdrawn; (ii) Raptor provides TorreyPines with at least three business days prior notice of any meeting of the Raptor board of directors at which such board will consider and determine whether such acquisition proposal is a superior proposal; (iii) the Raptor board of directors determines in good faith that such acquisition proposal constitutes a superior proposal; (iv) the Raptor board of directors determines in good faith, after taking into account the advice of Raptor s outside legal counsel, that, in light of such superior proposal, the failure to withdraw or modify the Raptor board recommendation is reasonably likely to result in a breach of such board of directors fiduciary obligations under applicable law; and (v) none of Raptor nor any of its representatives shall have violated any of the solicitation restrictions on it as described above.

Covenants; Conduct of Business Pending the Merger

TorreyPines agreed that it will conduct its business in compliance with all applicable laws, regulations, and certain contracts, to keep in full force its insurance policies, and to take other agreed-upon actions. TorreyPines also agreed that, subject to certain limited exceptions, without the consent of Raptor, it would not, during the period prior to closing of the merger:

declare, set aside or pay any dividends on, any of its capital stock or other equity or voting interests;

split, combine or reclassify any of its capital stock;

purchase, redeem or otherwise acquire any shares of capital stock or any options, warrants, calls or rights to acquire any such shares;

issue, deliver, sell, pledge or otherwise encumber any shares of its capital stock, any other equity or voting interests or any securities convertible into, or exchangeable for, or any options, warrants, calls or rights to acquire or receive, any such shares, interests or securities (excluding other than the issuance of shares upon the exercise of outstanding options or warrants);

amend or propose to amend any of its certificate of incorporation or bylaws or effect or become a party to any merger, consolidation, share exchange, business combination, recapitalization or similar transaction;

acquire any business or any corporation, partnership, limited liability company, joint venture, association or division thereof;

acquire any material assets or a license therefor other than in the ordinary course of business consistent with past practices or incur any capital expenditures, except pursuant to existing contracts or that, in the aggregate, would not exceed $25,000 during any fiscal quarter;

enter into any lease or sublease of real property (whether as a lessor, sublessor, lessee or sublessee);

sell, grant a license in, mortgage or otherwise encumber or dispose of any of its material properties or assets;

repurchase, prepay or incur any indebtedness or guarantee any indebtedness of another person or issue or sell any debt securities or options, warrants, calls or other rights to acquire any of its debt securities, guarantee any debt securities of another person, or enter into any keep well or other agreement to maintain any financial statement condition of another person;

make any loans, advances or capital contributions to, or investments in, any other person, other than TorreyPines or any of its subsidiaries and except for customary travel advances to employees;

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pay, discharge, settle or satisfy any material claims, liabilities or obligations (excluding payments, discharges, settlements or satisfaction as required by their terms as in effect on the date of the merger agreement of claims, liabilities or obligations reflected or reserved against in the most recent audited financial statements (or the notes thereto) of TorreyPines included in its SEC reports (other than settlements or discharges of any legal proceedings);

waive, release, grant or transfer any right of material value other than in the ordinary course of business consistent with past practices;

commence any legal proceeding;

enter into any material contract except in the ordinary course of business consistent with past practices;

change or terminate any contract to which TorreyPines or any of its subsidiaries is a party, or waive, release or assign any rights or claims thereunder;

adopt or enter into any collective bargaining agreement or other labor union contract applicable to the employees of TorreyPines or any of its subsidiaries;

hire any new employee or promote any employee or engage any independent contractor;

increase in any manner the compensation or benefits of any employee, officer, director or independent contractor of TorreyPines or any of its subsidiaries;

except as required to comply with applicable laws or any contract or benefit plan in effect on the date of the merger agreement, (i) pay to any employee, officer, director or independent contractor of TorreyPines or any of its subsidiaries any benefit not provided for under any such contract or benefit plan, (ii) grant any awards under any benefit plan, (iii) take any action to fund or in any other way secure the payment of compensation or benefits under any contract or benefit plan, (iv) take any action to accelerate the vesting or payment of any compensation or benefit under any contract or benefit plan, (v) adopt, enter into or amend any benefit plan or (vi) make any material determination under any benefit plan;

(i) fail to accrue a reserve in its books and records and financial statements in accordance with past practice for taxes payable by TorreyPines or any of its subsidiaries, (ii) settle or compromise any legal proceeding relating to any material tax or (iii) revoke any material tax election;

except as required by GAAP or applicable laws, change its fiscal year, revalue any of its material assets or make any changes in financial or tax accounting methods, principles or practices;

take any action (or omit to take any action) if such action (or omission) would, or would be reasonably likely to result in any representation and warranty of TorreyPines or any of its subsidiaries set forth in this Agreement becoming untrue in any material respect;

take any action with respect to the dissolution, liquidation or winding up of TorreyPines or any of its subsidiaries; or

authorize any of, or commit, resolve or agree to take any of, the foregoing actions.

Raptor agreed that it will conduct its business in the ordinary course consistent with past practices and in compliance with all applicable laws, regulations and certain contracts, and to take other agreed-upon actions. Raptor also agreed that, subject to certain exceptions, without the consent of TorreyPines, it would not, during the period prior to the closing of the merger:

take any action (or omit to take any action) if such action (or omission) would, or would be reasonably likely to result in any representation and warranty of Raptor or any of its subsidiaries set forth in this Agreement becoming untrue in any material respect; or

authorize any of, or commit, resolve or agree to take any of, the foregoing actions.

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Notwithstanding the foregoing, pursuant to the merger agreement, Raptor may, without the consent of TorreyPines, (i) issue securities at any time for capital-raising purposes and (ii) enter into any transactions involving a licensing, partnership, joint or collaborative venture, co-development or co-promotion agreement or similar arrangement involving one or more of Raptor s product candidates or potential product candidates or the acquisition of assets, a business or a product line so long as such transactions, individually or in the aggregate, do not result in a change of control transaction (as defined in the merger agreement and as set forth above).

Other Agreements

Each of TorreyPines and Raptor has agreed to use its commercially reasonable efforts to:

- file or otherwise submit all notices and other documents required to be filed or made with respect to the merger;
- take all actions necessary to complete the merger;
- coordinate with the other in preparing and exchanging information and promptly provide the other with copies of all filings or submissions made in connection with the merger;
- obtain all consents, approvals or waivers required in connection with the transactions contemplated by the merger agreement;
- oppose or lift any injunction prohibiting the merger; and
- consult and agree with each other about any public statement either will make concerning the merger, subject to certain exceptions.

TorreyPines and Raptor also agreed that:

- TorreyPines will file an initial listing application for the TorreyPines common stock to be issued in the merger on the NASDAQ Capital Market or, to the extent agreed by TorreyPines and Raptor, the NASDAQ Global Market, and use its commercially reasonable efforts to cause such initial listing application to be approved for listing (subject to issuance) prior to the effective time of the merger;
- TorreyPines and Raptor shall use commercially reasonable efforts to cause the merger to qualify as a reorganization under Section 368(a) of the U.S. internal revenue code;
- TorreyPines shall use commercially reasonable efforts to obtain and deliver the resignation of each officer and director of TorreyPines and its subsidiaries;
- Raptor, TorreyPines and merger sub shall take all such commercially reasonable steps as may be required to cause the transactions contemplated by the merger agreement and any other dispositions of equity securities of Raptor (including derivative securities) or acquisitions of equity securities of TorreyPines in connection with the merger by each individual who (a) is a director or officer of Raptor, or (b) at the effective time of the merger will become a director or officer of TorreyPines, to be exempt under Rule 16b-3 promulgated under the Exchange Act.

TorreyPines shall, if requested to do so by Raptor, terminate all of TorreyPines defined contribution 401(k) plans;

TorreyPines shall have taken or caused to be taken all necessary corporate action such that immediately after the effective time of the merger the board of directors and the officers, respectively, of TorreyPines shall be composed of certain of the members of the board of directors and the officers, respectively, of Raptor.

TorreyPines shall cause to be filed with the Secretary of State of the State of Delaware an amendment to its certificate of incorporation effecting the reverse stock split and changing the name of TorreyPines to Raptor Pharmaceutical Corp.

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Termination

The merger agreement may be terminated at any time before the completion of the merger, whether before or after the required TorreyPines and Raptor stockholder approvals to complete the merger have been obtained, as set forth below:

by mutual written consent of TorreyPines and Raptor duly authorized by the boards of directors of TorreyPines and Raptor;

by either TorreyPines or Raptor if the merger shall not have been consummated by November 30, 2009 (unless the failure to consummate the merger is attributable to a failure on the part of the party seeking to terminate the merger agreement to perform any material obligation required to be performed by such party at or prior to the effective time of the merger);

by either TorreyPines or Raptor if a court of competent jurisdiction or other governmental body shall have issued a final and nonappealable order, decree or ruling, or shall have taken any other action, having the effect of permanently restraining, enjoining or otherwise prohibiting the merger;

by either TorreyPines or Raptor if the stockholders of TorreyPines have not approved the issuance of shares of TorreyPines common stock to be issued in the merger and the amendment to the certificate of incorporation of TorreyPines effecting the reverse stock split and the name change from TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp. at the TorreyPines annual stockholders meeting (including any adjournments and postponements thereof), but such party shall not be permitted to terminate the merger agreement pursuant to this provision if the failure to obtain such stockholder approval is attributable to a failure on the part of such party to perform any material obligation required to be performed by such party at or prior to the effective time of the merger;

by either TorreyPines or Raptor if the stockholders of Raptor have not approved and adopted the merger agreement at the Raptor annual stockholders meeting (including any adjournments and postponements thereof), but such party shall not be permitted to terminate the merger agreement pursuant to this provision if the failure to obtain such stockholder approval is attributable to a failure on the part of such party to perform any material obligation required to be performed by such party at or prior to the effective time of the merger;

by Raptor, at any time prior to the TorreyPines stockholders having voted their shares of TorreyPines common stock in favor of the issuance of the TorreyPines common stock to be issued in the merger, the amendment to the certificate of incorporation of TorreyPines effecting the reverse stock split and the name change from TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp. , if:

- the board of directors of TorreyPines fails to recommend that TorreyPines stockholders vote to approve the issuance of the TorreyPines common stock to be issued in the merger, the amendment to the certificate of incorporation of TorreyPines effecting the reverse stock split and the name change from TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp. , or withdraws or modifies its recommendation in a manner adverse to Raptor;

- TorreyPines shall have failed to include in this joint proxy statement/prospectus its board recommendation;

- the board of directors of TorreyPines shall have failed to reaffirm, unanimously and without qualification, its recommendation, or shall have failed to publicly state, unanimously and without qualification, that it believes that the merger is in the best interests of TorreyPines stockholders, within five business days after Raptor requests in writing that such action be taken;

the board of directors of TorreyPines shall have approved, endorsed or recommended any acquisition proposal, as defined in the section titled, The Merger Agreement No Solicitation in this joint proxy statement/prospectus;

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TorreyPines or any of its subsidiaries (or representatives of any of them) shall have failed to comply with the non-solicitation provisions in the merger agreement, such provisions as discussed in the section titled, The Merger Agreement No Solicitation in this joint proxy statement/prospectus;

a tender or exchange offer relating to securities of TorreyPines shall have been commenced and TorreyPines shall not have released to its stockholders, within 10 business days after the commencement of such tender or exchange offer, a statement disclosing that the board of directors recommends rejection of such tender or exchange offer; or

an acquisition proposal shall have been publicly announced, and TorreyPines shall have failed to issue a press release announcing its opposition to such acquisition proposal within 10 business days after such acquisition proposal is announced (each of the above clauses is referred to as a TorreyPines triggering event); or

by TorreyPines, at any time prior to the Raptor stockholders having voted their shares of Raptor common stock in favor of the adoption of the merger agreement, if:

the board of directors of Raptor fails to recommend that Raptor s stockholders vote to approve the merger and adopt the merger agreement, or withdraws or modifies its recommendation in a manner adverse to TorreyPines;

Raptor shall have failed to include in this joint proxy statement/prospectus its board recommendation;

the board of directors of Raptor shall have failed to reaffirm, unanimously and without qualification, its recommendation, or shall have failed to publicly state, unanimously and without qualification, that it believes that the merger is in the best interests of Raptor s stockholders, within five business days after TorreyPines requests in writing that such action be taken;

the board of directors of Raptor shall have approved, endorsed or recommended any acquisition proposal, as defined in the section titled, The Merger Agreement No Solicitation in this joint proxy statement/prospectus;

Raptor or any of its subsidiaries (or representatives of any of them) shall have failed to comply with the non-solicitation provisions in the merger agreement, such provisions as discussed in the section titled, The Merger Agreement No Solicitation in this joint proxy statement/prospectus;

a tender or exchange offer relating to securities of Raptor shall have been commenced and Raptor shall not have released to its stockholders, within 10 business days after the commencement of such tender or exchange offer, a statement disclosing that the board of directors recommends rejection of such tender or exchange offer;

an acquisition proposal shall have been publicly announced, and Raptor shall have failed to issue a press release announcing its opposition to such acquisition proposal within 10 business days after such acquisition proposal is announced (each of the above clauses is referred to as a Raptor triggering event); or

by TorreyPines or Raptor, upon a breach of any representation, warranty, covenant or agreement on the part of the other, non-affiliated party, or if any representation or warranty of the other, non-affiliated party shall have become inaccurate, in either case such that the conditions to the closing of the merger would not be satisfied as of the time of such breach or as of the time such representation or warranty shall have become inaccurate, provided that if such inaccuracy or breach is curable, then the merger

agreement will not terminate pursuant to this provision as a result of such particular breach or inaccuracy until the earlier of (i) the expiration of a thirty (30) day period commencing upon delivery of written notice from the non-breaching party to the other, non-affiliated party of such breach or inaccuracy and (ii) the other, non-affiliated, breaching party ceasing to exercise commercially reasonable efforts to cure such breach (if such breach has not been cured).

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Expenses and Reimbursements

TorreyPines must reimburse Raptor s expenses in the merger, up to a maximum of $250,000, if:

- the merger agreement is terminated because TorreyPines stockholders do not approve the issuance of the TorreyPines common stock to be issued in the merger and the amendment to the certificate of incorporation of TorreyPines effecting the reverse stock split and the name change from TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp. and a bid acquisition proposal, as defined above in the section titled, The Merger Agreement No Solicitation, with respect to TorreyPines was publicly announced, disclosed or otherwise communicated to the board of directors of TorreyPines prior to the TorreyPines stockholders annual meeting and TorreyPines enters into an agreement for, or consummates, an acquisition transaction within 6 months of the termination; or

- the merger agreement is terminated by Raptor because of a TorreyPines triggering event.

Raptor must reimburse TorreyPines expenses in the merger, up to a maximum of $250,000, if:

- the merger agreement is terminated because Raptor s stockholders do not adopt the merger agreement and an acquisition proposal, as defined above in the section titled, The Merger Agreement No Solicitation, with respect to Raptor was publicly announced, disclosed or otherwise communicated to the board of directors of Raptor prior to the Raptor stockholders annual meeting and Raptor enters into an agreement for, or consummates, an acquisition transaction; or

- the merger agreement is terminated by TorreyPines because of a Raptor triggering event.

The provisions in the merger agreement that obligate Raptor and TorreyPines to incur or reimburse expenses, as applicable, including those set forth above, survive the termination of the merger agreement.

Representations and Warranties

The merger agreement contains representations and warranties that TorreyPines and merger sub, on the one hand, and Raptor, on the other hand, have made to one another as of specific dates and solely for the benefit of each other. The assertions embodied in the representations and warranties are qualified by information in confidential disclosure schedules exchanged by the parties in connection with signing the merger agreement. While TorreyPines and Raptor do not believe that these disclosure schedules contain information required to be publicly disclosed under the applicable securities laws, other than information that has already been so disclosed, the disclosure schedules do contain information that modifies, qualifies and creates exceptions to the representations and warranties set forth in the attached merger agreement. Accordingly, you should not rely on the representations and warranties as current characterizations of factual information about TorreyPines, merger sub or Raptor, because they were made as of specific dates, may be intended merely as a risk allocation mechanism between TorreyPines, merger sub and Raptor and are modified by the disclosure schedules.

The merger agreement contains representations and warranties of TorreyPines, merger sub and Raptor customary for transactions of this type and relate to the following subject matters:

- corporate organization, qualifications to do business and power and similar corporate matters;

- subsidiaries;

- capitalization;

any conflicts or violations of legal requirements, charter documents or agreements, to which TorreyPines, Raptor or any of their respective subsidiaries is bound or otherwise is a party, as a result of the merger or the merger agreement;

financial statements and documents filed with the SEC and the accuracy of information contained in those documents;

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- disclosure controls and procedures;
- any undisclosed liabilities;
- filing of tax returns and payment of taxes;
- intellectual property;
- compliance with legal requirements and governmental authorizations;
- litigation matters;
- regulatory compliance;
- absence of certain changes and events;
- the validity of material contracts to which the parties or their subsidiaries are a party, any violation, default or breach to such contracts and the effect on such contracts of entering into and completing the transactions contemplated by the merger agreement;
- authority to enter into the merger agreement and the related agreements and enforceability of such agreements against the parties;
- approval by the boards of directors of the parties;
- votes required for completion of the merger and approval of the proposals that will come before the TorreyPines and Raptor annual meetings;
- the amendment of the TorreyPines stockholder rights agreement and the Raptor stockholder rights agreement; and
- the information supplied by TorreyPines and Raptor, respectively, in this joint proxy statement/prospectus (and the related registration statement of which this is a part) not containing any untrue statement of a material fact or omitting to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.

In addition, the merger agreement contains representations and warranties of TorreyPines and merger sub relating to the following subject matters:

- title to, and sufficiency of, assets;

real property and leaseholds;

any brokerage or finder s fee or other fee or commission in connection with the merger;

employee benefits, labor relations and related matters;

any liens and encumbrances;

environmental matters;

insurance matters;

interests of officers and directors;

transactions with affiliates;

the trading of TorreyPines common stock on NASDAQ;

the projected spending estimate of TorreyPines; and

the valid issuance in the merger of the TorreyPines common stock to the Raptor stockholders.

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The representations and warranties are, in many respects, qualified by materiality and knowledge, and will not survive the merger, but their accuracy forms the basis of one of the conditions to the obligations of TorreyPines and Raptor to complete the merger.

Amendment

The merger agreement may be amended by the parties at any time, except that after the merger agreement has been adopted by the stockholders of TorreyPines or the stockholders of Raptor, no amendment which by law requires further approval by the stockholders of TorreyPines or Raptor, as the case may be, shall be made without such further approval.

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AGREEMENTS RELATED TO THE MERGER

Voting Agreements

In connection with the execution of the merger agreement, certain of Raptor s directors and officers, each of whom are Raptor stockholders, entered into voting agreements, which included irrevocable proxies, with each of TorreyPines and Raptor pursuant to which, among other things, each of such stockholders agreed, solely in his or her capacity as a stockholder, to vote all of his or her shares of Raptor capital stock entitled to vote in favor of the adoption of the merger agreement and any action in furtherance of the foregoing against any action or agreement that would result in a breach of the merger agreement by Raptor, against any proposal for any acquisition transaction, as defined in the merger agreement, other than the merger between Raptor and any third person other than TorreyPines and merger sub and against any change in a majority of the board of directors of Raptor. These Raptor stockholders also granted TorreyPines an irrevocable proxy to vote their respective shares in accordance with the voting agreement. These Raptor stockholders may vote their shares of Raptor capital stock on all other matters not referred to in such proxy.

As of July 27, 2009, the date of the merger agreement, the directors and officers of Raptor who entered into voting agreements collectively owned 7,412,500 shares of Raptor common stock, representing approximately 11% of the outstanding Raptor common stock. All of such stockholders who entered into such voting agreements are officers or directors of Raptor.

Under these voting agreements executed by such Raptor directors and officers, subject to certain exceptions, such stockholders also have agreed not to sell or transfer Raptor capital stock and options and warrants to purchase Raptor common stock held by them until the earlier of the termination of the merger agreement or the completion of the merger. To the extent that any such sale or transfer is permitted pursuant to the exceptions included in such voting agreements, each person to whom any shares of such capital stock are so sold or transferred must agree in writing to be bound by the terms and provisions of such voting agreement.

In addition, in connection with the execution of the merger agreement, TorreyPines directors and officers, each of whom are TorreyPines stockholders, entered into voting agreements, which included irrevocable proxies, with each of Raptor and TorreyPines pursuant to which, among other things, each of such stockholders agreed, solely in his or her capacity as a stockholder, to vote all of his or her shares of TorreyPines capital stock entitled to vote in favor of the approval of the issuance of the shares of TorreyPines common stock in the merger, the amendment to TorreyPines certificate of incorporation effecting the reverse stock split and the name change from TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp. and any action in furtherance of the foregoing and against any action or agreement that would result in a breach of the merger agreement by TorreyPines, against any proposal for any acquisition transaction, as defined in the merger agreement, other than the merger between TorreyPines and any third person other than Raptor and merger sub and against any change in a majority of the board of directors of TorreyPines. These TorreyPines stockholders also granted Raptor an irrevocable proxy to vote their respective shares in accordance with the voting agreement. These TorreyPines stockholders may vote their shares of TorreyPines common stock on all other matters not referred to in such proxy. As of July 27, 2009, the directors and officers of TorreyPines, who entered into voting agreements, collectively owned shares of TorreyPines common stock representing approximately 1% of the outstanding TorreyPines common stock.

Under these voting agreements executed by such TorreyPines directors and officers, subject to certain exceptions, such stockholders also have agreed not to sell or transfer TorreyPines common stock and options and warrants to purchase TorreyPines common stock held by them until the earlier of the termination of the merger agreement or the completion of the merger. To the extent that any such sale or transfer is permitted pursuant to the exceptions included in such voting agreements, each person to whom any shares of such capital stock are so sold or transferred must agree in writing to be bound by the terms and provisions of such voting agreements.

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MATTERS BEING SUBMITTED TO A VOTE OF TORREYPINES STOCKHOLDERS

TorreyPines Proposal No. 1: Approval of the Issuance of Common Stock in the Merger and the Resulting Change in Control

At the TorreyPines annual meeting, TorreyPines stockholders will be asked to approve (a) the issuance of TorreyPines common stock pursuant to the merger agreement and (b) the change in control of TorreyPines resulting from the issuance of TorreyPines common stock in the merger. Immediately following the merger, Raptor stockholders will hold 95% of the outstanding shares of common stock of the combined company, with existing TorreyPines stockholders holding 5% of the shares of common stock of the combined company, in each case without taking into account any of the other shares of TorreyPines common stock that may be issuable pursuant to outstanding options or warrants to acquire TorreyPines common stock outstanding as of the signing of the merger agreement or any other shares of Raptor common stock that may be issuable pursuant to outstanding options or warrants, other than the 350,000 shares of Raptor common stock issuable pursuant to Raptor stock options included in the calculation of the exchange ratio.

The terms of, reasons for and other aspects of the merger agreement, the merger and the issuance of TorreyPines common stock pursuant to the merger agreement are described in detail in the other sections in this joint proxy statement/prospectus.

Required Vote

The affirmative vote of the holders of a majority of the shares of TorreyPines common stock having voting power present in person or represented by proxy at the TorreyPines annual meeting is required for approval of TorreyPines Proposal No. 1.

THE TORREYPINES BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT TORREYPINES STOCKHOLDERS VOTE FOR TORREYPINES PROPOSAL NO. 1 TO APPROVE THE ISSUANCE OF TORREYPINES COMMON STOCK PURSUANT TO THE MERGER AGREEMENT AND THE RESULTING CHANGE IN CONTROL OF TORREYPINES.

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TorreyPines Proposal No. 2: Approval of Amendment to TorreyPines Certificate of Incorporation Effecting the Reverse Stock Split

General

At the TorreyPines annual meeting, TorreyPines stockholders will be asked to approve an amendment to TorreyPines certificate of incorporation effecting a reverse stock split of the issued shares of TorreyPines common stock. Upon the effectiveness of the amendment to TorreyPines certificate of incorporation effecting the reverse stock split, or the split effective time, the issued shares of TorreyPines common stock immediately prior to the split effective time will be combined into a smaller number of shares. Depending on the ratio for the reverse stock split, each ten, eleven, twelve, thirteen, fourteen, fifteen, seventeen, twenty, twenty-five, thirty, thirty-five, forty, forty-five, fifty, fifty-five, sixty or seventy shares, of existing TorreyPines common stock held by a TorreyPines stockholder immediately prior to the split effective time will be converted into one new share of TorreyPines common stock. The number of shares of common stock issued and outstanding will therefore be reduced, depending upon the reverse stock split ratio determined by the TorreyPines board of directors and approved by the Raptor board of directors. The amendment to the certificate of incorporation that is filed to effect the reverse stock split, if any, will include only the reverse split ratio determined by the boards of directors of TorreyPines and Raptor, respectively, that causes the combined company s stock price to be at least $4.00 per share and which is determined to be in the best interests of the stockholders of TorreyPines and Raptor, respectively, and all of the other proposed amendments at different ratios will be abandoned. TorreyPines believes that leaving the ratio to the discretion of the TorreyPines board of directors (provided that it is one of the seventeen proposed ratios) will provide TorreyPines with the flexibility to implement the reverse stock split in a manner designed to maximize the anticipated benefits for its stockholders. The TorreyPines board of directors decision will be based on a number of factors, including market conditions, existing and expected trading prices for TorreyPines common stock and the listing requirements of the NASDAQ Capital Market. Even if the stockholders approve the reverse stock split, TorreyPines reserves the right not to effect the reverse stock split if the TorreyPines board of directors does not deem it to be in the best interests of TorreyPines and its stockholders to effect the reverse stock split. The TorreyPines board of directors may determine to effect the reverse stock split, if it is approved by the stockholders, even if the other proposals to be acted upon at the meeting are not approved, including the issuance of shares of TorreyPines common stock pursuant to the merger agreement. If TorreyPines Proposal No. 2 is approved, the reverse stock split would become effective in connection with the closing of the merger. The exact split ratio will be publicly announced by TorreyPines.

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The following table provides estimates of the number of shares of TorreyPines common stock authorized, issued and outstanding, reserved for issuance and authorized but neither issued nor reserved for issuance at the following times: (i) prior to the reverse stock split and closing of the merger, (ii) assuming the minimum proposed reverse stock split of 10:1, but prior to closing of the merger, (iii) assuming the maximum proposed reverse stock split of 70:1, but prior to closing of the merger, (iv) assuming the minimum proposed reverse stock split of 10:1 and the closing of the merger, and (v) assuming the maximum proposed reverse stock split of 70:1 and the closing of the merger:

	Number of Shares of Common Stock Authorized	Number of Shares Issued and Outstanding(1)	Number of Shares Reserved For Issuance(1)	Number of Shares Authorized but Neither Issued nor Reserved for Issuance(1)
Prior to the Reverse Stock Split and Closing of the Merger:	150,000,000	15,999,058	5,274,682(2)	128,726,260(2)
After Assumed 10:1 Reverse Stock Split but Prior to Closing of the Merger:	150,000,000	1,599,906	527,468(3)	147,872,626(3)
After Assumed 70:1 Reverse Stock Split but Prior to Closing of the Merger:	150,000,000	228,558	75,353(4)	149,696,089(4)
After Assumed 10:1 Reverse Stock Split and Issuance of Shares Following Closing of the Merger:	150,000,000	31,998,116(5)	5,156,230(7)	112,845,654
After Assumed 70:1 Reverse Stock Split and Issuance of Shares Following Closing of the Merger:	150,000,000	4,571,159(6)	736,605(8)	144,692,236

(1) These estimates assume 15,999,058 shares of TorreyPines common stock issued and outstanding immediately prior to the closing of the merger which was the number of shares issued and outstanding as of July 27, 2009.

(2) Does not include an additional 303,982,102 shares of common stock reserved for issuance to Raptor stockholders in connection with the merger which would be subject to adjustment upon the completion of the reverse stock split.

(3) Does not include an additional 30,398,210 shares of common stock reserved for issuance to Raptor stockholders in connection with the merger, as adjusted for the reverse stock split.

(4) Does not include an additional 4,342,601 shares of common stock reserved for issuance to Raptor stockholders in connection with the merger, as adjusted for the reverse stock split.

(5) This assumes 1,599,906 shares of TorreyPines common stock issued and outstanding immediately prior to the closing of the merger and 30,398,210 shares of TorreyPines common stock that Raptor stockholders will be entitled to receive in connection with the merger.

(6) This assumes 228,558 shares of TorreyPines common stock issued and outstanding immediately prior to the closing of the merger and 4,342,601 shares of TorreyPines common stock that Raptor stockholders will be entitled to receive in connection with the merger.

(7) This assumes 527,648 shares of TorreyPines common stock reserved for issuance for the exercise of options and warrants to purchase shares of TorreyPines common stock outstanding immediately prior to the closing of the merger and 4,628,762 shares of TorreyPines common stock reserved for issuance for the exercise of options and warrants to purchase shares of TorreyPines common stock that the holders of options and warrants to purchase shares of Raptor capital stock will be entitled to receive in connection with the merger.

(8) This assumes 75,353 shares of TorreyPines common stock reserved for issuance for the exercise of options and warrants to purchase shares of TorreyPines common stock outstanding immediately prior to the closing of the merger and 661,251 shares of TorreyPines common stock reserved for issuance for the exercise of options and warrants to purchase shares of TorreyPines common stock that the holders of options and warrants to purchase shares of Raptor capital stock will be entitled to receive in connection with the merger.

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The form of the amendment to TorreyPines certificate of incorporation to effect the reverse stock split, as more fully described below, will effect the reverse stock split but will not change the number of authorized shares of common stock or preferred stock, or the par value of TorreyPines common stock or preferred stock.

Purpose

The TorreyPines board of directors approved the proposal approving the certificate of amendment to TorreyPines certificate of incorporation effecting the reverse stock split for the following reasons:

- because the listing standards of the NASDAQ Capital Market will require TorreyPines to have, among other things, a $4.00 per share minimum bid price upon the closing of the merger and because the listing of the TorreyPines common stock on the NASDAQ Capital Market is a condition to closing the merger, the reverse stock split may be necessary in order to consummate the merger;

- the board of directors believes effecting the reverse stock split may be an effective means of avoiding a delisting of TorreyPines common stock from the NASDAQ Global Market or NASDAQ Capital Market, as applicable, in the future; and

- the board of directors believes a higher stock price may help generate investor interest in TorreyPines and help TorreyPines attract and retain employees.

If the reverse stock split successfully increases the per share price of TorreyPines common stock, TorreyPines board of directors believes this increase may increase trading volume in TorreyPines common stock and facilitate future financings by TorreyPines.

NASDAQ Requirements for Listing on the NASDAQ Capital Market

TorreyPines common stock is quoted on the NASDAQ Global Market under the symbol TPTX . TorreyPines intends to file an initial listing application with NASDAQ to seek listing on the NASDAQ Capital Market upon the closing of the merger.

According to NASDAQ rules, an issuer must, in a case such as this, apply for initial inclusion following a transaction whereby the issuer combines with an entity that is not listed on the NASDAQ Stock Market, resulting in a change of control of the issuer and potentially allowing the entity that is not listed on the NASDAQ Stock Market to obtain a NASDAQ listing. Accordingly, the listing standards of the NASDAQ Capital Market will require TorreyPines to have, among other things, a $4.00 per share minimum bid price upon the closing of the merger. Therefore, the reverse stock split will be necessary in order to consummate the merger, although there is no assurance that the reverse stock split will be sufficient from The NASDAQ Stock Market LLC s perspective in order to approve the listing application.

Additionally, TorreyPines board of directors believes that achieving a listing on the NASDAQ Capital Market may provide a broader market for the combined company s common stock and facilitate the use of TorreyPines common stock in financing and other transactions. TorreyPines board of directors unanimously approved the reverse stock split partly as a means of maintaining the share price of TorreyPines common stock following the merger above $4.00 per share.

One of the effects of the reverse stock split will be to effectively increase the proportion of authorized shares which are unissued relative to those which are issued. This could result in the combined company s management being able to issue more shares without further stockholder approval. For example, if TorreyPines effects the reverse stock split at a 10:1 ratio, its authorized but unissued shares immediately prior to the closing of the merger would be approximately 147,872,626 compared to shares issued of approximately 1,599,906. If TorreyPines effects the reverse stock split at a 70:1 ratio, its authorized but unissued shares immediately prior to the closing of the merger would be approximately 149,771,442 compared to shares issued of approximately 228,558. TorreyPines currently has no plans to issue shares, other than in connection with the merger, and to

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satisfy obligations under TorreyPines warrants and employee stock options from time to time as these warrants and options are exercised. The reverse stock split will not affect the number of authorized shares of TorreyPines common stock which will continue to be 150,000,000.

Potential Increased Investor Interest

On July 27, 2009, TorreyPines common stock closed at $0.09 per share. TorreyPines common stock may not appeal to brokerage firms that are reluctant to recommend lower priced securities to their clients. Investors may also be dissuaded from purchasing lower priced stocks because the brokerage commissions, as a percentage of the total transaction, tend to be higher for such stocks. Moreover, the analysts at many brokerage firms do not monitor the trading activity or otherwise provide coverage of lower priced stocks. Also, the TorreyPines board of directors believes that most investment funds are reluctant to invest in lower priced stocks.

There are risks associated with the reverse stock split, including that the reverse stock split may not result in an increase in the per share price of TorreyPines common stock.

TorreyPines cannot predict whether the reverse stock split will increase the market price for TorreyPines common stock. The history of similar stock split combinations for companies in like circumstances is varied. There is no assurance that:

- the market price per share of TorreyPines common stock after the reverse stock split will rise in proportion to the reduction in the number of shares of TorreyPines common stock outstanding before the reverse stock split;
- the reverse stock split will result in a per share price that will attract brokers and investors who do not trade in lower priced stocks;
- the reverse stock split will result in a per share price that will increase TorreyPines ability to attract and retain employees; or
- the market price per share will either exceed or remain in excess of the $1.00 minimum bid price as required by NASDAQ for continued listing, or that TorreyPines will otherwise meet the requirements of NASDAQ for inclusion for trading on the NASDAQ Capital Market.

The market price of TorreyPines common stock will also be based on TorreyPines performance and other factors, some of which are unrelated to the number of shares outstanding. If the reverse stock split is effected and the market price of TorreyPines common stock declines, the percentage decline as an absolute number and as a percentage of TorreyPines overall market capitalization may be greater than would occur in the absence of a reverse stock split. Furthermore, the liquidity of TorreyPines common stock could be adversely affected by the reduced number of shares that would be outstanding after the reverse stock split.

Principal Effects of the Reverse Stock Split

The form of the proposed amendment to TorreyPines certificate of incorporation effecting the reverse stock split is set forth in *Annex C* to this joint proxy statement/prospectus. The attached amendment also reflects the change of TorreyPines corporate name as described in TorreyPines Proposal No. 3.

The reverse stock split will be effected simultaneously for all outstanding shares of TorreyPines common stock. The reverse stock split will affect all of TorreyPines stockholders uniformly and will not affect any stockholder s percentage ownership interests in TorreyPines, except to the extent that the reverse stock split results in any of TorreyPines stockholders owning a fractional share. Given the variations in the proposed reverse split ratios and the significant number of shares of TorreyPines common stock to be issued in the merger, it is possible that a significant number of TorreyPines stockholders will own a fractional share of TorreyPines common stock following the merger. Such stockholders will only be entitled to receive cash for such fractional

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shares of TorreyPines common stock as described below under Cash Payment in Lieu of Fractional Shares , and the ownership of a fractional interest will not give the holder thereof any voting, dividend, or other rights except to receive payment therefor as described herein. Common stock issued pursuant to the reverse stock split will remain fully paid and nonassessable. The reverse stock split will not affect TorreyPines continuing to be subject to the periodic reporting requirements of the Exchange Act.

If the reverse stock split is implemented, it will increase the number of TorreyPines stockholders who own odd lots of fewer than 100 shares of TorreyPines common stock. Brokerage commission and other costs of transactions in odd lots are generally higher than the costs of transactions for more than 100 shares of common stock.

Procedure for Effecting Reverse Stock Split and Exchange of Stock Certificates

If TorreyPines stockholders approve the amendment to TorreyPines certificate of incorporation effecting the reverse stock split, and if TorreyPines board of directors still believes that a reverse stock split is in the best interests of TorreyPines and its stockholders, the TorreyPines board will determine the ratio of the reverse stock split to be implemented and publicly announce such ratio. TorreyPines will file the certificate of amendment with the Secretary of State of the State of Delaware at such time as TorreyPines board of directors has determined to be the appropriate split effective time. The TorreyPines board of directors may delay effecting the reverse stock split without resoliciting stockholder approval. Beginning at the split effective time, each certificate representing pre-split shares will be deemed for all corporate purposes to evidence ownership of post-split shares.

As soon as practicable after the split effective time, stockholders will be notified that the reverse stock split and/or corporate name change have been effected. TorreyPines expects that Raptor s transfer agent will act as exchange agent for purposes of implementing the exchange of stock certificates. Holders of pre-split shares will be asked to surrender to the exchange agent certificates representing pre-split shares in exchange for certificates representing post-split shares in accordance with the procedures to be set forth in a letter of transmittal to be sent by TorreyPines. In the event that TorreyPines Proposal No. 3 is approved by TorreyPines stockholders, the certificates reflecting the post-split shares will also reflect the change of TorreyPines corporate name to Raptor Pharmaceutical Corp. No new certificates will be issued to a stockholder until such stockholder has surrendered such stockholder s outstanding certificate(s) together with the properly completed and executed letter of transmittal to the exchange agent. Any pre-split shares submitted for transfer, whether pursuant to a sale or other disposition, or otherwise, will automatically be exchanged for post-split shares. **Stockholders should not destroy any stock certificate(s) and should not submit any certificate(s) unless and until requested to do so.**

Cash Payment in Lieu of Fractional Shares

No fractional shares will be issued in connection with the reverse stock split. Stockholders of record who otherwise would be entitled to receive fractional shares because they hold a number of pre-split shares not evenly divisible by the number of pre-split shares for which each post-split share is to be reclassified, will be entitled, upon surrender to the exchange agent of certificates representing such shares, to a cash payment in lieu thereof at a price equal to the fraction to which the stockholder would otherwise be entitled multiplied by the closing price of the common stock on the NASDAQ Global Market on the date immediately preceding the split effective time. The ownership of a fractional interest will not give the holder thereof any voting, dividend, or other rights except to receive payment therefor as described herein. Given the variations in the proposed reverse split ratios and the significant number of shares of TorreyPines common stock to be issued in the merger, it is possible that a significant number of TorreyPines stockholders will own a fractional share of TorreyPines common stock following the merger.

By approving the certificate of amendment to TorreyPines certificate of incorporation effecting the reverse stock split, stockholders will be approving the combination of ten, eleven, twelve, thirteen, fourteen, fifteen, seventeen, twenty, twenty-five, thirty, thirty-five, forty, forty-five, fifty, fifty-five, sixty or seventy shares, of existing TorreyPines common stock into one new share of TorreyPines common stock. The number of shares of

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common stock issued and outstanding will therefore be reduced, depending upon the reverse stock split ratio determined by the TorreyPines board of directors and approved by the Raptor board of directors. The amendment to the restated certificate of incorporation that is filed to effect the reverse stock split, if any, will include only the reverse split ratio determined by the boards of directors of TorreyPines and Raptor, respectively, that causes the combined company s stock price to be at least $4.00 per share and which is determined to be in the best interests of the stockholders of TorreyPines and Raptor, respectively, and all of the other proposed amendments at different ratios will be abandoned.

Stockholders should be aware that, under the escheat laws of the various jurisdictions where stockholders reside, where TorreyPines is domiciled, and where the funds will be deposited, sums due for fractional interests that are not timely claimed after the effective date of the reverse stock split may be required to be paid to the designated agent for each such jurisdiction, unless correspondence has been received by TorreyPines or the exchange agent concerning ownership of such funds within the time permitted in such jurisdiction. Thereafter, stockholders otherwise entitled to receive such funds will have to seek to obtain them directly from the state to which they were paid.

Accounting Matters

The reverse stock split will not affect the stockholders equity on TorreyPines balance sheet. However, because the par value of TorreyPines common stock will remain unchanged on the effective date of the split, the components that make up the common stock capital account will change by offsetting amounts. Depending on the size of the reverse stock split the TorreyPines board of directors decides to implement, the stated capital component will be reduced to an amount between $1,600 and $229 from its present amount, and the additional paid-in capital component will be increased with the amount by which the stated capital is reduced. The per share net income or loss and net book value of TorreyPines will be increased because there will be fewer shares of TorreyPines common stock outstanding. Prior periods per share amounts will be restated to reflect the reverse stock split.

Potential Anti-Takeover Effect

Although the increased proportion of unissued authorized shares to issued shares could, under certain circumstances, have an anti-takeover effect, for example, by permitting issuances that would dilute the stock ownership of a person seeking to effect a change in the composition of TorreyPines board of directors or contemplating a tender offer or other transaction for the combination of TorreyPines with another company, the reverse stock split proposal is not being proposed in response to any effort of which TorreyPines is aware to accumulate shares of TorreyPines common stock or obtain control of TorreyPines, other than in connection with the merger with Raptor, nor is it part of a plan by management to recommend a series of similar amendments to TorreyPines board of directors and stockholders. Other than the proposals being submitted to TorreyPines stockholders for their consideration at the TorreyPines annual meeting, TorreyPines board of directors does not currently contemplate recommending the adoption of any other actions that could be construed to affect the ability of third parties to take over or change control of TorreyPines.

No Appraisal rights

Under the DGCL, TorreyPines stockholders are not entitled to appraisal rights with respect to the reverse stock split, and TorreyPines will not independently provide stockholders with any such right.

Material United States Federal Income Tax Consequences of the Reverse Stock Split

The following discussion summarizes the material United States federal income tax consequences of the reverse stock split that are expected to apply generally to holders of TorreyPines common stock. This summary is based upon current provisions of the Code, existing Treasury Regulations and current administrative rulings and court decisions, all of which are subject to change and to differing interpretations, possibly with retroactive effect.

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This summary only applies to a holder of TorreyPines common that is a U.S. person, defined to include:

- a citizen or resident of the United States;
- a corporation created or organized in or under the laws of the United States, or any political subdivision thereof (including the District of Columbia);
- an estate the income of which is subject to United States federal income taxation regardless of its source;
- a trust if either:
  - a court within the United States is able to exercise primary supervision over the administration of such trust and one or more United States persons have the authority to control all substantial decisions of such trust; or
  - the trust has a valid election in effect to be treated as a United States person for United States federal income tax purposes; and
- any other person or entity that is treated for United States federal income tax purposes as if it were one of the foregoing.

Any holder of TorreyPines common stock other than a U.S. person as so defined is, for purposes of this discussion, a non-U.S. person. If a partnership holds TorreyPines common stock, the tax treatment of a partner will generally depend on the status of the partner and the activities of the partnership. If you are a partner of a partnership holding TorreyPines common stock, you should consult your tax advisor.

This summary assumes that holders of TorreyPines common stock hold their shares of pre-split and post-split TorreyPines common stock as capital assets within the meaning of Section 1221 of the Code (generally, property held for investment). No attempt has been made to comment on all United States federal income tax consequences of the reverse stock split that may be relevant to particular holders, including holders:

- who are subject to special treatment under United States federal income tax rules such as dealers in securities, financial institutions, non-U.S. persons, mutual funds, regulated investment companies, real estate investment trusts, insurance companies, or tax-exempt entities;
- who are subject to the alternative minimum tax provisions of the Code;
- who acquired their shares in connection with stock option or stock purchase plans or in other compensatory transactions;
- who hold their shares as qualified small business stock within the meaning of Section 1202 of the Code; or
- who hold their shares as part of an integrated investment such as a hedge or as part of a hedging, straddle or other risk reduction strategy.

In addition, the following discussion does not address the tax consequences of the reverse stock split under state, local and foreign tax laws. For example, the state and local tax consequences of the reverse stock split may vary significantly as to each stockholder, depending upon the state in which such stockholder resides. Furthermore, the following discussion does not address any of the tax consequences of transactions effectuated before, after or at the same time as the reverse stock split, whether or not they are in connection with the reverse stock split. No ruling from the Internal Revenue Service, or IRS, has been or will be requested in connection with the reverse stock split.

Accordingly, holders of TorreyPines common stock are advised and expected to consult their own tax advisers regarding the federal income tax consequences of the reverse stock split in light of their personal circumstances and the consequences of the reverse stock split under state, local and foreign tax laws.

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Stockholders Who Receive Post-Split Shares

Holders of TorreyPines common stock will not recognize any gain or loss or dividend income upon the exchange of pre-split shares for post-split shares pursuant to the reverse stock split, other than with respect to cash received in lieu of fractional shares of TorreyPines common stock.

The aggregate tax basis of the post-split shares of TorreyPines common stock received in the reverse stock split, including any fraction of a post-split share deemed to have been received, will be equal to the aggregate tax basis of the pre-split shares surrendered in exchange for such post-split shares, decreased by the amount of any tax basis allocable to any fractional share interest in TorreyPines common stock for which cash is received. The holding period of the post-split shares will include the holding period of the pre-split shares surrendered in exchange therefor.

Generally, cash payments received by holders of TorreyPines common stock upon redemption of their fractional shares will be recognized as gain or loss equal to the difference, if any, between such stockholder s basis in the fractional share and the amount of cash received. Gain, if any, realized by such stockholders on the transaction will be recognized in an amount not in excess of the cash received. Recognized gain will be taxed either as a dividend to the extent of the stockholder s ratable share of TorreyPines earnings and profits, if any (as that term is used in Section 316 of Code) or as capital gain. TorreyPines has neither current nor accumulated earnings and profits and accordingly no portion of any gain recognized by a TorreyPines stockholder is expected to be treated as a dividend.

In the case of capital gain or loss recognized in respect of a fractional share, such gain or loss will be capital gain or loss, and generally will constitute long-term capital gain or loss if the stockholder s holding period in the shares surrendered is more than one year as of the reverse stock split. Net capital gain (*i.e.*, the excess of net long-term capital gain over net short-term capital loss) will be subject to tax at reduced rates for non-corporate stockholders who receive cash. The deductibility of capital losses is subject to various limitations for corporate and non-corporate holders.

For purposes of the above discussion of the bases and holding periods for shares of TorreyPines common stock, stockholders who acquired different blocks of TorreyPines common stock at different times for different prices must calculate their gains and losses and holding periods separately for each identifiable block of such stock surrendered in the reverse stock split.

Stockholders Who Receive Only Cash

A holder of TorreyPines common stock who receives only cash in the reverse stock split (*i.e.*, a stockholder that owns fewer than the number of shares of pre-split common stock for which one share of TorreyPines common stock will be issued in the reverse stock split) will be treated as having such shares redeemed in a taxable transaction governed by Section 302 of the Code. Because TorreyPines has neither current nor accumulated earnings and profits the stockholder will recognize gain or loss equal to the difference between the cash payment and the stockholder s tax basis for the redeemed shares.

Backup Withholding

TorreyPines is required to furnish to the record holders of TorreyPines common stock, other than corporations and other exempt holders, and to the IRS, information with respect to dividends paid on the TorreyPines common stock.

Certain non-corporate holders of TorreyPines common stock may be subject to backup withholding with respect to proceeds received from the disposition of shares of TorreyPines common stock. Backup withholding will not apply, however, to a holder of TorreyPines common stock who (1) furnishes a correct taxpayer identification number and certifies that the holder of TorreyPines common stock is not subject to backup

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withholding on IRS Form W-9 or a substantially similar form, (2) provides a certification of foreign status on an appropriate Form W-8 or successor form or (3) is otherwise exempt from backup withholding. If a holder of TorreyPines common stock provides an incorrect taxpayer identification number on IRS Form W-9 or a substantially similar form, such stockholder may be subject to penalties imposed by the IRS. Amounts withheld, if any, are generally not an additional tax and may be refunded or credited against the federal income tax liability of the holders of TorreyPines common stock, provided that the holder of TorreyPines common stock timely furnishes the required information to the IRS.

THE PRECEDING DISCUSSION IS INTENDED ONLY AS A SUMMARY OF CERTAIN UNITED STATES FEDERAL INCOME TAX CONSEQUENCES OF THE REVERSE STOCK SPLIT AND DOES NOT PURPORT TO BE A COMPLETE ANALYSIS OR DISCUSSION OF ALL OF THE REVERSE STOCK SPLIT S POTENTIAL TAX EFFECTS. HOLDERS OF TORREYPINES COMMON STOCK ARE URGED TO CONSULT THEIR OWN TAX ADVISORS AS TO THE SPECIFIC TAX CONSEQUENCES TO THEM OF THE REVERSE STOCK SPLIT AND THE APPLICABILITY AND EFFECT OF FEDERAL, STATE, LOCAL AND OTHER APPLICABLE TAX LAWS.

Vote Required; Recommendation of Board of Directors

The affirmative vote of the holders of a majority of the shares of TorreyPines common stock having voting power outstanding on the record date for the TorreyPines annual meeting is required to approve the certificate of amendment to TorreyPines certificate of incorporation effecting a reverse stock split of TorreyPines common stock, pursuant to which each ten, eleven, twelve, thirteen, fourteen, fifteen, seventeen, twenty, twenty-five, thirty, thirty-five, forty, forty-five, fifty, fifty-five, sixty or seventy shares, of existing TorreyPines common stock into one new share of TorreyPines common stock. The number of shares of common stock issued and outstanding will therefore be reduced, depending upon the reverse stock split ratio determined by the TorreyPines board of directors and approved by the Raptor board of directors. The amendment to the restated certificate of incorporation that is filed to effect the reverse stock split, if any, will include only the reverse split ratio determined by the boards of directors of TorreyPines and Raptor, respectively, that causes the combined company s stock price to be at least $4.00 per share and which is determined to be in the best interests of the stockholders of TorreyPines and Raptor, respectively, and all of the other proposed amendments at different ratios will be abandoned.

THE TORREYPINES BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT TORREYPINES STOCKHOLDERS VOTE FOR TORREYPINES PROPOSAL NO. 2 TO AMEND TORREYPINES CERTIFICATE OF INCORPORATION EFFECTING THE REVERSE STOCK SPLIT.

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TorreyPines Proposal No. 3: Approval of Name Change

At the TorreyPines annual meeting, holders of TorreyPines stock will be asked to approve the amendment to TorreyPines certificate of incorporation to change the name of the corporation from TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp. upon consummation of the merger. The primary reason for the corporate name change is that management believes this will allow for brand recognition of Raptor s product candidates and product candidate pipeline following the consummation of the merger. TorreyPines management believes that the current name will no longer accurately reflect the business of the combined company and the mission of the combined company subsequent to the consummation of the merger.

Insofar as TorreyPines business will not include Raptor s business until the merger has been completed, the proposed name change and the amendment of TorreyPines certificate of incorporation, even if approved by the TorreyPines stockholders at the TorreyPines annual meeting, will only be filed with the office of the Secretary of State of the State of Delaware, and will therefore only become effective, if the merger is consummated.

The affirmative vote of the holders of a majority of the shares of TorreyPines common stock having voting power outstanding on the record date for the TorreyPines annual meeting is required to approve the amendment to TorreyPines certificate of incorporation to change the name TorreyPines Therapeutics, Inc. to Raptor Pharmaceutical Corp.

THE TORREYPINES BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT TORREYPINES STOCKHOLDERS VOTE FOR TORREYPINES PROPOSAL NO. 3 TO APPROVE THE NAME CHANGE FROM TORREYPINES THERAPEUTICS, INC. TO RAPTOR PHARMACEUTICAL CORP.

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TorreyPines Proposal No. 4: Election of Directors

TorreyPines board of directors is currently comprised of four members. Each director is elected to hold office for a one year term or until the next annual meeting of stockholders and until his or her successor is elected and qualified or until his or her earlier death, resignation or removal. As a condition to the closing of the merger with Raptor, each of TorreyPines current directors will be required to tender his or her resignation as a director effective as of the closing.

TorreyPines board of directors has nominated Peter Davis, Ph.D., Steven H. Ferris, Ph.D., Evelyn Graham and Steven B. Ratoff for re-election to the TorreyPines board of directors. The merger agreement with Raptor requires that TorreyPines take all necessary corporate action such that immediately following the closing of the merger the individuals currently serving as the members of Raptor s board of directors shall compose the board of directors of the combined company.

The four nominees receiving the most **FOR** votes from the TorreyPines shares having voting power present in person or represented by proxy and entitled to vote at the TorreyPines annual meeting will be elected. Shares represented by executed proxies will be voted, if authority to do so is not withheld, for the election of Peter Davis, Ph.D., Steven H. Ferris, Ph.D., Evelyn Graham and Steven B. Ratoff. In the event that any nominee should be unavailable for election as a result of an unexpected occurrence, such shares will be voted for the election of such substitute nominee as the corporate governance and nominating committee of TorreyPines board of directors may propose. Peter Davis, Ph.D., Steven H. Ferris, Ph.D., Evelyn Graham and Steven B. Ratoff have each agreed to serve if elected, and TorreyPines has no reason to believe that any nominee will be unable to serve.

If the nominees are re-elected at the annual meeting and the merger is subsequently completed, in accordance with the provisions of the merger agreement Peter Davis, Ph.D., Steven H. Ferris, Ph.D., Evelyn Graham and Steven B. Ratoff will resign from the TorreyPines board of directors and Christopher M. Starr, Ph.D., Raymond W. Anderson, Erich Sager and Richard L. Franklin, M.D., Ph.D. will be appointed as new directors of the combined company. For more information, please see the section titled, The Merger Agreement Directors and Officers of TorreyPines Following the Merger in this joint proxy statement/prospectus.

Set forth below is biographical information for each person nominated.

THE TORREYPINES BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT TORREYPINES STOCKHOLDERS VOTE IN FAVOR OF EACH NAMED NOMINEE.

Set forth below is information regarding each director nominee, executive officer and significant employee of TorreyPines. There are no family relationships among any directors nominees of TorreyPines.

Name	Age	Position	Director Since
Peter Davis	65	Chairman of the Board, Director	2006
Steven H. Ferris, Ph.D.	66	Director	2003
Evelyn Graham	61	Chief Executive Officer, Director	2008
Steven B. Ratoff	67	Director	2005
Craig Johnson	47	Vice President, Finance and Chief Financial Officer	N/A
Paul Schneider	39	Vice President and General Counsel	N/A

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Current TorreyPines Directors Biographical Information

The following biographical information is furnished with regard to the directors of TorreyPines as of August 12, 2009.

Peter Davis, Ph.D., has served as a director of TorreyPines since October 2006 and the Chairman of TorreyPines Board since May 2007. He previously served as a director of TPTX, Inc., TorreyPines subsidiary, from August 2005 to February 2007. Since 2002, Dr. Davis has worked as an independent consultant to a number of companies. Dr. Davis served as president of DNA Plant Technologies Corp., an agriculture biotechnology company, from 2001 to 2002. Dr. Davis was a member of the Executive Committee of Pulsar International, S.A., a management consultant company and an affiliate of A.G. Biotech Capital, from 1993 to 2001. From 1975 to 1993, Dr. Davis was a faculty and staff member of the Wharton School of the University of Pennsylvania. His primary appointments included Director of the Applied Research Center and Director of Executive Education. He is a member of the board of directors of several private companies. Dr. Davis received a B.A. in physics from Cambridge University, a Masters Degree in operations research from the London School of Economics and a Ph.D. in operations research from the Wharton School of the University of Pennsylvania.

Steven H. Ferris, Ph.D. has served as a director of TorreyPines since January 2003. Dr. Ferris is a neuropsychologist, psychopharmacologist, and gerontologist who has been studying brain aging and Alzheimer s disease for over 30 years. Dr. Ferris is the Friedman Professor and Director of the Alzheimer s Disease Center in the Department of Psychiatry at New York University (NYU) School of Medicine, and Executive Director of the Aging and Clinical Dementia Research Center of the NYU Center of Excellence for Brain Aging and Dementia. Dr. Ferris has been at the NYU School of Medicine since 1973, where he has conducted a major research program focusing on cognitive assessment, early diagnosis and treatment of brain aging and Alzheimer s disease. He has served as the Associate Editor in Chief of *Alzheimer Disease and Associated Disorders*, is a former member of the Medical and Scientific Affairs Council of the national *Alzheimer s Association*, has served on several National Institutes of Health peer review panels, and has been a member of the U.S. Food and Drug Administration Advisory Committee which reviews new drugs for Alzheimer s disease. He has conducted more than 75 clinical trials in aging and dementia and has been a consultant to numerous pharmaceutical companies who are developing new treatments for Alzheimer s disease.

Evelyn A. Graham has served as TorreyPines Chief Executive Officer and a director of TorreyPines since November 2008. Ms. Graham served as TorreyPines Acting Chief Executive Officer from September 2008 to November 2008 and as TorreyPines Chief Operating Officer from October 2006 to August 2008. Ms. Graham joined TPTX, Inc., TorreyPines subsidiary, in 2004 as Vice President, Development; she became TPTX Inc. s Vice President, Corporate Development in 2005 and Chief Operating Officer in 2006. Ms. Graham was Executive Director, Development Operations at Purdue Pharma, a privately-held pharmaceutical company, from 2000 to 2003. From 1998 to 2000, Ms. Graham was Senior Vice President of Business Development of Ingenix Pharmaceutical Services, a health information technology company and a division of UHG, and served as Vice President of Clinical Operations at Worldwide Clinical Trials, a contract research organization, prior to its acquisition by UHG. Previously, Ms. Graham held positions in operations management, healthcare utilization, and organizational planning at Bayer Corporation and Wyeth Pharmaceuticals (formerly Ayerst Laboratories). Ms. Graham holds a B.A. in biology from the University of Delaware and an M.B.A. from the University of Connecticut.

Steven B. Ratoff has served as a director of TorreyPines since May 2005. From September 2005 to October 2006, Mr. Ratoff served as the Chairman of TorreyPines Board. Mr. Ratoff is currently a private investor and has been a Venture Partner with Proquest Investments, a biopharmaceutical venture firm, since 2004. In addition, he is currently serving as the Chairman and Interim Chief Executive Officer of Novadel Pharma, Inc., a publicly traded specialty pharmaceutical company. He served as Chairman and Interim Chief Executive Officer of Cima Labs, Inc., a publicly traded specialty pharmaceutical company, from May 2003 through its sale to Cephalon, Inc. in August 2004. He was the President and Chief Executive Officer of MacroMed, Inc., a privately owned drug delivery company, from February 2001 to December 2001, and also as

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director of that company from 1998 to 2001. Mr. Ratoff s experience includes serving as Executive Vice President and Chief Financial Officer of Brown-Forman Corporation, a publicly traded diversified manufacturer of consumer products, as well as 15 years in a variety of senior financial positions with Bristol-Myers Squibb. Mr. Ratoff received a B.S. in Business Administration from Boston University and an M.B.A. with Distinction from the University of Michigan. Mr. Ratoff is also a retired Certified Public Accountant.

Executive Employee Biographical Information

Evelyn A. Graham

See above under Director Biographical Information .

Craig A. Johnson has been TorreyPines Vice President, Finance and Chief Financial Officer since October 2006. Mr. Johnson has served as Chief Financial Officer and Vice President, Finance of TPTX, Inc., TorreyPines subsidiary since January 2004 and as a director since February 2007. From 1994 to 2004, Mr. Johnson served in a number of financial positions with MitoKor, Inc., a biotechnology company, and last held the position of Chief Financial Officer and Senior Vice President of Operations. Prior to joining MitoKor, Mr. Johnson served as a senior financial executive for several early-stage technology companies, and from 1984 to 1988 Mr. Johnson worked for the accounting firm Price Waterhouse. Mr. Johnson received his B.B.A. in accounting from the University of Michigan and is a certified public accountant. He has been actively involved in the Association of Bioscience Financial Officers since 1998. Mr. Johnson serves as a director and the Chairman of the Audit Committee for Ardea Biosciences, Inc., a publicly traded biotechnology company.

Paul R. Schneider has been TorreyPines Vice President and General Counsel since 2007. From 2002 to 2007, Mr. Schneider was an associate with the law firm of Cooley Godward Kronish, LLP. From 1993 to 1999, Mr. Schneider worked as an analytical chemist for Eli Lilly & Company. Mr. Schneider is a member of the State Bar of California and holds B.S. degrees in Chemistry and Economics from the University of Wisconsin, Madison and a J.D. from Duke Law School.

Independence of the TorreyPines Board of Directors

As required under applicable NASDAQ Marketplace Rules, a majority of the members of a listed company s board of directors must qualify as independent, as affirmatively determined by the board of directors. TorreyPines board of directors consults with its counsel to ensure that its board of directors determinations are consistent with all relevant securities and other laws and regulations regarding the definition of independent, including those set forth in pertinent NASDAQ Marketplace Rules, as in effect time to time.

Consistent with these considerations, after review of all relevant transactions or relationships between each director or any of his or her family members, and TorreyPines senior management, TorreyPines independent registered public accounting firm and TorreyPines, the board of directors of TorreyPines affirmatively has determined that all of the directors are independent directors within the meaning of the applicable NASDAQ Marketplace Rules, except for Ms. Graham.

As required under applicable NASDAQ Marketplace Rules, in 2008 TorreyPines independent directors met in regularly scheduled executive sessions at which only independent directors were present.

Meetings of the TorreyPines Board of Directors

TorreyPines board of directors met eleven times during 2008. Each director attended 75% or more of the aggregate of the meetings of the board of directors and of the committees on which he or she served, held during the period for which he or she was a director or committee member, respectively.

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Attendance at TorreyPines Annual Meetings

TorreyPines has adopted a policy encouraging its directors and nominees for director to attend TorreyPines annual meetings of stockholders. Six of TorreyPines seven directors then in office attended the TorreyPines 2008 annual meeting of stockholders.

TorreyPines Board Committees

TorreyPines board of directors currently has an Audit Committee, a Compensation Committee and a Corporate Governance and Nominating Committee. Below is a description of each committee of the board of directors and information regarding committee meetings held in 2008. The TorreyPines board of directors has determined that each member of each committee meets the applicable rules and regulations regarding independence and that each member is free of any relationship that would interfere with his or her individual exercise of independent judgment with regard to TorreyPines. The charters for the Audit, Compensation and Corporate Governance and Nominating Committees can be found on TorreyPines corporate website at www.tptxinc.com.

TorreyPines Audit Committee

The Audit Committee of the TorreyPines board of directors was established by the TorreyPines board of directors in accordance with Section 3(a)(58)(A) of the Exchange Act to oversee TorreyPines corporate accounting and financial reporting processes and audits of its financial statements. For this purpose, the Audit Committee performs several functions. The Audit Committee evaluates the performance of and assesses the qualifications of the independent registered public accounting firm; determines and approves the engagement of the independent registered public accounting firm; determines whether to retain or terminate the existing independent registered public accounting firm or to appoint and engage a new independent registered public accounting firm; reviews and approves the retention of the independent registered public accounting firm to perform any proposed permissible non-audit services; monitors the rotation of partners of the independent registered public accounting firm on TorreyPines audit engagement team as required by law; reviews and approves or rejects transactions between the TorreyPines and any related persons; confers with management and the independent registered public accounting firm regarding the effectiveness of internal controls over financial reporting; establishes procedures, as required under applicable law, for the receipt, retention and treatment of complaints received by TorreyPines regarding accounting, internal accounting controls or auditing matters and the confidential and anonymous submission by employees of concerns regarding questionable accounting or auditing matters; and meets to review TorreyPines annual audited financial statements and quarterly financial statements with management and the independent registered public accounting firm, including reviewing TorreyPines disclosures under Management s Discussion and Analysis of Financial Condition and Results of Operations in TorreyPines Annual Report on Form 10-K.

The Audit Committee, which includes Dr. Davis, Dr. Ferris and Mr. Ratoff, met a total of 4 times during the fiscal year ended December 31, 2008. Dr. Davis currently chairs the Audit Committee. TorreyPines board of directors has determined that all members of its Audit Committee are independent (as independence is currently defined in Rule 5605(c)(2)(A)(i) and (ii) of the NASDAQ listing standards). TorreyPines board of directors has determined that Dr. Davis and Mr. Ratoff each qualifies as an audit committee financial expert as defined in the applicable Securities and Exchange Commission, or SEC, rules. The TorreyPines board of directors made a qualitative assessment of each of Dr. Davis and Mr. Ratoff s respective levels of knowledge and experience based on a number of factors, including his respective formal education and prior experience.

The Audit Committee is authorized to retain advisors and consultants and to compensate them for their services.

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TorreyPines Compensation Committee

The Compensation Committee of the TorreyPines board of directors acts on behalf of the board of directors to review, adopt and oversee TorreyPines compensation strategy, policies, plans and programs, including:

- establishment of corporate and individual performance objectives relevant to the compensation of TorreyPines executive officers, directors and other senior management and evaluation of performance in light of these stated objectives;
- review and approval of the compensation and other terms of employment or service, including severance and change-in-control arrangements, of TorreyPines Chief Executive Officer and the other executive officers;
- review and recommendation to the board of directors of the type and amount of compensation to be paid or awarded to board of directors members; and
- administration of TorreyPines equity compensation plans, pension and profit-sharing plans, deferred compensation plans and other similar plan and programs.

The Compensation Committee also reviews with management TorreyPines Compensation Discussion and Analysis and considers whether to recommend that it be included in proxy statements and other filings.

The Compensation Committee, which included Dr. Fisherman, who resigned from the TorreyPines board of directors effective June 12, 2009, Mr. Van Beneden, who resigned from the TorreyPines board of directors effective May 29, 2009 and Mr. Ratoff, met a total of 4 times during the year ended December 31, 2008. Mr. Ratoff currently chairs the Compensation Committee. TorreyPines board of directors has determined that all members of TorreyPines Compensation Committee are independent (as independence is currently defined in Rule 5605(a)(2) of the NASDAQ listing standards). The Compensation Committee is authorized to retain advisors and consultants and to compensate them for their services.

Executive and Director Compensation Process

The following is an overview of TorreyPines processes and procedures for the consideration and determination of executive compensation. The specific determinations of the Compensation Committee with respect to executive compensation for fiscal 2008 are described in greater detail in the Compensation Discussion and Analysis section of TorreyPines Annual Report on Form 10-K for the year ended December 31, 2008 filed with the SEC on March 27, 2009.

At the beginning of each year the Compensation Committee meets with TorreyPines management team to specify a limited number of key corporate goals for the upcoming year. Additionally, the Compensation Committee works with the Chief Executive Officer to establish goals specific to the Chief Executive Officer. At the end of the year the Compensation Committee reviews corporate performance and establishes the achievement level of each goal. The Compensation Committee also reviews the performance of the Chief Executive Officer and establishes the achievement level of his or her goals.

Compensation Committee Interlocks and Insider Participation

No member of TorreyPines Compensation Committee has served as one of its officers or employees at any time. None of TorreyPines executive officers serves, or has served during the last fiscal year, as a member of the compensation committee or a member of the board of directors of any other company that has an executive officer serving as a member of TorreyPines Compensation Committee or TorreyPines board of directors.

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TorreyPines Corporate Governance and Nominating Committee

The Corporate Governance and Nominating Committee of the TorreyPines board of directors is responsible for identifying, reviewing and evaluating candidates to serve as TorreyPines directors (consistent with criteria approved by the TorreyPines board of directors), reviewing and evaluating incumbent directors, recommending to the TorreyPines board of directors for selection candidates for election to the TorreyPines board of directors, making recommendations to the TorreyPines board of directors regarding the membership of the committees of the TorreyPines Board, assessing the performance of the TorreyPines board of directors and developing a set of corporate governance principles for the TorreyPines.

The Corporate Governance and Nominating Committee believes that candidates for director should have certain minimum qualifications, including the ability to read and understand basic financial statements and having the highest personal integrity and ethics. The Corporate Governance and Nominating Committee also intends to consider such factors as possessing relevant expertise upon which to be able to offer advice and guidance to management, having sufficient time to devote to the affairs of the TorreyPines, knowledge of the industry, having the ability to exercise sound business judgment and having the commitment to represent the long-term interests of TorreyPines stockholders. However, the Corporate Governance and Nominating Committee retains the right to modify these qualifications from time to time. Candidates for director nominees are reviewed in the context of the current composition of the TorreyPines board of directors, the operating requirements of the TorreyPines and the long-term interests of stockholders. In conducting this assessment, the Corporate Governance and Nominating Committee considers such factors as it deems appropriate given the current needs of the TorreyPines board of directors and the company, to maintain a balance of knowledge, experience and capability.

At this time, the TorreyPines Corporate Governance and Nominating Committee does not have a policy with regard to the consideration of director candidates recommended by stockholders. The TorreyPines Corporate Governance and Nominating Committee believes that it is in the best position to identify, review, evaluate and select qualified candidates for board of directors membership, based on the comprehensive criteria for board of directors membership approved by the TorreyPines board of directors.

The Corporate Governance and Nominating Committee, which included Dr. Deleage, who resigned from the TorreyPines board of directors of directors effective May 27, 2009, and Dr. Davis and Mr. Ratoff, held 1 meeting during the year ended December 31, 2008. All members of the Nominating Committee are independent, as independence is currently defined in Rule 5605(a)(2) of the NASDAQ listing standards. The Corporate Governance and Nominating Committee is authorized to retain advisors and consultants and to compensate them for their services.

Compensation to Directors

Each of TorreyPines non-employee directors receives as compensation:

- an annual retainer of $20,000 payable on the date of the Annual Meeting of the TorreyPines stockholders;
- an additional annual retainer of $20,000 for the Chairman of TorreyPines board of directors payable on the date of the Annual Meeting of the TorreyPines stockholders;
- an annual $10,000 retainer for service as the Audit Committee chair payable on the date of the Annual Meeting of the TorreyPines stockholders ;
- an annual $10,000 retainer for service as the Compensation Committee chair payable on the date of the Annual Meeting of the TorreyPines stockholders ;
- an annual $3,000 retainer for service as the Corporate Governance and Nominating Committee chair payable on the date of the Annual Meeting of the TorreyPines stockholders ;

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$1,500 per board meeting attended in person or telephonically; and

$1,000 per meeting of the Audit Committee, Compensation Committee or Corporate Governance and Nominating Committee attended in person or telephonically.

In addition to the cash compensation set forth above, on the date of each Annual meeting of stockholders each continuing non-employee director will receive an annual stock option grant for 10,000 shares of TorreyPines common stock which will fully vest on the one year anniversary of the grant date. Each non-employee director who first becomes a director of the TorreyPines will receive an initial stock option grant for 20,000 shares which would vest over four years in equal monthly installments. Stock options granted to non-employee directors have an exercise price equal to the closing price of the TorreyPines common stock on the date of grant as reported by NASDAQ. Each non-employee director was also reimbursed for reasonable out-of-pocket expenses incurred in attending meetings of the TorreyPines board of directors or any committee of the TorreyPines board of directors. The TorreyPines board of directors has suspended the payment of the annual retainers payable to each non-employee director for 2009 as well as the annual stock option grant that was to be issued to each non-employee director in connection with the 2009 annual meeting of TorreyPines stockholders.

Compensation Discussion and Analysis

Objectives and Philosophy of Executive Compensation

The Compensation Committee of TorreyPines board of directors is responsible for establishing, implementing and monitoring the policies governing compensation for TorreyPines executives. The objective of TorreyPines Compensation Committee is to provide a competitive compensation package that will attract, motivate and retain talented and dedicated executives who will enable TorreyPines to achieve its key strategic goals. TorreyPines Compensation Committee believes it is important to align incentives for executives with value creation for stockholders. In order to accomplish this purpose, TorreyPines Compensation Committee believes it is appropriate for a significant amount of the total compensation of each executive to be based on performance, which compensation may or may not be earned. TorreyPines Compensation Committee intends to make compensation decisions that:

support TorreyPines overall business objectives;

reward outstanding performance in discovery, preclinical development and clinical development;

recognize disciplined management of financial resources;

motivate employees in a high performance environment; and

demand the highest standards of corporate governance and personal integrity.

TorreyPines Compensation Committee believes that:

the overall compensation package for each of TorreyPines executives should be based on performance, should motivate TorreyPines executives to achieve TorreyPines key strategic goals, and should be aligned with the compensation package of TorreyPines other executive officers and employees;

for the purpose of recruitment and retention, executive base salaries should be competitive with salaries paid to executives at peer group companies in the life sciences industry that are comparable to TorreyPines in size and stage of development, and should be targeted near the median salary range for executives with similar responsibilities at public companies in TorreyPines peer group and

base salaries should represent a portion of the overall compensation package that provides sufficient incentives to strive for achievement of goals;

actual bonus amounts should be conditioned upon the achievement of corporate and individual goals that reflect key strategic objectives that are expected to create overall stockholder value if achieved,

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target bonus amounts for executives should be competitive with bonus amounts paid to executives at companies in our peer group, and target bonus amounts should represent a portion of the overall compensation package that provides sufficient incentives to strive for achievement of goals; and

long-term equity incentive awards offer an important element of our overall compensation package that reward our executives for meeting our long-term goals while preserving available cash and align executive interests with those of our stockholders.

In addition TorreyPines Compensation Committee believes that it is necessary to provide severance payments to certain executives in order to remain competitive with TorreyPines peer group. However, TorreyPines Compensation Committee believes that any severance payments paid in the event of a change of control of TorreyPines should be triggered only in the event that the executive no longer remains an executive of the combined company following the change of control. In addition, any severance paid to executives, either in connection with a change of control or otherwise, should be in the lower range of severance paid to executives by companies in TorreyPines peer group.

TorreyPines Compensation Committee believes that providing executives with a mix of stock options and restricted stock units is the appropriate means of retaining executives, focusing TorreyPines executives on delivering long-term value to stockholders and providing long-term value to TorreyPines executives. Stock options vest over time and only have value to the extent TorreyPines stock price on the date the option is exercised exceeds the exercise price of the option. The restricted stock units will vest on the achievement of certain objectively defined results and have value to the executives at that time without the requirement of further payment by the executive. TorreyPines Compensation Committee believes that the combination of stock option grants and restricted stock unit grants will achieve the proper balance between upside potential and volatility while providing good long-term incentives to TorreyPines executives.

Material tax and accounting implications of executive compensation policies

TorreyPines accounts for the equity compensation expense for its employees under the rules of SFAS 123R, which requires TorreyPines to estimate and record an expense for each award of equity compensation over the service period of the award. Accounting rules also require TorreyPines to record cash compensation as an expense at the time the obligation is accrued. Unless and until TorreyPines achieves sustained profitability, the availability to TorreyPines of a tax deduction for compensation expense is not material to TorreyPines financial position. TorreyPines structures discretionary cash bonus compensation so that it is taxable to its employees at the time it becomes available to them. Federal income tax law prohibits publicly held companies from deducting certain compensation paid to a named executive officer that exceeds $1 million during the tax year. To the extent that compensation is based upon the attainment of performance goals set by TorreyPines Compensation Committee pursuant to plans approved by TorreyPines stockholders, the compensation is not included in the computation of this limit. Although TorreyPines Compensation Committee intends, to the extent feasible and where it believes it is in the best interests of TorreyPines and its stockholders, to attempt to qualify executive compensation as tax deductible, it does not intend to permit this tax provision to dictate TorreyPines Compensation Committee s development and execution of effective compensation plans.

Evaluation of Executive Compensation Package

During the months of November and December 2008 and January 2009, TorreyPines Compensation Committee, along with TorreyPines board of directors, had numerous informal discussions regarding the appropriate compensation packages for TorreyPines executives. TorreyPines Compensation Committee, in conjunction with the TorreyPines board of directors, determined that given the financial constraints of TorreyPines there would be no salary adjustment for 2009 and no bonuses paid for 2008.

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Elements of Executive Compensation

Executive compensation consists of the following elements:

Base Salary. Base salaries for TorreyPines executives are established based on the particular scope of each executive s responsibilities as well as their qualifications, experience and performance, taking into account competitive market compensation paid by other companies in TorreyPines peer group for individuals with similar responsibilities. Base salaries are reviewed annually, and additionally may be adjusted from time to time to realign salaries with market levels after taking into account individual responsibilities, performance and experience. TorreyPines Compensation Committee intends to conduct an annual review of base salaries, and the overall compensation package, each year toward the end of the year.

Discretionary Annual Cash Bonus. Discretionary annual cash bonuses are a means of rewarding individuals based on achievement of annual corporate and individual goals. TorreyPines Compensation Committee has the authority to award discretionary annual cash bonuses to TorreyPines executives. Each of TorreyPines executives has an annual cash bonus target ranging from 20% to 40% of base salary for 2008 depending on such executive s responsibilities. At the beginning of 2008 TorreyPines Compensation Committee met with TorreyPines management team to specify a limited number of key corporate goals for the year. These goals were then weighted to reflect their importance in determining overall corporate performance. At the end of 2008 TorreyPines Compensation Committee reviewed corporate performance and determined whether the particular goal was achieved. The sum of the goals achieved is the basis for any bonus payout amount for each executive.

2008 Bonus Amounts. In 2008, TorreyPines Compensation Committee and TorreyPines board of directors determined that given the current financial condition of TorreyPines no bonuses would be paid to any of TorreyPines executives.

Long-Term Equity Incentive Awards. Long-term equity incentive awards are a means of encouraging executive ownership of TorreyPines stock, promoting executive retention, and providing a focus on long-term corporate goals as well as increased stockholder value. TorreyPines Compensation Committee approves equity incentive award grants at year end following an increase in responsibilities by an executive.

In December 2006, TorreyPines Compensation Committee developed a three year equity award plan that would result in fair and equitable level of ownership in TorreyPines by the senior executives should TorreyPines be successful in achieving its long-term goals. TorreyPines Compensation Committee s plan involves the use of both stock option grants, which vest over time, and restricted stock units that vest based on corporate and individual performance. In order to provide a significant incentive to TorreyPines executives at a reasonable cost, TorreyPines Compensation Committee determined that a substantial portion of the equity awards to be issued in the three year plan would be granted in 2006, with vesting periods that extend over four years.

Stock Options. Stock options granted by TorreyPines have an exercise price equal to the fair market value of TorreyPines common stock on the day of grant, typically vest over a four-year period with 25% vesting 12 months after the vesting commencement date and the remainder vesting ratably each month thereafter based upon continued employment, and generally expire ten years after the date of grant. Incentive stock options also include certain other terms necessary to assure compliance with the Code.

Restricted Stock and Restricted Stock Units. TorreyPines stock plans authorize it to grant restricted stock and restricted stock units. Restricted stock units vest on the attainment of a specified milestone or time period. Once the restricted stock unit has vested, the executive has the ability to obtain shares of TorreyPines common stock.

In determining the number of stock options and restricted stock units to be granted to executives, TorreyPines Compensation Committee takes into account the individual s position, scope of responsibility,

qualifications and experience, ability to affect stockholder value, historic and recent performance, existing vested and unvested awards, and the value of stock options in relation to the other elements of the individual executive s total compensation package. In order to control overall stockholder dilution, TorreyPines Compensation Committee also evaluates the aggregate outstanding stock options to all TorreyPines employees in relation to those granted to its executives when determining the number of options and restricted stock units that should be granted.

2008 Equity Awards. In 2008, TorreyPines executives were awarded stock options in the amounts indicated in the section titled Grants of Plan-Based Awards. These awards are based on the executives performance during 2008 and as part of the three year equity plan developed by the Compensation Committee in 2006.

2009 Equity Awards. In 2009, TorreyPines executives were awarded stock options in the amounts indicated in the section titled Grants of Plan-Based Awards. These awards were granted as a means of promoting executive retention and focus on near-term corporate goals.

Broad-Based Benefit Plans. Broad-based benefit plans are an integral component of competitive executive compensation packages. TorreyPines benefits include a 401(k) savings plan, health benefits such as medical, dental, and vision plans, and disability and life insurance benefits. TorreyPines has no structured perquisite benefits, and does not provide any deferred compensation programs or supplemental pensions to any executives. In its discretion, TorreyPines Compensation Committee may revise, amend or add to the executive s benefits if it deems it advisable.

Change in Control and Severance Benefits. Change in control arrangements are designed to retain executives and provide continuity of management in the event of a change in control. TorreyPines has entered into employment agreements with its Chief Executive Officer, its Chief Financial Officer and its Vice President and General Counsel. These agreements provide for severance compensation to be paid if the executives are terminated under certain conditions, such as a termination following a change in control or a termination without cause by TorreyPines, each as set forth in the applicable agreement.

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The following table provides information regarding the annual and long-term compensation earned for services rendered in all capacities to TorreyPines Therapeutics, Inc. for the years ended December 31, 2008, 2007 and 2006 of those persons who (i) served at any time during the last fiscal year as our Principal Executive Officer, (ii) served at any time during the last fiscal year as our Principal Financial Officer, (iii) were serving at fiscal year-end as our two most highly compensated executive officers, other than the Principal Executive Officer and the Principal Financial Officer, whose total compensation exceeded $100,000 (collectively, the Named Executive Officers) and (iv) any additional persons who would have been a Named Executive Officer but for not serving as of December 31, 2008.

SUMMARY COMPENSATION TABLE FOR 2008

Name and Principal Position	Year	Salary ($)	Bonus ($)	Stock Awards (1)($)	Option Awards (1)($)	Non-Equity Incentive Plan Compensation (2)($)	All Other Compensation ($)	Total ($)
Evelyn A. Graham	2008	$ 304,667		$ 34,270	$ 45,206	$	$	$ 384,143
Chief Executive Officer	2007	271,200		34,175	40,418	69,200		414,993
	2006	228,757		1,609	15,107	88,400		333,873
Craig A. Johnson	2008	282,000		34,270	44,214			360,484
Vice President, Chief Financial Officer	2007	271,200		34,175	40,431	69,200		415,006
	2006	223,221		1,609	15,120	61,951		301,901
Susan J. Mellberg	2008	197,400		20,562	23,155			241,117
Former Vice President, Project Management(3)								
Paul R. Schneider	2008	217,700		1,007	75,208			293,915
Vice President and General Counsel								
Neil M. Kurtz, M.D.	2008	320,015		(93,040)	51,515			278,490
Former President &	2007	417,200		88,856	78,436	141,800		726,292
Chief Executive Officer(4)	2006	354,272		4,184	18,639	135,364		512,459
Steven Wagner, Ph.D.	2008	249,068		(14,314)	8,987		12,249(5)	255,990
Former Chief Scientific	2007	237,800		13,670	13,809	50,500		315,779
Officer(5)	2006	228,000		644	2,039	59,850		290,533

(1) The amounts shown reflect the dollar amount recognized for financial statement reporting purposes for the fiscal years ended December 31, 2008, 2007 and 2006, in accordance with FAS 123R of restricted stock units granted pursuant to our 2006 Equity Incentive Plan (the 2006 Plan) or stock option grants pursuant to both the 2000 Stock Option Plan (the 2000 Plan) and the 2006 Plan and thus may include amounts from restricted stock units or stock options granted in and prior to 2008, 2007 and 2006, respectively. Assumptions used in the calculation of these amounts are included in the footnotes of the consolidated Financial Statements included in Part IV, Item 15, of this Annual Report on Form 10-K.

(2) Amounts listed in this column for 2007 were awarded for corporate and individual performance in 2007 but were paid in January 2008. Amounts listed in this column for 2006 were awarded for corporate and individual performance in 2006 but were paid in February 2007.

(3) Ms. Mellberg s last date of employment was March 31, 2009.

(4) Dr. Kurtz resigned from TorreyPines effective August 31, 2008.

(5) Dr. Wagner s last date of employment was September 30, 2008 and his total salary for 2008 includes severance pay totaling $61,225.

(6) Amount consists of a reimbursement for the cost of health benefits under COBRA.

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Grants of Plan-Based Awards

The following table presents information concerning grants of plan-based awards to each of the Named Executive Officers for the fiscal year ended December 31, 2008.

GRANTS OF PLAN-BASED AWARDS IN 2008

Name	Grant Date	Estimated Possible Payouts Under Non-Equity Incentive Plan Awards(1) Threshold ($)	Target ($)	Maximum ($)	All Other Option Awards: Number of Securities Underlying Options (2)(#)	Exercise or Base Price of Option Awards ($/Sh)	Grant Date Fair Value of Stock and Option Awards (3)($)
Evelyn A. Graham	10/15/08				300,000	0.27	53,580
	n/a	110,250	157,500	236,250			
Craig A. Johnson	10/15/08				250,000	0.27	44,650
	n/a	59,220	84,600	126,900			
Paul R. Schneider	10/15/08				120,000	0.27	21,432
		38,098	54,425	81,638			
Susan J Mellberg(4)	10/15/08				120,000	0.27	21,432
		29,036	41,480	62,220			
Neil M. Kurtz, M.D.(5)	n/a	131,418	187,740	281,610			
Steven L. Wagner, Ph.D.(6)	n/a	42,858	61,225	91,838			

(1) The amounts shown in these columns represent the threshold, target and maximum payout levels for discretionary annual cash bonuses for 2008 performance. The actual amount of incentive bonus earned by each Named Executive Officer in 2008 was $0 and is reported under the Non-Equity Incentive Plan Compensation column in the Summary Compensation Table. The potential payouts for Named Executive Officers are performance driven and therefore are completely at risk.

(2) This column reflects the number of stock options granted under TorreyPines 2006 Plan during 2008. The terms of these awards are summarized in the Outstanding Equity Awards at Fiscal Year-End Table below.

(3) Amount represents the grant date fair value for stock options granted under TorreyPines 2006 Plan during 2008 and is computed in accordance with FAS 123R. Assumptions used in the calculation of these amounts are included in the footnotes of the consolidated Financial Statements included in this joint proxy statement/prospectus.

(4) Ms. Mellberg was TorreyPines former Vice President, Project Management; her last date of employment was March 31, 2009.

(5) Dr. Kurtz was TorreyPines former President and Chief Executive Officer; he resigned from the Company effective August 31, 2008.

(6) Dr. Wagner was TorreyPines former Chief Scientific Officer; his last date of employment was September 30, 2008.

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Outstanding Equity Awards at Fiscal Year-End

The following table presents the outstanding equity awards held by each of the Named Executive Officers as of the fiscal year ended December 31, 2008 including the value of outstanding stock awards.

OUTSTANDING EQUITY AWARDS AT DECEMBER 31, 2008

	Option Awards				Stock Awards	
Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested ($)(3)
Evelyn A. Graham(9)	8,120		1.24	2/04/2014		
	28,420	4,060(4)	1.24	6/12/2015		
	12,500	12,500(5)	6.37	12/13/2016		
	2,125	6,375(6)	2.90	12/05/2017		
	25,000	275,000(8)	0.27	10/14/2018		
					25,000(1)	6,750
Craig A. Johnson(10)	8,120		1.24	2/04/2014		
	28,420	4,060(4)	1.24	6/12/2015		
	12,500	12,500(5)	6.37	12/13/2016		
	2,125	6,375(6)	2.90	12/05/2017		
	20,833	229,167(8)	0.27	10/14/2018		
					25,000(1)	6,750
Susan J. Mellberg	8,628		1.24	2/04/2014		
	7,578	1,083(4)	1.24	6/12/2015		
	7,500	7,500(5)	6.37	12/13/2016		
	1,219	3,656(6)	2.90	12/05/2017		
	10,000	110,000(8)	0.27	10/14/2018		
					15,000(1)	4,050
Paul R. Schneider(11)	25,208	29,792(7)	7.77	1/31/2017		
	1,219	3,656(6)	2.90	12/05/2017		
	10,000	110,000(8)	0.27	10/14/2018		
					15,000(2)	4,050

(1) Amount reflects restricted stock units awarded during 2006. These restricted stock units will vest on March 31, 2009, provided our average closing stock price for the six-month period ending March 31, 2009 is at or above a specified amount. The restricted stock units are subject to forfeiture if the individual officers do not meet the service requirements and have an expiration date of December 31, 2016.

(2) Amount reflects restricted stock units awarded during 2006. These restricted stock units will vest on March 31, 2009, provided our average closing stock price for the six-month period ending March 31, 2009 is at or above a specified amount. The restricted stock units are subject to forfeiture if the individual officer does not meet the service requirements and have an expiration date of December 31, 2017.

(3) The amounts reflected as Market or Payout Value are based on the closing price of our common stock ($0.27) on December 31, 2008, the last business day of 2008, as reported by Nasdaq.

(4) These options vest in equal monthly installments on the 25th of each month and will be fully vested on April 25, 2009.

(5) These options vest in equal monthly installments on the 14th of each month and will be fully vested on December 14, 2010.

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(6) Twenty-five percent (25%) of the shares underlying the options vested on December 6, 2008 and thereafter the options vest in equal monthly installments on the 6th of each month. These options vest will be fully vested on December 6, 2011.
(7) These options vest in equal monthly installments on the 1st of each month and will be fully vested on February 1, 2011.
(8) These options vest in equal monthly installments on the 15th of each month and will be fully vested on October 15th, 2011.
(9) On February 23, 2009 the Board of Directors granted 300,000 stock options to Ms. Graham. These options have an exercise price of $0.23 per share, were one hundred percent (100%) vested as of the grant date and will expire on February 22, 2019.
(10) On February 23, 2009 the Board of Directors granted 250,000 stock options to Mr. Johnson. These options have an exercise price of $0.23 per share, were one hundred percent (100%) vested as of the grant date and will expire on February 22, 2019.
(11) Ms. Mellberg was TorreyPines former Vice President, Project Management; her last date of employment was March 31, 2009.
(12) On February 23, 2009 the Board of Directors granted 250,000 stock options to Mr. Schneider. These options have an exercise price of $0.23 per share, were one hundred percent (100%) vested as of the grant date and will expire on February 22, 2019.

Option Exercises and Stock Vested at Fiscal Year End

There were no option exercises by the Named Executive Officers and no stock awards vested during the fiscal year ended December 31, 2008.

Pension Benefits

None of our Named Executive Officers participates in or has account balances in qualified or non-qualified defined benefit plans sponsored by us.

Nonqualified Deferred Compensation

None of our Named Executive Officers participate in or have account balances in non-qualified defined contribution plans or other deferred compensation plans maintained by us.

Potential Payments Upon Termination or Change-in-Control Arrangements

Employment Agreement with Ms. Graham

TorreyPines entered into an employment agreement with Ms. Graham on December 14, 2006. TorreyPines entered into an amended and restated employment agreement with Ms. Graham on September 1, 2008 in connection with Ms. Graham being appointed acting Chief Executive Officer. On February 3, 2009 TorreyPines entered into an amendment to such amended and restated employment agreement extending the time of severance payments to twelve (12) months following a change in control such employment agreement, as amended, referred to herein as the Graham Original Employment Agreement. The Graham Original Employment Agreement provides for an initial annual base salary of not less than $350,000 and provides that Ms. Graham will be eligible to earn an annual bonus for 2008 in an amount up to 150% of her target bonus of 45% of her annual base salary, as determined by TorreyPines board of directors.

Pursuant to the terms of the Graham Original Employment Agreement, in the event that Ms. Graham s employment is terminated without cause or is terminated (either by TorreyPines without cause or by such executive for good reason) three (3) months prior to or twelve (12) months after a change in control, Ms. Graham will be entitled to continue to receive for twelve months following the date of her termination or resignation

(a) her base salary and (b) an amount equal to one-twelfth of the greater of (i) the average of the three annual bonuses paid to Ms. Graham by TorreyPines prior to the date of termination or resignation, (ii) the last annual bonus paid to Ms. Graham by TorreyPines prior to the date of termination or resignation, or (iii) if the termination occurs within the first 12 months following October 3, 2008, 45% of her base salary, which payments will be without reduction by any amount of Ms. Graham s earnings from any other employment during the 12-month severance period. Additionally, under those circumstances, the vesting of each of Ms. Graham s equity awards will be treated as if Ms. Graham had completed an additional 12 months of service immediately before the date on which her employment is terminated or she resigns. Ms. Graham s execution of a release in favor of TorreyPines is a condition to the receipt of these severance benefits, and she has agreed to a non-solicitation obligation and to confidentiality and assignment of inventions obligations in connection with her employment agreement.

Under the Graham Original Employment Agreement, a change in control is deemed to have occurred under any of the following circumstances, subject to certain exceptions and limitations: (i) a person becomes the owner of 50% or more of our voting power; (ii) the composition of TorreyPines board of directors changes over a period of 24 consecutive months or less in a way that results in a majority of TorreyPines board of directors (rounded up to the next whole number) ceasing, by reason of one or more proxy contests for the election of TorreyPines board of directors members, to be comprised of individuals who either (A) have been TorreyPines board of directors members continuously since the beginning of the period or (B) have been elected or nominated for election as TorreyPines board of directors members during the period by at least two-thirds of the TorreyPines board of directors members described in clause (A) who were still in office at the time the election or nomination was approved by the TorreyPines board of directors; (iii) (A) a merger or consolidation occurs in which we are not the surviving entity, or (B) any reverse merger occurs in which TorreyPines is not the surviving entity, or (C) any merger involving one of TorreyPines subsidiaries occurs in which TorreyPines is a surviving entity, but in each case in which holders of TorreyPines outstanding voting securities immediately prior to such transaction, as such, do not hold, immediately following such transaction, securities possessing 50% or more of the total combined voting power of the surviving entity s outstanding securities (in the case of clause (A)) or TorreyPines outstanding voting securities (in the case of clauses (B) and (C)); or (iv) all or substantially all of TorreyPines assets are sold of transferred other than in connection with an internal reorganization or our complete liquidation (other than a liquidation of us into a wholly-owned subsidiary).

Employment Agreement with Mr. Johnson

TorreyPines entered into an employment agreement with Mr. Johnson on December 14, 2006. TorreyPines entered into an amended and restated employment agreement with Mr. Johnson on November 12, 2008 to comply with Section 409A of the Internal Revenue Code of 1986, as amended and the final regulations issued thereunder. On February 3, 2009 TorreyPines entered into an amendment to such amended and restated employment agreement extending the time of severance payments to twelve (12) months following a change in control such employment agreement, as amended, referred to herein as the Johnson Original Employment Agreement. The Johnson Original Employment Agreement provides for an initial annual base salary of not less than $282,000 and provides that Mr. Johnson will be eligible to earn an annual bonus for 2008 in an amount up to 150% of his target bonus of 35% of his annual base salary, as determined by TorreyPines board of directors.

Pursuant to the terms of the Johnson Original Employment Agreement, in the event that Mr. Johnson s employment is terminated without cause or is terminated (either by TorreyPines without cause or by such executive for good reason) three (3) months prior to or twelve (12) months after a change in control, Mr. Johnson will be entitled to continue to receive for twelve months following the date of his termination or resignation (a) his base salary and (b) an amount equal to one-twelfth of the greater of (i) the average of the three annual bonuses paid to Mr. Johnson by TorreyPines prior to the date of termination or resignation, (ii) the last annual bonus paid to Mr. Johnson by TorreyPines prior to the date of termination or resignation, or (iii) if the termination occurs within the first 12 months following November 12, 2008, 35% of his base salary, which payments will be without reduction by any amount of Mr. Johnson s earnings from any other employment during

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the 12-month severance period. Additionally, under those circumstances, the vesting of each of Mr. Johnson s equity awards will be treated as if Mr. Johnson had completed an additional 12 months of service immediately before the date on which his employment is terminated or he resigns. Mr. Johnson s execution of a release in favor of TorreyPines is a condition to the receipt of these severance benefits, and he has agreed to a non-solicitation obligation and to confidentiality and assignment of inventions obligations in connection with his employment agreement. The definition of change in control in Mr. Johnson s employment agreement is the same as in Ms. Graham s employment agreement.

Employment Agreement with Mr. Schneider

TorreyPines entered into an employment agreement with Mr. Schneider on February 1, 2007. TorreyPines entered into an amended and restated employment agreement with Mr. Schneider on November 12, 2008 to comply with Section 409A of the Internal Revenue Code of 1986, as amended and the final regulations issued thereunder. On February 3, 2009 TorreyPines entered into an amendment to such amended and restated employment agreement extending the time of severance payments to twelve (12) months following a change in control such employment agreement, as amended, referred to herein as the Schneider Original Employment Agreement. The Schneider Original Employment Agreement provides for an initial annual base salary of not less than $217,700 and provides that he will be eligible to earn an annual bonus for 2008 in an amount up to 150% of his target bonus of 25% of his annual base salary, as determined by TorreyPines board of directors.

Pursuant to the terms of the Schneider Original Employment Agreement, in the event that Mr. Schneider s employment is terminated without cause or is terminated (either by TorreyPines without cause or by such executive with good reason) three months prior to or twelve (12) months after a change in control, Mr. Schneider resigns for good reason, Mr. Schneider will be entitled to continue to receive for twelve months following the date of his termination or resignation (a) his base salary and (b) an amount equal to one-twelfth of the greater of (i) the average of the three annual bonuses paid to Mr. Schneider by TorreyPines prior to the date of termination or resignation, (ii) the last annual bonus paid to Mr. Schneider by TorreyPines prior to the date of termination or resignation, or (iii) if the termination occurs within the first 12 months following November 12, 2008, 25% of his base salary, which payments will be without reduction by any amount of Mr. Schneider s earnings from any other employment during the 12-month severance period. Additionally, under those circumstances, the vesting of each of Mr. Schneider s equity awards will be treated as if Mr. Schneider had completed an additional 12 months of service immediately before the date on which his employment is terminated or he resigns. Mr. Schneider s execution of a release in favor of TorreyPines is a condition to the receipt of these severance benefits, and he has agreed to a non-solicitation obligation and to confidentiality and assignment of inventions obligations in connection with his employment agreement. The definition of change in control in Mr. Schneider s employment agreement is the same as in Ms. Graham s employment agreement.

The table below estimates amounts payable upon a separation as if the individuals were separated on December 31, 2008 using the closing share price of TorreyPines common stock as of that day.

	Severance Payments						
Name	Salary During Severance Period	Severance Bonus	Cobra Payments During Severance Period	Total Value of Severance Payment	Accrued But Unused PTO	Value of Options Vesting Upon Termination(1)	Total Value of Benefits Due Upon Termination
Evelyn A. Graham	$ 350,000	$ 157,500	$ 20,926	$ 528,426	$ 33,652	$	$ 562,078
Craig A. Johnson	282,000	69,200	21,210	372,410	27,114		399,524
Paul R. Schneider	217,700	54,425	18,630	290,755	12,769		303,524

(1) The Value of Options Vesting Upon Termination is calculated by multiplying the total options vesting upon termination (as outlined in the respective Employment Agreements) by the difference between the exercise price of the option and the closing price of TorreyPines common stock ($0.27) on December 31, 2008 as reported by NASDAQ.

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Employment Agreement Amendments

On July 27, 2009 TorreyPines and TPTX entered into a second amended and restated employment agreement with each of Ms. Graham, Mr. Johnson and Mr. Schneider which agreements are effective upon the closing of the merger. Pursuant to such amended and restated agreements the provisions discussed under this section, Potential Payments Upon Termination or Change-in-Control Arrangements, with respect to termination for cause, without cause and for good reason, and upon a change in control, as well as the vesting of equity awards, have been removed and/or amended and restated in their entirety. For more information, please see the section titled Interests of TorreyPines Directors and Executive Officers Employment Agreements Following Merger in this joint proxy statement/prospectus.

TorreyPines Director Compensation for 2008

The following table sets forth summary information concerning compensation paid or accrued for services rendered to TorreyPines in all capacities to the non-employee members of TorreyPines board of directors for the fiscal year ended December 31, 2008.

Name(1)	Fees Earned or Paid in Cash ($)	Option Awards ($)(2)	All Other Compensation ($)	Total ($)
Peter Davis, Ph.D.	69,000	22,285(3)		91,285
Jean Deleage, Ph.D.	38,000(4)	22,285(5)		60,285
Steven H. Ferris, Ph.D.	41,500	22,285(6)		63,785
Jason S. Fisherman, M.D.	39,500	22,285(7)		61,785
Steven B. Ratoff	52,500	22,285(8)		74,785
Patrick Van Beneden	38,500			38,500

(1) Neil M. Kurtz, M.D., TorreyPines former President and Chief Executive Officer, is not included in this table as he was an employee of TorreyPines and thus received no compensation for his service as a director. Evelyn Graham, TorreyPines Chief Executive Officer, is not included in this table as she is an employee of the TorreyPines and thus received no compensation for her service as a director.

(2) The amounts shown reflect the dollar amount recognized for financial statement reporting purposes for the year ended December 31, 2008, in accordance with FAS 123R, of stock options granted pursuant to the TorreyPines stock option plans and thus may include amounts from stock options granted in and prior to 2008.

(3) Dr. Davis has outstanding options to purchase an aggregate of 21,624 shares of common stock as of December 31, 2008. The amount shown in the table reflects compensation expense TorreyPines recorded for the year ended December 31, 2008 for the following stock option grants:

Grant Date	Total Shares of Common Stock	Exercise Price	Grant Date Fair Value
May 23, 2007	10,000	7.12	47,155
June 19, 2008	10,000	1.35	7,856

(4) Fees earned by Dr. Deleage for his TorreyPines board of directors service were paid to Alta Partners.

(5) Dr. Deleage has outstanding options to purchase an aggregate of 20,000 shares of common stock as of December 31, 2008. The amount shown in the table reflects compensation expense TorreyPines recorded for the year ended December 31, 2008 for the following stock option grants:

Grant Date	Total Shares of Common Stock	Exercise Price	Grant Date Fair Value
May 23, 2007	10,000	7.12	47,155

June 19, 2008	10,000	1.35	7,856

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(6) Dr. Ferris has outstanding options to purchase an aggregate of 45,687 shares of common stock as of December 31, 2008. The amount shown in the table reflects compensation expense TorreyPines recorded for the year ended December 31, 2008 for the following stock option grants:

Grant Date	Total Shares of Common Stock	Exercise Price	Grant Date Fair Value
May 23, 2007	10,000	7.12	47,155
June 19, 2008	10,000	1.35	7,856

(7) Dr. Fisherman has outstanding options to purchase an aggregate of 20,000 shares of common stock as of December 31, 2008. The amount shown in the table reflects compensation expense TorreyPines recorded for the year ended December 31, 2008 for the following stock option grants:

Grant Date	Total Shares of Common Stock	Exercise Price	Grant Date Fair Value
May 23, 2007	10,000	7.12	47,155
June 19, 2008	10,000	1.35	7,856

(8) Mr. Ratoff has outstanding options to purchase an aggregate of 56,662 shares of common stock as of December 31, 2007. The amount shown in the table reflects compensation expense TorreyPines recorded for the year ended December 31, 2008 for the following stock option grants:

Grant Date	Total Shares of Common Stock	Exercise Price	Grant Date Fair Value
May 23, 2007	10,000	7.12	47,155
June 19, 2008	10,000	1.35	7,856

TorreyPines Code of Business Conduct and Ethics

TorreyPines has adopted a code of ethics for its directors, officers (including its principal executive officer, principal financial officer and principal accounting officer) and employees, known as the Code of Business Conduct and Ethics. The Code of Business Conduct and Ethics is available on TorreyPines website at *http://www.tptxinc.com* under the Corporate Governance section of the Investor Center page. TorreyPines will promptly disclose on its website (i) the nature of any amendment to the policy that applies to its principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and (ii) the nature of any waiver, including an implicit waiver, from a provision of the policy that is granted to one of these specified individuals, the name of such person who is granted the waiver and the date of the waiver. Stockholders may request a free copy of the Code of Business Conduct and Ethics from TorreyPines corporate compliance officer, Paul Schneider c/o TorreyPines Therapeutics, Inc., P.O. Box 231386, Encinitas, CA 92023-1386.

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REPORT OF THE AUDIT COMMITTEE OF THE TORREYPINES BOARD OF DIRECTORS

The following is the report of the Audit Committee of the board of directors of TorreyPines with respect to TorreyPines audited financial statements for the fiscal year ended December 31, 2008, included in this joint proxy statement/prospectus. The information contained in this report shall not be deemed to be soliciting material or to be filed with the Securities and Exchange Commission, nor shall such information be incorporated by reference into any future filing under the Securities Act, or the Exchange Act, except to the extent that TorreyPines specifically incorporates it by reference in such filing.

The Audit Committee has reviewed and discussed with TorreyPines management the audited financial statements for the fiscal year ended December 31, 2008. The Audit Committee has discussed with the independent registered public accounting firm the matters required to be discussed by the Statement on Auditing Standards No. 61, as amended (AICPA, *Professional Standards*, Vol. 1. AU section 380), as adopted by the Public Company Accounting Oversight Board (PCAOB) in Rule 3200T. The Audit Committee has also received the written disclosures and the letter from the independent accountants required by the PCAOB regarding the independent accountant s communications with the Audit Committee concerning independence and has discussed with the independent accountants the independent accountant s independence. Based on the foregoing, the Audit Committee has recommended to the TorreyPines board of directors that the audited financial statements be included in this joint proxy statement/prospectus.

The Audit Committee of TorreyPines board of directors:

Dr. Peter Davis

Dr. Steven Ferris

Mr. Steven Ratoff

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Audit Committee of the TorreyPines Board of Directors

The Audit Committee has appointed Ernst & Young LLP as the Company s independent auditors to perform audit and other services for the Company and its subsidiaries for the fiscal year 2008. In connection with the audit of the 2008 financial statements, the Company entered into an engagement agreement with Ernst & Young LLP, which sets forth the terms by which Ernst & Young LLP will perform audit services for the Company. That agreement is subject to alternative dispute resolution procedures.

The following table represents aggregate fees billed to TorreyPines for the fiscal years ended December 31, 2008 and December 31, 2007 by Ernst & Young LLP.

	2008	2007
Audit Fees	$ 223,000	$ 217,000
Audit-related Fees		
Tax Fees		
All Other Fees		
Total Fees	$ 223,000	$ 217,000

All fees described above were approved by the Audit Committee.

Pre-Approval Policies and Procedures

The Audit Committee has adopted a policy and procedures for the pre-approval of audit and non-audit services rendered by TorreyPines independent registered public accounting firm, Ernst & Young LLP. The policy generally pre-approves specified services in the defined categories of audit services, audit-related services, and tax services up to specified amounts. Pre-approval may also be given as part of the Audit Committee s approval of the scope of the engagement of the independent registered public accounting firm or on an individual explicit case-by-case basis before the independent registered public accounting firm is engaged to provide each service. The pre-approval of services may be delegated to one or more of the Audit Committee s members, but the decision must be reported to the full Audit Committee at its next scheduled meeting. All of the audit-related and tax fees incurred in 2008 and 2007 were approved in accordance with TorreyPines pre-approval policies and procedures.

The Audit Committee has determined that the rendering of the services other than audit services by Ernst & Young LLP is compatible with maintaining the principal accountant s independence.

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TorreyPines Proposal No. 5: Approval of Possible Adjournment of the TorreyPines Annual Meeting

If TorreyPines fails to receive a sufficient number of votes to approve TorreyPines Proposal Nos. 1, 2 and 3 TorreyPines may propose to adjourn the TorreyPines annual meeting, for a period of not more than 30 days, for the purpose of soliciting additional proxies to approve TorreyPines Proposal Nos. 1, 2 and 3. TorreyPines currently does not intend to propose adjournment at the TorreyPines annual meeting if there are sufficient votes to approve TorreyPines Proposal Nos. 1, 2 and 3. The affirmative vote of the holders of a majority of the shares of TorreyPines common stock having voting power present in person or represented by proxy at the TorreyPines annual meeting is required to approve the adjournment of the TorreyPines annual meeting for the purpose of soliciting additional proxies to approve TorreyPines Proposal Nos. 1, 2 and 3.

THE TORREYPINES BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT TORREYPINES STOCKHOLDERS VOTE FOR TORREYPINES PROPOSAL NO. 5 TO ADJOURN THE ANNUAL MEETING, IF NECESSARY, TO SOLICIT ADDITIONAL PROXIES IF THERE ARE NOT SUFFICIENT VOTES IN FAVOR OF TORREYPINES PROPOSALS NOS. 1, 2 AND 3.

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MATTERS BEING SUBMITTED TO A VOTE OF RAPTOR STOCKHOLDERS

Raptor Proposal No. 1: Adoption of the Merger Agreement

At the Raptor annual meeting and any adjournment or postponement thereof, Raptor stockholders will be asked to consider and vote upon a proposal to adopt the merger agreement. The merger agreement provides that at the effective time of the merger, merger sub will be merged with and into Raptor. Upon the consummation of the merger, Raptor will continue as the surviving corporation and will be a wholly-owned subsidiary of TorreyPines. The terms of, reasons for, and other aspects of, the merger agreement are described in detail in the other sections of this joint proxy statement/prospectus.

Required Vote

Raptor cannot complete the merger unless the merger agreement is adopted by the affirmative vote of the holders of a majority of the shares of Raptor common stock outstanding on the record date and entitled to vote at the Raptor annual meeting.

RAPTOR S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE FOR THE ADOPTION OF THE MERGER AGREEMENT

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Raptor Proposal No. 2: Election of Directors

Information about the Nominees

Your vote is requested in favor of four directors to serve until the next Raptor annual meeting of stockholders and until their successors are elected and qualified or their earlier resignation, removal, disqualification or death. Each of the nominees is currently a director of Raptor and each of their terms expires at this 2009 Raptor annual meeting.

Raptor s bylaws provide that the number of directors shall be determined from time to time by the board of directors, but may not be less than one. Raptor s board of directors currently consists of four persons.

Each nominee for election has agreed to serve if elected, and Raptor has no reason to believe that any nominee will be unavailable to serve. If any nominee is unable or declines to serve as a director at the time of the 2009 annual meeting, the proxy holders will vote for a nominee designated by the present Raptor board to fill the vacancy. Unless otherwise instructed, the proxy holders will vote the proxies received by them **FOR** the nominees named below. The table below sets forth the names and current position with Raptor of each of the nominees. A summary of the background and experience of each of these individuals is set forth after the table.

Name	Age	Director Since	Position
Christopher M. Starr, Ph.D.(1,3)	56	May 25, 2006	Chief Executive Officer, President and Director
Raymond W. Anderson(1,2,3)	66	May 25, 2006	Director
Erich Sager(1,2,3)	51	May 25, 2006	Director
Richard L. Franklin, M.D., Ph.D.(2,3)	63	July 10, 2008	Director

(1) Member of the Nominating and Corporate Governance Committee.
(2) Member of the Audit Committee and Compensation Committee.
(3) Member of the Stock Option Committee.

Christopher M. Starr, Ph.D. is Raptor s co-founder, and has served as Chief Executive Officer, President and director since Raptor s inception in 2006. Dr. Starr has served as Chief Executive Officer of Raptor s wholly-owned subsidiary, Raptor Pharmaceutical Inc., since its inception in September 2005. Dr. Starr co-founded BioMarin in 1997 where he last served as Senior Vice President and Chief Scientific Officer prior to joining the Company in 2006. As Senior Vice President at BioMarin, Dr. Starr was responsible for managing a Scientific Operations team of 181 research, process development, manufacturing and quality personnel through the successful development of commercial manufacturing processes for its enzyme replacement products, and supervised the cGMP design, construction and licensing of BioMarin s proprietary biological manufacturing facility. From 1991 to 1998, Dr. Starr supervised research and commercial programs at BioMarin s predecessor company, Glyko, Inc., where he served as Vice President of Research and Development. Prior to his tenure at Glyko, Inc., Dr. Starr was a National Research Council Associate at the National Institutes of Health. Dr. Starr earned a B.S. from Syracuse University and a Ph.D. in Biochemistry and Molecular Biology from the State University of New York Health Science Center, in Syracuse, New York.

Raymond W. Anderson has served as a director of Raptor since May 25, 2006 and is the Chief Financial Officer and Vice President, Finance & Administration of Dow Pharmaceutical Sciences, Inc. Mr. Anderson has more than 30 years of healthcare industry experience, primarily focused in financial management within the biopharmaceutical sector. Prior to joining Dow in 2003, he was Chief Financial Officer for Transurgical, Inc., a private medical technology company. Prior to that, Mr. Anderson served as Chief Operating Officer and Chief Financial Officer at BioMarin from June 1998 to January 2002. Prior to June 1998, Mr. Anderson held similar executive-level positions with other biopharmaceutical companies including Syntex, Chiron, Glycomed and Fusion Medical Technologies. Mr. Anderson holds an M.B.A. from Harvard University, an M.S. in Administration from George Washington University, and a B.S. in Engineering from the United States Military Academy.

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Erich Sager has served as a director of Raptor since May 25, 2006. He is a founding partner of Limetree Capital SA, a Swiss-based investment banking boutique. Mr. Sager also serves as Chairman and member of the board of directors of Directors at Calltrade Carrier Services AG, a European wholesale phone operator, and has held such position since 2004. He is also a current Board member of Zecotek Medical Systems Inc. and Pulse Capital Corp. Mr. Sager served on the board of directors of BioMarin Pharmaceutical Inc. from November 1997 to March 2006 and as Chairman of LaMont Asset Management SA, a private investment management firm, from September 1996 until August 2004. Mr. Sager has held the position of Senior Vice President, Head of the Private Banking for Dresdner Bank (Switzerland) Ltd., Vice President, Private Banking, Head of the German Desk for Deutsche Bank (Switzerland) Ltd., and various positions at banks in Switzerland. Mr. Sager received a business degree from the School of Economics and Business Administration, Zurich, Switzerland.

Richard L. Franklin, M.D., Ph.D. has served as a director of Raptor since July 2008 and has served as Chairman of the board of directors of SyntheMed, Inc., a biomaterials company engaged in the development and commercialization of medical devices, since June 2003 and as a director of SyntheMed, Inc., since December 2000. Since September 2002, Dr. Franklin has been Chairman of DMS Data Systems, an internet-based information services company. From May 1996 to September 2002, Dr. Franklin had been Chief Executive of Phairson, Ltd., a medical product development company. From January 1991 to May 1996, Dr. Franklin was founder and principal of Richard Franklin & Associates and from January 1988 to December 1990, Dr. Franklin was with Boston Capital Group, both of which are consulting firms to the healthcare industry. From July 1986 to December 1987, Dr. Franklin was head of Healthcare Corporate Finance at Tucker Anthony, an investment banking firm.

Meetings and Committees of the Board of Directors

During the fiscal year ended August 31, 2008, or Fiscal Year 2008, the Raptor board of directors held a total of three board meetings and took action by unanimous written consent on twelve occasions. All of Raptor s directors have agreed to serve until the next Raptor annual meeting of stockholders and until their successors have been duly elected and qualified or their earlier resignation, removal, disqualification or death. There are no arrangements between any director or executive officer and any other person pursuant to which the director or officer is to be selected as such. There is no family relationship between the directors, executive officers or persons nominated or appointed by the Raptor board of directors to become directors or executive officers. Each director attended at least 75% of (a) the total number of meetings of the Raptor board of directors and (b) the total number of meetings of all committees of the Raptor board of directors on which he served, for Fiscal Year 2008. Raptor does not have a formal policy to require the members of its board of directors to attend its annual meeting of stockholders; however, it is anticipated that at least one of Raptors directors will attend the 2009 Annual Meeting.

The Raptor board of directors has an Audit Committee, a Compensation Committee, a Nominating and Corporate Governance Committee, and a Stock Option Committee. The function, composition, and number of meetings of each of these committees are described below.

Audit Committee

The audit committee of Raptor s board of directors, herein referred to as the Raptor Audit Committee, has been established in accordance with Section 3(a)(58)(A) of the Exchange Act of 1934, as amended, herein referred to as Exchange Act, and currently consists of the following two members: Mr. Anderson (Chairman) and Mr. Sager. The Raptor Audit Committee (a) has sole authority to appoint, replace and compensate Raptor s independent registered public accounting firm and is directly responsible for oversight of its work; (b) approves all audit fees and terms, as well as any permitted non-audit services performed by Raptor s independent registered public accounting firm; (c) meets and discusses directly with Raptor s independent registered public accounting firm its audit work and related matters and (d) oversees and performs such investigations with respect to Raptor s internal and external auditing procedures and affairs as the Raptor Audit Committee deems necessary

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or advisable and as may be required by applicable law. Raptor s Audit Committee s charter can be found in the Corporate Governance section of Raptor s website at *www.raptorpharma.com*. The Raptor Audit Committee took action 4 times, by meeting or by written consent, during Raptor s Fiscal Year 2008.

Raptor s board of directors has determined that both members of its Audit Committee are qualified as audit committee financial experts as defined by the regulations promulgated by the U.S. Securities and Exchange Commission, herein referred to as the SEC.

Compensation Committee

The compensation committee of Raptor s board of directors, herein referred to as the Compensation Committee, currently consists of the following two members: Mr. Sager (Chairman) and Mr. Anderson. The Compensation Committee annually reviews and determines salaries, bonuses and other forms of compensation paid to Raptor s executive officers and management. Both members of the Compensation Committee are non-employee directors and are considered to be independent. Raptor s Compensation Committee s charter can be found in the Corporate Governance section of Raptor s website at *www.raptorpharma.com*. The Raptor Compensation Committee took action 1 time, by meeting or by written consent, during Raptor s Fiscal Year 2008.

Nominating and Corporate Governance Committee

The Nominating and Corporate Governance Committee of Raptor s board of directors, herein referred to as the Nominating Committee, currently consists of the full board of directors: Mr. Sager, Mr. Anderson, Dr. Franklin and Dr. Starr. The Nominating Committee has authority to review the qualifications of, interview and nominate candidates for election to Raptor s board of directors. Raptor s Nominating Committee s charter can be found in the Corporate Governance section of Raptor s website at www.raptorpharma.com. The primary functions of the Nominating Committee are to:

- recruit, review and nominate candidates for election to Raptor s board of directors;
- monitor and make recommendations regarding committee functions, contributions and composition; and
- develop the criteria and qualifications for membership on Raptor s board of directors.

The Nominating Committee develops the credentials and characteristics required of Raptor s board of directors and committee nominees in light of the composition of its board of directors and committees, its business, operations, applicable legal and listing requirements, and other factors they consider relevant. The Nominating Committee may identify other candidates, if necessary, through recommendations from its directors, management, employees, the stockholder nomination process, or outside consultants. The Nominating Committee will review candidates in the same manner regardless of the source of the recommendation. For membership on Raptor s board of directors, the Nominating Committee takes into consideration applicable laws and regulations, diversity, age, skills, experience, integrity, ability to make independent analytical inquiries, understanding of Raptor s business and business environment, willingness to devote adequate time and effort to Raptor s board of directors responsibilities and other relevant factors, including experience in the biotechnology and pharmaceutical industries. The Raptor Nominating Committee took action 1 time, by meeting or by written consent, during Raptor s Fiscal Year 2008.

Stock Option Committee

The stock option committee of Raptor s board of directors, herein referred to as the Stock Option Committee, currently consists of its full board of directors: Mr. Sager, Mr. Anderson, Dr. Franklin and Dr. Starr. Raptor s Stock Option Committee is responsible for the administration of its 2006 Equity Incentive Plan, including the approval of grants under such plan to Raptor s employees, consultants and directors. The Raptor Stock Option Committee took action 6 times, by meeting or by written consent, during Raptor s Fiscal Year 2008.

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Director Compensation

Raptor generally compensates non-employee directors for their service as a member of Raptor s board of directors by granting to each such director options to purchase shares of its common stock upon joining Raptor s board of directors. Upon joining Raptor s board of directors on May 26, 2006, Mr. Anderson and Mr. Sager were granted stock options to purchase 500,000 shares and 1,000,000 shares, respectively, of Raptor s common stock at an exercise price of $0.60 per share. Such stock options vested 6/36ths on the six month anniversary of such grant and 1/36th per month thereafter and expire ten years from grant date. Upon joining Raptor s board of directors on July 10, 2008, Dr. Franklin was granted stock options to purchase 150,000 shares of Raptor s common stock at an exercise price of $0.52 per share, which vests 6/48ths on the six-month anniversary of such grant and 1/48th per month thereafter and expire ten years from grant date. In addition, at the discretion of the Stock Option Committee, each non-employee director may receive options to purchase 100,000 shares of Raptor s common stock for each subsequent year of service on its board of directors. Such options are generally granted at fair market value one day preceding the grant date, vest 6/48ths on the six month anniversary of the grant date and 1/48th per month thereafter and expire ten years from grant date. Raptor made these grants to Mr. Anderson and Mr. Sager with respect to Raptor s fiscal year ended August 31, 2007, herein referred to as Fiscal Year 2007, on June 14, 2007 at a per share exercise price of $0.60. No such annual grants were approved for Raptor s fiscal year ended August 31, 2008, herein referred to as Fiscal Year 2008. Raptor also reimburses its directors for out-of-pocket expenses incurred in connection with their service as directors.

The following table sets forth the total compensation paid by Raptor to each of its non-employee directors during Fiscal Year 2008. Dr. Starr, who is an employee of Raptor, did not receive additional compensation for his service as a director.

Name*	Fees Earned or Paid in Cash ($)*	Option Awards ($)(1)*	Total*
Raymond W. Anderson(2)	22,500	89,077	111,577
Erich Sager(3)	42,500	167,013	209,513
Richard L. Franklin, M.D. Ph.D.(4)	0	2,142	2,142

* On July 10, 2008, Raptor s board of directors approved the following increases in annual cash compensation for its board members: Mr. Anderson s increased from $20,000 to $40,000 and Mr. Sager s increased from $40,000 to $60,000. On the same date, Raptor s board of directors appointed Dr. Franklin to its board of directors. Dr. Franklin receives cash compensation of $40,000 per year, effective October 10, 2008, for his service as a member of Raptor s board of directors.

(1) Amounts shown do not reflect compensation actually received by a director, but reflect the dollar amount compensation cost recognized by Raptor for financial statement reporting purposes (disregarding an estimate of forfeitures related to service-based vesting conditions) for Fiscal Year 2008, in accordance with Statement of Financial Accounting Standards No. 123 (revised 2004), *Share-Based Payment* , herein referred to as SFAS 123R, and thus may include amounts from awards granted in and prior to Fiscal Year 2008. The assumptions underlying the calculations pursuant to SFAS 123R are set forth under Note 7 of the Notes to Consolidated Financial Statements, beginning on page F-32 of Raptor s financial statements for Fiscal Year 2008 located elsewhere in this joint proxy statement/prospectus.

(2) Mr. Anderson had 600,000 options outstanding as of August 31, 2008, of which 404,166 were exercisable. As of June 30, 2009, 549,999 were exercisable.

(3) Mr. Sager had 1,100,000 options outstanding as of August 31, 2008, of which 779,167 were exercisable. As of June 30, 2009, 1,049,999 were exercisable.

(4) Dr. Franklin had 150,000 options outstanding as of August 31, 2008, of which none were exercisable. As of June 30, 2009, 34,374 were exercisable.

Mr. Anderson and Dr. Franklin will each receive annual retainers of $40,000 and Mr. Sager will receive an annual retainer of $60,000, as non-employee directors for with respect to Raptor s fiscal year ending August 31, 2009.

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Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires Raptor s directors, executive officers and 10% stockholders of a registered class of equity securities to file reports of ownership and reports of changes in ownership of Raptor s common stock and other equity securities with the SEC. Directors, executive officers and 10% stockholders of a registered class of equity securities are required to furnish Raptor with copies of all Section 16(a) forms they file. Based on a review of the copies of such reports furnished to Raptor, except as discussed below, Raptor believes that during Fiscal Year 2008, its directors, executive officers and 10% stockholders of a registered class of equity securities timely filed all Section 16(a) reports applicable to them. On December 12, 2007 Mr. Daley, President of Raptor s clinical subsidiary, filed a Form 3 which should have been filed by September 20, 2007 and filed two Form 4s which one should have been filed by September 12, 2007 and the other should have been filed by October 17, 2007. The reason for the delays in Mr. Daley s filings was that Raptor had not determined whether Mr. Daley was a Section 16 filer until December 2007, which was three months after his employment commenced. Since December 2007, all of Mr. Daley s Section 16 filings have been timely.

Code of Ethics

Raptor has adopted a Code of Ethics, which is applicable to its directors and employees, including its principal executive officer, principal financial officer, principal accounting officer or controller or persons performing similar functions. The Code of Ethics is available in the Corporate Governance section of Raptor s website at www.raptorpharma.com. Raptor will disclose on its website any amendment to the Code of Ethics, as well as any waivers of the Code of Ethics, that are required to be disclosed by the rules of the SEC.

Certain Relationships, Related Party Transactions, and Director Independence

Raptor s Audit Committee is required to review on an on-going basis, and pre-approve all related party transactions before they are entered into including those transaction that are required to be disclosed pursuant to SEC regulations. If such transaction relates to compensation, it must be approved by Raptor s Compensation Committee as well. All related party transactions must also be approved by the disinterested members of Raptor s board of directors. It is the responsibility of Raptor s employees and directors to disclose any significant financial interest in a transaction between Raptor and a third party, including an indirect interest. All related party transactions shall be disclosed in Raptor s filings with the SEC as required under SEC rules. The Raptor board of directors has determined that each of Mr. Anderson and Mr. Sager is independent under the rules of the SEC.

Required Vote

The affirmative vote of a plurality of the voting power of the shares present in person or represented by proxy at the Raptor annual meeting is required for the election of the four nominees. This means that each of the four nominees will be elected if they receive more affirmative votes than any other person.

RAPTOR S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT A VOTE FOR EACH OF THE NOMINEES FOR DIRECTOR.

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Raptor Proposal No. 3: Ratification of Independent Registered Public Accounting Firm

Raptor s Audit Committee has appointed the firm of Burr, Pilger & Mayer, LLP, an independent registered public accounting firm, to serve as Raptor s independent registered public accounting firm for Fiscal Year 2009 and Raptor s board of directors recommends the stockholders vote for ratification of that appointment. Burr, Pilger & Mayer, LLP served in this capacity during Fiscal Year 2008 and has been Raptor s independent auditor since September 8, 2005. A representative of Burr, Pilger & Mayer, LLP is expected to be present at the 2009 Annual Meeting, with the opportunity to make a statement should the representative desire to do so, and be available to respond to appropriate questions.

Raptor s Audit Committee appoints Raptor s independent registered public accounting firm annually and its board of directors subsequently requests ratification of such appointment by the stockholders at the Raptor s annual meeting. Raptor s Audit Committee reviews and approves in advance the scope of the audit, the types of non-audit services that Raptor will need and the estimated fees for the following fiscal year. The Audit Committee also reviews and approves any non-audit services provided by Raptor s independent registered public accounting firm to ensure that any such services will not impair the independence of the independent registered public accounting firm. To the extent that Raptor s management believes that a new service or the expansion of a current service provided by Raptor s independent registered public accounting firm is necessary, such new or expanded service is presented to Raptor s Audit Committee or one of its members for review and approval.

Before making its selection, Raptor s Audit Committee carefully considered Burr, Pilger & Mayer, LLP s qualifications as Raptor s independent registered public accounting firm, which included a review of Burr, Pilger & Mayer, LLP s performance in prior years, as well as its reputation for integrity and competence in the fields of accounting and auditing. Raptor s Audit Committee expressed its satisfaction with Burr, Pilger & Mayer, LLP in these respects.

Stockholder ratification of Raptor s Audit Committee s selection of Burr, Pilger & Mayer, LLP as the Raptor s independent registered public accounting firm is not required by law, Raptor s bylaws or other legal requirement. However, Raptor s board of directors is submitting Raptor s Audit Committee s selection of Burr, Pilger & Mayer, LLP to Raptor s stockholders for ratification as a matter of good corporate governance. If Raptor s stockholders fail to ratify the selection, Raptor s Audit Committee will reconsider whether or not to retain that firm. Even if the selection is ratified, Raptor s Audit Committee in its discretion may direct the appointment of different independent registered public accounting firm at any time during the year if it determines that such change would be in the best interests of Raptor and its stockholders.

The following table presents the aggregate fees billed for professional services rendered by Burr, Pilger & Mayer LLP in the period from September 8, 2005 (Raptor s inception) to August 31, 2006 and during Fiscal Years 2007 and 2008. Other than as set forth below, no professional services were rendered nor were any fees billed by Burr, Pilger & Mayer, LLP during the period from September 8, 2005 (inception) to August 31, 2006 or during Fiscal Years 2007 and 2008.

	Fiscal Year Ended August 31, 2008	Fiscal Year Ended August 31, 2007
Audit Fees	$ 96,720	$ 75,843
Audit-Related Fees	41,798	5,883
Tax Fees(1)	4,980	18,540
All Other Fees	0	0
Total Fees	$ 143,498	$ 100,266

(1) Includes fees and out-of-pocket expenses for tax compliance, tax planning and advice.

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All work performed by the Burr, Pilger & Mayer, LLP as described above has been pre-approved by Raptor s Audit Committee prior to Burr, Pilger & Mayer LLP s engagement to perform such services. Raptor s Audit Committee pre-approves on an annual basis the audit, audit-related, tax and other permissible non-audit services to be rendered by Burr, Pilger & Mayer LLP based on historical information and anticipated requirements for the following fiscal year. To the extent that Raptor s management believes that a new service or the expansion of a current service provided by the Burr, Pilger & Mayer LLP is necessary, such new or expanded service is presented to Raptor s Audit Committee or one of its members for review and approval.

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REPORT OF THE AUDIT COMMITTEE OF THE RAPTOR BOARD OF DIRECTORS

The members of Raptor s Audit Committee have been appointed by Raptor s board of directors. Raptor s Audit Committee is governed by its charter, which has been approved and adopted by Raptor s board of directors and which will be reviewed and reassessed annually by Raptor s Audit Committee. Raptor s Audit Committee has determined that it has fulfilled its responsibilities under its charter for Fiscal Year 2008. Raptor s Audit Committee is comprised of two independent directors, Mr. Anderson and Mr. Sager.

The following Audit Committee Report does not constitute soliciting material and shall not be deemed filed or incorporated by reference into any other Raptor filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent Raptor specifically incorporates this Audit Committee Report by reference therein.

Raptor s Audit Committee assists Raptor s board of directors in fulfilling its oversight responsibilities by reviewing (i) the financial reports and other financial information provided by Raptor to any governmental body or to the public, (ii) Raptor s systems of internal controls regarding finance, accounting, legal compliance and ethics and (iii) Raptor s auditing, accounting and financial reporting processes. It is not the responsibility of Raptor s Audit Committee to determine that Raptor s financial statements are complete and accurate, are presented in accordance with accounting principles generally accepted in the United States or present fairly the results of operations of Raptor for the periods presented or that Raptor maintains appropriate internal controls. Nor is it the duty of Raptor s Audit Committee to determine that the audit of Raptor s financial statements have been carried out in accordance with generally accepted auditing standards or that Raptor s independent registered public accounting firm are independent.

In this context, Raptor s Audit Committee hereby reports as follows:

We have reviewed and discussed the audited financial statements as of and for the year ended August 31, 2008 with management and the independent registered public accounting firm.

The Audit Committee discussed with the independent registered public accounting firm the matters required to be discussed by Statement on Auditing Standards No. 61, as amended (Communication with Audit Committees).

The Audit Committee received from its independent registered public accounting firm the written disclosures and letter required by the Public Company Accounting Oversight Board regarding the Independent accountant s communications with the Audit Committee concerning independence, and the Audit Committee discussed with the independent registered public accounting firm the independence of the independent registered public accounting firm.

Based upon the review and discussion referred to in paragraphs (1) through (3) above, we recommended to Raptor s board of directors, and Raptor s board of directors has approved, that the audited financial statements be included in Raptor s Annual Report on Form 10-K for the fiscal year ended August 31, 2008, for filing with the SEC. Raptor s Audit Committee also has recommended, and Raptor s board of directors also has approved, subject to stockholder ratification, the appointment of Burr, Pilger & Mayer, LLP as Raptor s independent registered public accounting firm for Raptor s fiscal year ending August 31, 2009.

Audit Committee

Raymond W. Anderson (Chair)

Erich Sager

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Required Vote

Ratification of the appointment of Burr, Pilger & Mayer, LLP as Raptor s independent registered public accounting firm for the fiscal year ending August 31, 2009 requires the affirmative vote of the holders of a majority of the shares of Raptor common stock having voting power present in person or represented by proxy at the Raptor annual meeting.

RAPTOR S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT A VOTE FOR THE RATIFICATION OF BURR, PILGER & MAYER LLP AS RAPTOR S INDEPENDENT PUBLIC ACCOUNTING FIRM FOR THE YEAR ENDING AUGUST 31, 2009.

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Raptor Proposal No. 4: Adjournment of the Raptor Annual Meeting, if Necessary, to Solicit Additional Proxies if There are Not Sufficient Votes in Favor of the Adoption of the Merger Agreement

At the Raptor annual meeting and any adjournment or postponement thereof, Raptor stockholders will be asked to consider and vote upon a proposal to adjourn the Raptor annual meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of the adoption of the merger agreement.

Required Vote

The adjournment of the Raptor annual meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of the adoption of the merger agreement requires the affirmative vote of the holders of a majority of the shares of Raptor common stock having voting power present in person or represented by proxy at the Raptor annual meeting.

RAPTOR S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE FOR THE ADJOURNMENT OF THE RAPTOR ANNUAL MEETING, IF NECESSARY, TO SOLICIT ADDITIONAL PROXIES IF THERE ARE NOT SUFFICIENT VOTES IN FAVOR OF THE ADOPTION OF THE MERGER AGREEMENT.

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TORREYPINES BUSINESS

Proposed Merger with Raptor Pharmaceuticals Corp.

TorreyPines has effectively ceased all business operations related to the development of its product candidates to focus its efforts on the completion of the merger with Raptor and a possible strategic transaction related to its product candidates to the extent permitted under the merger agreement. Following the completion of the merger, the current management and board of directors of TorreyPines will have no control over the ultimate decisions regarding the combined company s operations and business, including whether the combined company will elect to dispose of TorreyPines product candidates in a strategic transaction, reinitiate their development, abandon them entirely or any combination of the foregoing. Most of the TorreyPines business described below relates to TorreyPines current product candidates and related matters, and will only be relevant if the combined company attempts to continue to develop TorreyPines product candidates, which it may never do. Prior to executing the merger agreement with Raptor, TorreyPines board of directors approved a Plan of Liquidation and Dissolution and called a stockholder meeting to vote on that plan, which meeting was cancelled as a condition to the execution of the merger agreement. If TorreyPines is unable to complete the merger or another financing or strategic transaction, it does not expect to be able to continue as a going concern and may be required to liquidate in a voluntary dissolution under Delaware law or to seek protection under the provisions of the U.S. Bankruptcy Code.

Most, if not all, of the combined company s business immediately following the merger will be the business conducted by Raptor immediately prior to the merger, and most if not all of the descriptions of TorreyPines business in this joint proxy statement/prospectus, as well as the trends and risks that apply to TorreyPines business, will change from those described herein based on TorreyPines business to date and otherwise may no longer be applicable to the combined company. In addition, because of the pending merger with Raptor and the other strategic transactions TorreyPines may pursue with respect to its product candidates, TorreyPines believes its historical operating results are not indicative of future results. TorreyPines encourages you to review the section titled, Raptor s Business in this joint proxy statement/prospectus for a description of the substantial portion of the expected business and operations of the combined company if the merger is approved and completed.

Overview

TorreyPines is a biopharmaceutical company that has been committed to providing patients with better alternatives to existing therapies through the development and commercialization of small molecule compounds. TorreyPines goal is to develop versatile product candidates each capable of treating a number of diseases and disorders characterized by moderate to severe pain, including acute migraine, migraine prophylaxis and chronic pain, such as neuropathic pain. Due to TorreyPines current financial condition, it has been exploring strategic alternatives, including the proposed merger with Raptor, in order to continue the development of TorreyPines two ionotropic glutamate receptor antagonist product candidates. If TorreyPines is unable to complete the merger with Raptor, TorreyPines may be unable to continue as a going concern and may be forced to cease operations, seek protection under the provisions of the U.S. Bankruptcy Code or liquidate and dissolve.

TorreyPines two ionotropic glutamate receptor antagonists, NGX426 and tezampanel, are clinical stage product candidates. NGX426 and tezampanel competitively block the binding of glutamate at the glutamate receptors, specifically the AMPA and kainate receptor subtypes. While normal glutamate levels are essential, excess glutamate has been implicated in a number of diseases and disorders. NGX426 and tezampanel are the first glutamate receptor antagonists with this combined binding activity to be tested in humans.

NGX426 is an orally bioavailable prodrug of tezampanel that is ready to enter Phase II testing. In clinical trials, NGX426 has been shown to rapidly convert to tezampanel, the active moiety. In December 2008 TorreyPines announced that a single dose of NGX426 administered to healthy male adults demonstrated a

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statistically significant reduction in spontaneous pain, hyperalgesia (abnormally increased pain state) and allodynia (pain resulting from normally non-painful stimuli to the skin) compared to placebo following injection under the skin of capsaicin in an experimental model of pain. TorreyPines also completed two additional Phase I trials in healthy volunteers to evaluate the safety and tolerability of NGX426 given in either a single dose or given once daily for five consecutive days.

Tezampanel, the active parent compound of NGX426, has been shown to be safe and well tolerated in more than 500 healthy subjects and patients in single and multiple doses. Three Phase I and six Phase II clinical trials have been completed and all six Phase II trials demonstrated the analgesic effect of tezampanel across a variety of pain models. In the largest of the Phase II trials, a single dose of tezampanel given by injection was statistically significant compared to placebo in treating acute migraine headache in 306 migraineurs. TorreyPines held a successful end of Phase II meeting with the U.S. Food and Drug Administration, or FDA, on September 29, 2008. Following a successful end of Phase II meeting, the U.S. Food and Drug Administration agreed that a Phase III program for tezampanel in acute migraine may be initiated.

These clinical data suggest that both NGX426 and tezampanel have potential therapeutic utility in treating moderate to severe acute pain, including acute migraine, migraine prophylaxis and chronic pain, such as neuropathic pain. In order to pursue further clinical development of NGX426 and tezampanel, TorreyPines will need to secure project financing, equity financing, or a development partner.

NGX426 and tezampanel Ionotropic Glutamate Receptor Antagonists, AMPA and Kainate Subtype

TorreyPines in-licensed NGX426 and tezampanel from Eli Lilly & Company, or Eli Lilly, in 2003. Based on their mechanism of action as well as preclinical and clinical data, TorreyPines believes these first-in-class product candidates have the potential to be effective across numerous indications in a wide range of therapeutic areas.

Mechanism of Action

NGX426 and tezampanel are ionotropic glutamate receptor antagonists. These product candidates act as competitive antagonists of the AMPA and kainate subtype of ionotropic glutamate receptors. Glutamate receptors mediate the functioning of glutamate, an important excitatory neurotransmitter. While normal glutamate levels are essential, excess glutamate levels, either through injury or disease, can have a range of pathological effects. By acting at both the AMPA and kainate receptor site to competitively block the binding of glutamate, both NGX426 and tezampanel have the potential to treat a number of diseases and disorders. These include the acute pain associated with migraine, chronic pain, such as neuropathic pain, and a condition known as central sensitization, a persistent state of hypersensitivity to pain that is a core component of many pain conditions.

Migraine

Migraine is a chronic, intermittent pain condition characterized by acute pain episodes often accompanied by central sensitization. The 2005 American Migraine Prevalence and Prevention study, sponsored by the National Headache Foundation, estimated that there are approximately 30 million people who suffer from migraines in the United States, with fewer than half that number seeking treatment. This study also confirmed that a large number of migraine sufferers are not getting adequate treatment or the relief they need, despite the number of products available to treat migraines. It has been more than a decade since the FDA has approved a migraine treatment with a new mechanism of action.

The medications most commonly used to treat acute migraine are triptans and ergotamines. These drugs constrict or narrow the blood vessels in the brain, heart and periphery. When the blood vessels in the brain are constricted, the blood flow is decreased thus relieving the throbbing pain associated with migraine.

An emerging theory is that the brain itself, not just the blood vessels, may cause or contribute to the migraine. Published data show that during a migraine, increased levels of glutamate activate AMPA and kainate receptors, resulting in the transmission of pain and, in many patients, the development of central sensitization. Tezampanel has been shown in preclinical studies to block the binding of glutamate to these receptors. In doing so, tezampanel relieves the migraine pain and may prevent or lessen the development of central sensitization without directly constricting the blood vessels. As a result, tezampanel, as well as its prodrug NGX426, may offer a safety advantage over drugs such as the triptans and ergotamines for patients with cardiovascular risk factors.

Migraine is often accompanied by central sensitization, which is characterized by allodynia and hyperalgesia. Allodynia is a painful response to a normally non-painful stimulus such as touch, sound, temperature, or light. Hyperalgesia is an exaggerated sensitivity to a normally painful stimulus. In contrast, preclinical data show that tezampanel s analgesic activity is especially pronounced in the presence of central sensitization. Because of its positive effects in treating central sensitization, tezampanel as well as NGX426 may have a role to play not only in treating the acute migraine pain, but also in preventing migraines by addressing the underlying cause.

Neuropathic Pain

Neuropathic pain is a complex, chronic pain condition in which the peripheral or central nervous system itself is damaged, dysfunctional or injured. The malfunctioning nerves become the cause of the pain, sending incorrect signals to pain centers. Because it is often difficult to recognize and determine the cause of the neuropathic pain, it is often under-treated. Some common causes of neuropathic pain include spinal or back injury or surgery, diabetes, HIV infection and herpes. A hallmark of neuropathic pain is central sensitization. The signs and symptoms of central sensitization in patients with neuropathic pain are similar to those in patients with migraine, namely allodynia and hyperalgesia. In a Phase II trial, tezampanel, given intravenously, was shown to relieve neuropathic pain and reduce the signs and symptoms of central sensitization.

Clinical Development Overview NGX426

The results of TorreyPines first Phase I single dose clinical trial of NGX426, given orally, demonstrated that NGX426 was well-tolerated and rapidly converted to tezampanel at 10 mg, 20 mg, and 30 mg. During 2008, TorreyPines completed a Phase I clinical trial that was designed to identify the maximum tolerated single dose of NGX426 when given to healthy adults. Subjects were dosed up to 210 mg, the maximum dose allowable under the protocol. All doses were safe and well tolerated therefore the maximum tolerated dose was not reached. In December 2008, TorreyPines announced that oral administration of a single dose of NGX426 to healthy male adults demonstrated a statistically significant reduction in spontaneous pain, hyperalgesia (abnormally increased pain state) and allodynia (pain resulting from normally non-painful stimuli to the skin) compared to placebo following injections under the skin of capsaicin in a human experimental model of induced pain, hyperalgesia and allodynia. Using a three-period cross-over design, subjects received two intradermal injections of capsaicin at 30 minutes and 120 minutes after administration of a single, oral dose of 90 mg or 150 mg of NGX426, or placebo. In February 2009, TorreyPines announced that oral administration of NGX426 was safe and well-tolerated in healthy male and female subjects when dosed once daily for five consecutive days. TorreyPines will need to secure additional funding in order to pursue the Phase II clinical development of NGX426.

Clinical Development Overview Tezampanel

Using intravenous administration of tezampanel, proof of concept clinical testing has been successfully completed in migraine, low back pain, neuropathic pain via a capsaicin model, post-operative dental pain and pain from spinal cord trauma. In order to evaluate tezampanel given by injection, TorreyPines completed a Phase I clinical trial and determined that a single dose of tezampanel given by injection was well tolerated at all doses up to and including 100 mg. To date tezampanel has been shown to be safe and well-tolerated in three Phase I and six Phase II clinical trials involving more than 450 patients and healthy adults.

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In October 2007, TorreyPines released results of a Phase IIb clinical trial of tezampanel, given by injection, in patients who suffered a single acute migraine attack. This clinical trial demonstrated that the 40 mg dose of tezampanel was statistically significant compared to placebo in improvement of headache pain response, the primary endpoint, at two hours post-dose. There were no serious or medically important adverse events reported.

In February 2008, TorreyPines released results of a multiple dose clinical trial of tezampanel, given by injection. The Phase I double-blind, placebo-controlled trial enrolled 30 normal healthy male and female adults. The data from this trial show that tezampanel given by injection once-daily for four consecutive days at doses of 40 mg, 70 mg and 100 mg was safe and well-tolerated. There were no discontinuations from the study and reported adverse events were generally mild and transient. These Phase I results support TorreyPines continued development of tezampanel across a variety of chronic conditions.

In September 2008, TorreyPines held a successful end of Phase II meeting with the FDA regarding the scope of a Phase III program for tezampanel in acute migraine. While the FDA agreed with TorreyPines planned Phase III program for tezampanel in acute migraine, given financial constraints TorreyPines will need to secure additional funding in order to pursue the Phase III clinical development of tezampanel for the potential treatment of acute migraine.

Strategic Alliance, License and Other Commercial Agreements

Drug development is long and costly and TorreyPines recognizes that it will need strategic partners to maximize the potential of one or more of its product candidates. TorreyPines goal is to strike a balance between advancing product development at its expense and partnering with third parties at key points along the development path. Overall, TorreyPines strategy is to reach key milestones with its product candidates before entering into strategic alliances. TorreyPines believes that, in this way, it can retain significant commercial value in the product candidates while obtaining strategic and financial assistance to advance its programs. TorreyPines speaks to prospective partners on a regular basis, understanding that beneficial strategic alliances are the result of developing on-going relationships. TorreyPines will need to secure additional funding or a development partner to enable it to pursue the commercial opportunities it has identified for NGX426 and tezampanel.

Since inception, substantially all of TorreyPines revenue has been derived from TorreyPines agreements with Eisai Co., Ltd. These agreements expired by their terms in 2008.

Eli Lilly

In 2003, TorreyPines entered into a development and licensing agreement with Eli Lilly to obtain an exclusive license to Eli Lilly s ionotropic glutamate receptor antagonist assets NGX426 and tezampanel. TorreyPines paid Eli Lilly an up-front license fee of $6.0 million under the agreement. If specified development, regulatory and commercial milestones are achieved, TorreyPines is obligated to make milestone payments to Eli Lilly. TorreyPines is also obligated to pay royalties to Eli Lilly on any sales of NGX426 and tezampanel. TorreyPines is required to use commercially reasonable efforts to develop and commercialize the product candidates subject to the agreement, including use of commercially reasonable efforts to achieve specified development events within specified timeframes.

The term of the development and licensing agreement will continue until all royalty payment obligations have expired on a country-by-country basis, unless the agreement is earlier terminated. Under certain termination circumstances, all of the rights granted to TorreyPines under the agreement will revert to Eli Lilly.

University of Iowa Research Foundation

TorreyPines has a license agreement with the University of Iowa Research Foundation, or UIRF, pursuant to which UIRF has granted TorreyPines an exclusive United States license to certain patents and patent applications relating to spinal administration of tezampanel. Under the terms of the agreement TorreyPines has the right to sublicense its license from UIRF.

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If TorreyPines achieves specified regulatory and patent-related milestones, it will be obligated to make milestone payments to UIRF which may total up to $0.4 million. TorreyPines must also pay UIRF an annual license maintenance fee which may be reduced by the amount of other payments made by TorreyPines to UIRF under the agreement. TorreyPines is also obligated to pay royalties to UIRF on any sales of tezampanel using the licensed patent rights and to pay UIRF a percentage of specified payments TorreyPines receives upon sublicensing rights to the licensed patent rights. TorreyPines is required to use commercially reasonable efforts to commercialize products using the licensed patent rights.

This agreement will continue until the expiration of the last-to-expire of the licensed patents and patent applications unless earlier terminated.

Competition

TorreyPines and its strategic alliance partners face intense competition. TorreyPines is in competition with fully integrated pharmaceutical companies, smaller companies that may be collaborating with larger pharmaceutical companies, academic institutions, government agencies and other public and private research organizations. Many of these competitors have prescription products for acute and chronic pain, such as migraine and neuropathic pain, and xerostomia already approved by the FDA or they are pursuing the same or similar approaches to those which constitute TorreyPines development programs and operate larger development programs in these fields than TorreyPines. TorreyPines believes that competition for the products that it may develop will come from companies that are conducting research, engaging in clinical development, or currently marketing and selling therapeutics to treat these conditions. These competitors include the pharmaceutical industry s leading companies.

For example, triptans are the most commonly prescribed drugs for the treatment of moderate to severe migraine. There are seven triptans approved for use and Imitrex®, marketed by GlaxoSmithKline, dominates the market. Other triptans are: Zomig®, Maxalt® , Amerge®, Frova , Axert®, and Relpax®. According to PhRMA s 2008 report, *Medicines in Development for Neurologic Disorders,* there are more than 30 companies seeking to develop compounds to treat migraine and pain disorders or to obtain additional indications to broaden the use of currently approved pain relieving prescription medications. This list includes most of the large pharmaceutical companies such as Abbott Laboratories, AstraZeneca, Eisai, Elan, Eli Lilly, GlaxoSmithKline, Merck, Pfizer, and Wyeth Pharmaceuticals as well as small and mid-sized biotechnology companies.

In the neuropathic pain market, TorreyPines would compete with companies such as Pfizer, marketing Neurontin and Lyrica®, and Eli Lilly, marketing Cymbalta® in addition to opiods approved for treating neuropathic pain, off-label uses of products to treat neuropathic pain and generic products. Given the size of the neuropathic pain market, approximately $3.5 billion in 2006 and expected to double by 2016, it is likely that most of the large pharmaceutical companies as well as many biotechnology companies will look to develop compounds to treat neuropathic pain.

Many of TorreyPines competitors, either alone or together with their collaborative partners, have substantially greater financial resources than TorreyPines, as well as greater experience in developing pharmaceutical products, undertaking preclinical testing and human clinical trials, obtaining FDA and other regulatory approvals of products, formulating and manufacturing pharmaceutical products, and launching, marketing, distributing and selling products.

Proprietary Rights

Patent Applications

TorreyPines policy is to pursue patents, both those generated internally and those licensed from third parties, pursue trademarks, maintain trade secrets and use other means to protect TorreyPines technology, inventions and improvements that are commercially important to the development of TorreyPines business.

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If TorreyPines is able to overcome its current financial issues and continue as a going concern, TorreyPines success will depend significantly on its ability to:

- obtain and maintain patent and other proprietary protection for the technology, inventions and improvements it considers important to its business;
- defend its patents;
- preserve the confidentiality of its trade secrets; and
- operate without infringing the patents and proprietary rights of third parties.

As of August 10, 2009, TorreyPines controlled approximately 64 patents and patent applications pertaining to tezampanel and/or NGX426 (including 14 issued U.S. patents). Issued patents, and patents that may issue from these pending applications, would expire between 2013 and 2028. In accordance with the Hatch-Waxman Act in the United States, and corresponding legislation in certain foreign countries, patents covering TorreyPines drug products may be eligible for up to five years of patent term restoration.

Trademarks, Trade Secrets and Other Proprietary Information

TorreyPines owns the TORREYPINES THERAPEUTICS & Design trademark, which is registered in the U.S. and in Japan, Canada, and the European Community. TorreyPines also owns its Tree Logo trademark, which is registered in the U.S.

To protect TorreyPines trade secrets and proprietary information, TorreyPines requires its employees, scientific advisors, consultants and collaborators to execute confidentiality agreements when they begin to work with TorreyPines. Additionally, TorreyPines requires its employees, scientific advisors and consultants to assign to TorreyPines any inventions developed as a result of their relationship with TorreyPines. While these agreements provide a certain degree of protection of TorreyPines proprietary information and internally developed technologies, they do not provide protection in the event of unauthorized disclosure of such information.

Manufacturing and Supply

TorreyPines currently has no manufacturing capabilities and relies, or will rely, on third parties for the preclinical or clinical supplies of each of its product candidates. TorreyPines does not currently have relationships for redundant supply or a second source for any of its product candidates. However, TorreyPines believes that there are alternate sources of supply that can satisfy its preclinical and clinical trial requirements without significant delay or material additional costs.

Because TorreyPines product candidates are all in an early stage of development, there is no commercial process developed for the synthesis of active pharmaceutical ingredient, or API, for any of its product candidates. In addition, TorreyPines has not identified final market formulations and delivery systems for any of its product candidates. TorreyPines must rely upon third party vendors to achieve a final commercial process for API and it must obtain FDA approval for both the API process and the drug product. TorreyPines reliance on third party vendors may result in delays, significant and unanticipated costs, or yield lower than anticipated amounts of product.

Commercial quantities of any products TorreyPines seeks to develop will have to be manufactured in facilities and by processes that comply with the FDA and other regulations for current good manufacturing practices, or cGMPs. TorreyPines plans to rely on third parties to manufacture commercial quantities of any products it may successfully develop. TorreyPines believes that there are several manufacturing sources available to it on commercially reasonable terms to meet its clinical requirements as well as any commercial production requirements.

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Sales and Marketing

TorreyPines currently has no marketing, sales or distribution capabilities. If and when NGX426 or tezampanel obtain regulatory approval, or in situations or markets where a more favorable return may be realized through licensing commercial rights to a third party, TorreyPines may license a portion or all of its commercial rights in a territory to a third party in exchange for one or more of the following: up-front payments, research funding, development funding, milestone payments and royalties on product sales.

Government Regulation

FDA Requirements for New Drug Compounds

The research, testing, manufacture and marketing of pharmaceutical products are extensively regulated by numerous governmental authorities in the United States and other countries. In the United States, pharmaceutical products are subject to rigorous regulation by the FDA. The Federal Food, Drug, and Cosmetic Act, and other federal and state statutes and regulations, govern, among other things, the research, development, testing, manufacture, storage, recordkeeping, labeling, promotion and marketing and distribution of pharmaceutical products. Failure to comply with applicable regulatory requirements may subject a company to a variety of administrative or judicial sanctions, including:

- suspension of review or refusal to approve pending applications;
- product seizures;
- recalls;
- withdrawal of product approvals;
- restrictions on, or prohibitions against, marketing its products;
- fines;
- restrictions on importation of its products;
- injunctions;
- debarment; and
- civil and criminal penalties.

The steps ordinarily required before a new pharmaceutical product may be marketed in the United States include:

- preclinical laboratory tests, animal studies and formulation development according to good laboratory practices, or GLPs;

submission to the FDA of an investigational new drug application, or IND, which must become effective before clinical, or human, testing may commence;

adequate and well-controlled clinical trials to establish the safety and efficacy of the product for each indication for which FDA approval is sought according to good clinical practices;

submission to the FDA of a new drug application, or NDA;

satisfactory completion of an FDA Advisory Committee review, if applicable;

satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the product is produced to assess compliance with cGMP; and

FDA review and approval of the NDA.

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Satisfaction of FDA pre-market approval requirements typically takes several years, and the actual time required may vary substantially based upon the type, complexity and novelty of the product or disease. Government regulation may delay or prevent marketing of potential candidates for a considerable period of time and impose costly procedures upon a manufacturer s activities. Success in early stage clinical trials does not assure success in later stage clinical trials. Data obtained from clinical development is not always conclusive and may be susceptible to varying interpretations that could delay, limit or prevent regulatory approval. Even if a product receives regulatory approval, later discovery of previously unknown problems with a product may result in restrictions on the product or even complete withdrawal of the product from the market.

Preclinical tests include laboratory evaluation of product chemistry and formulation, as well as toxicology studies to assess the safety of the product. The conduct of the preclinical tests and formulation of compounds for testing must comply with federal regulations and requirements. The results of preclinical testing are then submitted to the FDA as part of an IND.

An IND, which must be approved before human clinical trials may begin, will automatically become effective 30 days after the FDA receives it, unless the FDA raises concerns or questions about the IND. If the FDA has questions or concerns, they must be resolved to the satisfaction of the FDA before initial clinical testing can begin. In addition, the FDA may, at any time, impose a clinical hold on on-going clinical trials. If the FDA imposes a clinical hold, clinical trials cannot commence or recommence without FDA authorization and then only under terms authorized by the FDA. In some instances, the IND process can result in substantial delay and additional expense.

Clinical trials involve the administration of the investigational drug to healthy volunteers or patients under the supervision of a qualified investigator. Clinical trials must be conducted in compliance with federal regulations and requirements, under protocols detailing the objectives of the trial, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated, among other things. Each protocol involving testing in the United States must be submitted to the FDA as part of the IND. In addition, an institutional review board, or IRB, at each site at which the clinical trial is conducted must approve the protocols, protocol amendments and informed consent documents for patients. All clinical trial participants must provide their informed consent in writing.

Clinical trials to support an NDA for marketing approval are typically conducted in three sequential phases, but the phases may overlap. In Phase I clinical trials, the initial introduction of the drug into healthy human subjects or patients, the drug is tested to assess safety, including side effects associated with increasing doses, metabolism, pharmacokinetics and pharmacological actions. Phase II clinical trials usually involve trials in a limited patient population, usually several hundred people, to determine dosage tolerance and optimum dosage, identify possible adverse effects and safety risks, and provide preliminary support for the efficacy of the drug in the indication being studied. In certain patient populations, accelerated approval is available based on Phase II clinical trial data. A Phase IIa clinical trial is typically designed to obtain proof-of-concept data and determine if the product candidate has an effect on a limited number of patients. A clinical trial designed to generate efficacy data but that is not expected to satisfy FDA criteria for NDA approval is sometimes referred to as a Phase IIb clinical trial. If a compound demonstrates evidence of effectiveness and an acceptable safety profile in Phase II clinical trials, Phase III clinical trials are undertaken to further evaluate clinical safety and efficacy within an expanded patient population, usually several hundred to several thousand subjects, typically at geographically dispersed clinical trial sites. Phase I, Phase II or Phase III clinical trials of any product candidate may not be completed successfully within any specified time period, if at all.

After successful completion of the required clinical testing, generally an NDA is prepared and submitted to the FDA. FDA approval of the NDA is required before marketing of the product may begin in the United States. The NDA must include the results of extensive preclinical studies and clinical trials and other detailed information, including, information relating to the product s pharmacology, chemistry, manufacture, and controls. The cost of preparing and submitting an NDA is substantial. Under federal law, the submission of

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NDAs are generally subject to substantial application user fees, currently exceeding $750,000, and the sponsor and/or manufacturer under an approved application are also subject to annual product and establishment user fees, currently exceeding $40,000 per product and $250,000 per establishment. Additional user fees exceeding $300,000 apply for NDA supplements containing clinical data. Fees are waived for the first pre-market application from companies with gross sales of less than $30 million. These fees are typically increased annually.

The FDA has 60 days from its receipt of an NDA to determine whether the application will be accepted for filing based on the agency s threshold determination that the NDA is sufficiently complete to permit substantive review. Once the submission is accepted for filing, the FDA begins an in-depth review of the NDA. Under federal law, the FDA has agreed to certain performance goals in the review of most NDAs. Applications for non-priority drug products are generally reviewed within 12 months. Applications for priority drugs, such as those that address an unmet medical need, are generally reviewed within 6 months. The review process can be significantly extended by FDA requests for additional information or clarification regarding information already provided in the submission.

The FDA may also refer applications for novel drug products or drug products that present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved. The FDA is not bound by the recommendation of an advisory committee. Also, before approving an NDA, the FDA will inspect the facility or the facilities at which the product is manufactured to assure that the facilities, methods and controls are adequate to preserve the product s identity, strength, quality and purity.

If FDA evaluations of the NDA and the manufacturing facilities are favorable, the FDA may issue an approval letter, or, in some cases, an approvable letter followed by an approval letter. An approvable letter generally contains a statement of specific conditions that must be met in order to secure final approval of the NDA. If and when those conditions have been met to the FDA s satisfaction, the FDA will typically issue an approval letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. If the FDA s evaluation of the NDA submission is not favorable, the FDA may refuse to approve the NDA or issue a not approvable letter. A not approvable letter outlines the deficiencies in the submission and may require additional testing or information in order for the FDA to reconsider the application. Even with submission of this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval. With limited exceptions, the FDA may withhold approval of an NDA regardless of prior advice it may have provided or commitments it may have made to the sponsor.

As a condition of NDA approval, the FDA may require post-approval testing and surveillance to monitor the drug s safety or efficacy and may impose other conditions, including labeling restrictions which can materially impact the potential market and profitability of the drug. In addition, a product approval may be withdrawn if compliance with regulatory standards is not maintained or problems are identified following initial marketing.

The FDA has various programs, including FastTrack designation, accelerated approval and priority review that are intended to expedite or simplify the process for reviewing certain drugs. Specifically, drug products that are intended for the treatment of serious or life-threatening conditions and demonstrate the potential to address unmet medical needs may be eligible for FastTrack designation and/or accelerated approval. Products may qualify for accelerated approval based on adequate and well-controlled Phase II clinical trial results that establish that the product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit. As a condition of approval, the FDA may require that a sponsor of a drug product receiving FastTrack or accelerated approval perform post-marketing clinical trials. In addition, if a drug product would provide a significant improvement compared to marketed products, it may be eligible to receive priority review, which shortens the time in which the FDA acts on the sponsor s application. Even if a drug product qualifies for one or more of these programs, the FDA may later decide that the drug no longer meets the conditions for qualification or the time period for FDA review or approval will not be shortened.

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After an NDA is approved, the approved drug will be subject to certain post-approval requirements, including a requirement to report adverse events and to submit annual reports. In addition, a supplemental NDA may be required for approval of changes to the originally approved indication, prescribing information, product formulation, and manufacturing and testing requirements. Following approval, drug products are required to be manufactured and tested for compliance with NDA and/or compendia specifications prior to release for commercial distributions. The manufacture and testing must be performed in approved manufacturing and testing sites that comply with cGMP requirements and are subject to FDA inspection authority.

Approved drugs must be promoted in a manner that is consistent with their terms and conditions of approval, and that is not false or misleading. In addition, the FDA requires substantiation of any claims of superiority of one product over another, generally through adequate and well-controlled head-to-head clinical trials. To the extent that market acceptance of TorreyPines product candidates may depend on their superiority over existing therapies, any restriction on TorreyPines ability to advertise or otherwise promote claims of superiority, or requirements to conduct additional expensive clinical trials to provide proof of such claims, could negatively affect the sales of TorreyPines products and/or TorreyPines expenses.

Once an NDA is approved, the product covered thereby becomes a listed drug which can, in turn, be cited by potential competitors in support of approval of an abbreviated new drug application, or ANDA. An ANDA provides for marketing of a drug product that has the same active ingredients, strength, dosage form, route of administration and conditions of use, and has been shown through bioequivalence testing to be therapeutically equivalent to the listed drug. Generally, an ANDA applicant is required only to conduct bioequivalence testing, and is not required to conduct or submit results of preclinical or clinical tests to prove the safety or efficacy of its drug product. Drugs approved in this way, commonly referred to as generic equivalents to the listed drug, are listed in the FDA s Approved Drug Products with Therapeutic Equivalence Evaluations, which is referred to as the Orange Book, and can often be substituted by pharmacists under prescriptions written for the original listed drug.

Federal law provides for a period of three years of exclusivity following approval of a listed drug that contains previously approved active ingredients but is approved in a new dosage, dosage form, indication or route of administration or combination, if one of the clinical trials conducted was essential to the approval of the application and was conducted or sponsored by the applicant. During this three year period, the FDA cannot grant effective approval of an ANDA based on that listed drug. Federal law also provides a period of exclusivity for five years following the approval of a drug containing a new chemical entity, except that an ANDA may be submitted after four years following the approval of the original product if the ANDA challenges a listed patent as invalid or not infringed.

Applicants submitting an ANDA are required to make a certification with regard to any patents listed for an innovative drug, stating that either there are no patents listed in the Orange Book for the innovative drug, any patents listed have expired, the date on which the patents will expire, or that the patents listed are invalid, unenforceable, or will not be infringed by the manufacture, use, or sale of the drug for which the ANDA is submitted. If an ANDA applicant certifies that it believes all listed patents are invalid or not infringed, it is required to provide notice of its ANDA submission and certification to the NDA sponsor and the patent owner. If the patent owner, its representatives, or the approved application holder, who is an exclusive patent licensee, then initiates a suit for patent infringement against the ANDA sponsor within 45 days of receipt of the notice, the FDA cannot grant effective approval of the ANDA until either 30 months have passed or there has been a court decision holding that the patents in question are invalid or not infringed. On the other hand, if a suit for patent infringement is not initiated within the 45 days, the ANDA applicant may bring a declaratory judgment action.

If the ANDA applicant certifies that it does not intend to market its generic product before some or all listed patents on the listed drug expire, then the FDA cannot grant effective approval of the ANDA until those patents expire. The first ANDA submitting a substantially complete application certifying that all listed patents for a particular product are invalid or not infringed may qualify for a period of 180 days of exclusivity against other generics, which begins to run after a final court decision of invalidity or non-infringement or after the applicant

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begins marketing its product, whichever occurs first, during which time subsequently submitted ANDAs cannot be granted effective approval. If more than one applicant files a substantially complete ANDA on the same day, each such first applicant will be entitled to share the 180-day exclusivity period, but there will only be one such period, beginning on the date of the first marketing by any of the first applicants.

FDA also imposes a number of complex requirements and restrictions on entities that advertise and promote prescription drugs, which include, among others, standards for and regulations of print and in-person promotion, product sampling, direct-to-consumer advertising, off-label promotion, industry sponsored scientific and educational activities, and promotional activities involving the Internet. The FDA has very broad enforcement authority under the Federal Food, Drug and Cosmetic Act, and failure to abide by FDA requirements can result in penalties and other enforcement actions, including the issuance of warning letters or other letters objecting to violations and directing that deviations from FDA standards be corrected, total or partial suspension of production, and state and federal civil and criminal investigations and prosecutions.

From time to time, legislation is drafted and introduced in Congress that could significantly change the statutory provisions governing the approval, manufacturing and marketing of drug products. In addition, FDA regulations and guidance are often revised or reinterpreted by the agency or the courts in ways that may significantly affect TorreyPines business and products candidates. It is impossible to predict whether legislative changes will be enacted, or FDA regulations, guidance or interpretations changed, or what the impact of such changes, if any, may be.

Foreign Regulation of New Drug Compounds

Approval of a product by comparable regulatory authorities may be necessary in foreign countries prior to the commencement of marketing of the product in those countries, whether or not FDA approval has been obtained. In general, each country has its own procedures and requirements, many of which are time consuming, expensive, and may require additional studies prior to marketing the product. Also, the time required may differ from that required for FDA approval. Thus, there can be substantial delays in obtaining required approvals from foreign regulatory authorities after the relevant applications are filed.

In Europe, marketing authorizations may be granted at a centralized level, a decentralized level or a national level. The centralized procedure provides a single marketing authorization valid in all European Union member states, and is mandatory for the approval of most medicinal products, including certain biotechnology products. The decentralized procedure allows an applicant to seek market authorizations in several designated member states at once, and a national market authorization provides an authorization valid in only one member state. All medicinal products that are not subject to the centralized procedure and which have received at least one marketing authorization in another member state may receive additional marketing authorizations from other member states through a mutual recognition procedure.

Reimbursement and Pricing

In the United States and elsewhere, sales of pharmaceutical products depend in significant part on the availability of reimbursement to the consumer from third-party payors, such as government and private insurance plans. Third-party payors are increasingly challenging the prices charged for medical products and services. It will be time-consuming and expensive for TorreyPines to go through the process of seeking reimbursement from Medicare and private payors. TorreyPines products may not be considered cost effective, and coverage and reimbursement may not be available or sufficient to allow it to sell its products on a competitive and profitable basis.

In many foreign markets, including the countries in the European Union, pricing of pharmaceutical products is subject to governmental control. In the United States, there have been, and TorreyPines expect that there will continue to be, a number of federal and state proposals to implement similar governmental pricing control. While TorreyPines cannot predict whether such legislative or regulatory proposals will be adopted, the adoption of such proposals could have a material adverse effect on TorreyPines business, financial condition and profitability.

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Hazardous Materials

TorreyPines manufacturing processes involve the controlled use of hazardous materials, chemicals and the production of waste products. TorreyPines is subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of hazardous materials and waste products. TorreyPines does not expect the cost of complying with these laws and regulations to be material.

Employees

As of December 31, 2008, TorreyPines had 10 full-time employees, 2 of whom were engaged in clinical development and 8 of whom were engaged in management, business development and accounting. As of June 30, 2009 TorreyPines had 3 full-time employees. None of TorreyPines employees are represented by a labor union or covered by a collective bargaining agreement, nor have TorreyPines experienced work stoppages. TorreyPines believe that relations with TorreyPines employees are good.

Properties

During 2009, TorreyPines operations were conducted in La Jolla, California. TorreyPines lease terminated on July 31, 2009 and TorreyPines currently does not maintain an office.

Legal Proceedings

Several lawsuits were filed against TorreyPines in February 2005 in the U.S. District Court for the Southern District of New York asserting claims under Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, as amended, or the Exchange Act and Rule 10b-5 thereunder on behalf of a class of purchasers of TorreyPines common stock during the period from June 26, 2003, through and including February 4, 2005, referred to as the class period. Dr. Marvin S. Hausman, M.D., a former director and TorreyPines former Chief Executive Officer, and Dr. Gosse B. Bruinsma, M.D., also a former director and TorreyPines former Chief Executive Officer, were also named as defendants in the lawsuits. These actions were consolidated into a single class action lawsuit in January 2006. On April 10, 2006, the class action plaintiffs filed an amended consolidated complaint. TorreyPines filed its answer to that complaint on May 26, 2006. TorreyPines motion to dismiss the consolidated amended complaint was filed on May 26, 2006 and was submitted to the court for a decision in September 2006. On March 31, 2009 the U.S. District Court for the Southern District of New York dismissed the proceedings. On April 24, 2009 an appeal was filed with the United States Court of Appeals for the Second Circuit by the class action plaintiffs.

Company Website

TorreyPines maintains a website at *www.tptxinc.com*. TorreyPines makes available free of charge on its website its periodic and current reports as soon as reasonably practicable after such reports are filed with the Securities and Exchange Commission, or SEC. Information contained on, or accessible through, TorreyPines website is not part of this report or TorreyPines other filings with the SEC.

TorreyPines was initially incorporated in Nevada on July 29, 1997 as Axonyx Inc. In October 2006, TorreyPines was reincorporated in Delaware and changed its name to TorreyPines Therapeutics, Inc. TorreyPines principal executive offices are located at P.O. Box 231386, Encinitas, CA 92023-1386, and TorreyPines telephone number is (858) 623-5665.

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RAPTOR S BUSINESS

Overview

Raptor believes that it is building a balanced pipeline of drug candidates that may expand the reach and benefit of existing therapeutics. Raptor s product portfolio includes both candidates from its proprietary drug targeting platforms and in-licensed and acquired product candidates.

Raptor s current pipeline includes four clinical development programs plus three preclinical programs that are based upon its proprietary drug-targeting platforms.

Clinical Development Programs

Raptor s four clinical development programs are based on existing therapeutics that it is 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; non-alcoholic steatohepatitis, or NASH, a metabolic disorder of the liver; Huntington s Disease, or HD, an inherited neurodegenerative disease; and
- Convivia for the potential management of acetaldehyde toxicity due to alcohol consumption by individuals with aldehyde dehydrogenase, or ALDH2 deficiency, an inherited metabolic disorder.

Preclinical Programs

Raptor s preclinical platforms consist of targeted therapeutics, which it is developing for the potential treatment of multiple indications, including liver diseases, neurodegenerative diseases and breast cancer:

Raptor s 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.

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

DRUG PRODUCT CANDIDATE	DISEASE INDICATION	STAGE OF DEVELOPMENT
Delayed release, enterically coated cysteamine bitartrate, or DR Cysteamine	cystinosis	Phase II (*ongoing, open IND*) Orphan Product Designation
DR Cysteamine	NASH	Phase IIa (ongoing, open IND)
DR Cysteamine	HD	Phase II (*planned for 2009*) Orphan Product Designation
Convivia™	ALDH2 Deficiency, or Ethanol Intolerance	Phase IIa (*completed, IND exemption granted by FDA*)
HepTide™	Hepatocellular Carcinoma, or HCC	Preclinical (ongoing)
HepTide™	Hepatitis C	Preclinical (ongoing)
WntTide™	Breast Cancer	Preclinical (ongoing)
NeuroTrans™	Neurodegenerative Diseases	Preclinical Roche collaboration (ongoing)

Future Activities

Over the next 12 months, Raptor plans to conduct research and development activities based upon its DR Cysteamine product candidate, its Convivia™ product candidate, its RAP-based platform, its Mesd-based peptides, and future in-licensed technologies and acquired technologies. A brief summary of Raptor s primary objectives in the next 12 months for its research and development activities is provided below. Raptor s plans for research and development activities over the next 12 months can only be implemented if it is successful in raising significant funds during this period. In addition, there can be no assurances that Raptor s research and development activities will be successful. Raptor needs to make important progress towards achieving at least one of its major clinical objectives or its ability to continue as a going concern will be adversely impacted due to the potential inability for Raptor to raise additional capital.

Clinical Development Programs

Raptor develops clinical-stage drug product candidates which are: internally discovered therapeutic candidates based on its 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 it could repurpose or reformulate as potentially more effective or convenient treatments for a drug s currently approved indications.

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Development of DR Cysteamine for the Potential Treatment of Nephropathic Cystinosis and Other Diseases

Raptor s DR Cysteamine product candidate is a proprietary delayed-release, enteric-coated microbead formulation of cysteamine bitartrate contained in a gelatin capsule. Raptor is investigating DR Cysteamine for the potential treatment of: cystinosis, NASH and HD.

Immediate-release cysteamine bitartrate, a cystine-depleting agent, is currently the only FDA and 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. Raptor s 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; DR Cysteamine for the treatment of Batten Disease in 2008; and cysteamine for the treatment of HD in 2008.

In June 2009, Raptor commenced its Phase IIb clinical trial of DR Cysteamine in cystinosis, in which it has enrolled three cystinosis patients and plan to enroll up to four additional cystinosis patients with a history of compliance using the currently available immediate-release form of cysteamine bitartrate. The clinical trial will evaluate safety, tolerability, pharmacokinetics and pharmacodynamics of a single dose of DR Cysteamine in patients. Release of data from the study is expected in the fourth calendar quarter of 2009. Raptor plans to follow the Phase IIb clinical study with a pivotal, Phase III clinical study in cystinosis patients anticipated to commence in the fourth calendar quarter of 2009. In October 2008, Raptor commenced a clinical trial in collaboration with UCSD to investigate a prototype formulation of DR Cysteamine for the treatment of NASH in juvenile patients.

Raptor also plans to support a clinical trial investigating DR Cysteamine in HD patients in collaboration with a French institution in the fourth quarter of 2009 or early 2010.

Development of Convivia™ for Liver Aldehyde Dehydrogenase Deficiency

Convivia is Raptor s 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 acetaldehyde levels 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, Raptor 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. Raptor believes that this subset represents approximately one-third of the ALDH2 deficient adult population. Raptor is actively seeking corporate partnerships with pharmaceutical companies in selected Asian countries to continue clinical development of Convivia™ in those countries.

Preclinical Development Programs

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

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These applications are based on the assumption that Raptor s targeting molecules can be engineered to bind to a selective subset of receptors with restricted tissue distribution under particular conditions of administration. Raptor believes 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.

Development of HepTide™ for Hepatocellular Carcinoma and Hepatitis C

Drugs currently used to treat primary liver cancer are often toxic to other organs and tissues. Raptor believes 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 Raptor s radio-labeled HepTide™ (a variant of RAP), HepTide™, its 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. Raptor believes 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.

Raptor s 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, high levels of LRP1 expression are 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.

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

Raptor is 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.

Development of NeuroTrans™ for the Potential Treatment of Diseases Affecting the Brain

Nearly 1,000 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.

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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 Raptor s proprietary RAP-based technology program to research the delivery of therapeutics across the blood-brain barrier. Raptor believes its 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.

Raptor worked with Dr. William Mobley, while he was a professor and Chairman of the Department of Neurology and Neurological Sciences, and his lab at Stanford University to study the brain transport behavior of NeuroTrans candidates. In the first year of Raptor s collaboration, a number of RAP-based peptide transport candidates were tested for their ability to bind to receptors that are thought to reside on the cells that line the blood-brain barrier. From these experiments, a lead candidate peptide was selected. In the second year of Raptor s collaboration, it completed preclinical evaluations which it believes support that NeuroTrans conjugates injected into the blood stream have the ability to seek out, bind to, and rapidly enter the cells that line the blood-brain barrier. These experiments support the NeuroTrans peptide s ability to enhance the transport of cargo molecules into the cells that line the blood-brain barrier. This collaboration has lapsed.

In June 2009, Raptor 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 Raptor s scientists will actively collaborate on the project. Raptor has received an initial upfront payment for the collaboration to cover its portion of the initial studies, and may earn development milestone payments and royalties in exchange for the licensing of NeuroTrans™ to Roche.

Development of 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 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 Raptor from the University. Professor Bu sits on Raptor s Scientific Advisory Board.

WntTide is Raptor s proprietary, Mesd-based peptide that it is developing as a potential therapeutic to inhibit the growth and metastasis of tumors over-expressing LRP5 or LRP6.

In November 2006, Raptor licensed the use of Mesd from Washington University in St. Louis for the potential treatment of cancer and bone density disorders. In June 2007, Raptor s preclinical study demonstrated that both Mesd and WntTide accelerated bone loss in a model of osteoporosis, suggesting inhibition of a key cellular signaling pathway was taking place. These findings indicate that WntTide may treat diseases known to be caused by an over-activation of the Wnt pathway, including certain forms of breast cancer. In April 2009, Washington University conducted a preclinical study of WntTide in a breast cancer model which showed

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tumor inhibition. The results of this study were presented at the 2nd Annual Wnt Conference in Washington, D.C., in June 2009 and will be published in the second calendar half of 2009. Raptor is currently evaluating the next steps with researchers at Washington University in the continued development of WntTide™.

Other Development Areas

Securing Additional and Complementary Technology Licenses from Others

Raptor intends to continue to extend its development of RAP, RAP-variants and Mesd to applications in other potential therapeutics. Raptor plans 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 Raptor s ability to establish such collaborations over the next 12 months, or at all. Raptor intends to focus its 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.

Business Development Activities

As part of Raptor s ongoing business development activities, it intends to seek out industry partners interested in potential clinical applications of its proprietary molecules and co-development or drug partnerships. In the cancer area, Raptor plans to contact institutions and companies with an expressed interest in developing therapeutics to its potential anti-cancer targets. Out-licensing arrangements with these companies may include technology transfer, partnerships, or joint ventures. Joint activities may include drug product candidate development, drug product candidate manufacturing, preclinical testing or clinical research studies. Raptor plans to enter partnerships with one or more pharmaceutical companies in Asian countries for development and commercialization of its Convivia™ product candidate. Raptor also plans to seek distribution or co-development agreements with one or more companies for ex-US territories for its DR Cysteamine product candidate. There can be no assurance that Raptor will be able to identify appropriate industry partners or, if it is able to, that it will be able to enter into mutually acceptable agreements with them on terms that are satisfactory to Raptor, or at all.

Raptor also intends to continue its efforts to in-license or acquire clinical stage products and preclinical drugs or drug technologies. These products may be in later stage clinical development or already approved and on the market. Raptor may obtain these products through collaborations, joint ventures or through merger and/or acquisitions with other biotechnology companies.

Strategic Acquisitions

Purchase of Convivia™

In October 2007, Raptor purchased certain assets of Convivia, Inc., or Convivia, including intellectual property, know-how and research reports related to a product candidate targeting liver ALDH2 deficiency, a genetic metabolic disorder. Raptor hired Convivia s chief executive officer and founder, Thomas E. (Ted) Daley, as President of Raptor s clinical development division. In exchange for the assets related to the ALDH2 deficiency program, what Raptor now calls Convivia ™, Raptor issued to Convivia 200,000 shares of Raptor s common stock, an additional 200,000 shares of Raptor s common stock to a third party in settlement of a convertible loan between the third party and Convivia, and another 37,500 shares of Raptor s common stock in settlement of other obligations of Convivia. Mr. Daley, as the former sole stockholder of Convivia, may earn additional shares of Raptor s common stock based on certain triggering events or milestones related to the development of the Convivia assets. In addition, Mr. Daley may earn cash bonuses based on the same triggering events pursuant to his employment agreement. In January 2008, Mr. Daley earned a $30,000 cash bonus pursuant to his employment agreement as a result of the milestone of Raptor s execution of a formulation agreement for manufacturing Convivia™ with Patheon. In March 2008, Raptor issued to Mr. Daley 100,000 shares of its

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common stock pursuant to Raptor s Convivia purchase agreement as a result of the milestone of Raptor s execution of an agreement to supply Raptor with the active pharmaceutical ingredient for Convivia™ and two $10,000 cash bonuses pursuant to his employment agreement for reaching his six-month and one-year employment anniversaries. In October 2008, Raptor issued to Mr. Daley 100,000 shares of its common stock valued at $27,000 and a $30,000 cash bonus as a result of fulfilling a clinical milestone.

Purchase of DR Cysteamine

In December 2007, through a merger between Encode Pharmaceuticals, Inc., or Encode, and Raptor s wholly-owned subsidiary, Raptor Therapeutics, Raptor purchased certain assets, including the clinical development rights to DR Cysteamine. Under the terms of and subject to the conditions set forth in the merger agreement, Raptor issued 3,444,297 shares of its common stock to the stockholders of Encode, or Encode Stockholders, options, or Encode Options, to purchase up to, in the aggregate, 357,427 shares of Raptor s common stock to the optionholders of Encode, or Encode Optionholders, and warrants, or Encode Warrants, to purchase up to, in the aggregate, 1,098,276 shares of Raptor s common stock to the warrantholders of Encode, or Encode Warrantholders, and together with the Encode Stockholders and Encode Optionholders, referred to herein collectively as the Encode Securityholders), as of the date of such agreement. Such common stock, Encode Options to purchase Raptor s common stock, and Encode Warrants to purchase Raptor s common stock combine for an aggregate amount of 4.9 million shares of Raptor s common stock issuable to the Encode Securityholders as of the closing of the merger. The Encode Securityholders are eligible to receive up to an additional 2.4 million shares of Raptor s common stock, Encode Options and Encode Warrants to purchase Raptor s common stock in the aggregate based on certain triggering events related to regulatory approval of DR Cysteamine, an Encode product program, if completed within the five year anniversary date of the merger agreement.

As a result of the Encode merger, Raptor received the exclusive worldwide license to DR Cysteamine, referred to herein as the License Agreement, developed by clinical scientists at the UCSD, School of Medicine. In consideration of the grant of the license, prior to the merger with Raptor Therapeutics, Encode paid an initial license fee and Raptor is obligated to pay an annual maintenance fee of $15,000 until it begins commercial sales of any products developed pursuant to the License Agreement. In addition to the maintenance fee, Raptor is obligated to pay during the life of the License Agreement: milestone payments ranging from $20,000 to $750,000 for orphan indications and from $80,000 to $1,500,000 for non-orphan indications upon the occurrence of certain events, if ever; royalties on commercial net sales from products developed pursuant to the License Agreement ranging from 1.75% to 5.5%; a percentage of sublicense fees ranging from 25% to 50%; a percentage of sublicense royalties; and a minimum annual royalty commencing the year Raptor begins commercially selling any products pursuant to the License Agreement, if ever. Under the License Agreement, Raptor is obligated to fulfill predetermined milestones within a specified number of years ranging from 0.75 to 6 years from the effective date of the License Agreement, depending on the indication. In addition, Raptor is obligated, among other things, to spend annually at least $200,000 for the development of products (which Raptor satisfied, as of its fiscal year ended August 31, 2008 by spending approximately $900,000 on such programs) pursuant to the License Agreement. As of May 31, 2009, Raptor accrued $40,000 due to UCSD for the milestone related to the first patient dosing in the NASH trial which commenced in October 2008. To the extent that Raptor fails to perform any of its obligations under the License Agreement, then UCSD may terminate the license or otherwise cause the license to become non-exclusive.

Company History

Corporate Structure

Raptor was incorporated in the State of Nevada on April 1, 2002 under the name of Highland Clan Creations Corp., or HCCC. On June 9, 2006, HCCC merged with its wholly-owned subsidiary, Raptor Pharmaceuticals Corp. incorporated on May 5, 2006 in Delaware. As a result, HCCC was reincorporated from the State of Nevada to the State of Delaware and changed its name to Raptor Pharmaceuticals Corp. Raptor is a publicly traded company quoted on the OTC Bulletin Board under the ticker RPTP (Yahoo Finance RPTP.OB).

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On May 25, 2006, Raptor acquired 100% of the outstanding capital stock of Raptor Pharmaceutical Inc. (incorporated in Delaware on September 8, 2005), a development-stage research and development company and on June 9, 2006, Raptor disposed of Raptor former wholly-owned subsidiary, Bodysentials Health & Beauty Inc., which sold nutritional milkshakes and drinks on the Internet. On August 1, 2007, Raptor formed Raptor Therapeutics Inc. (f/k/a Bennu Pharmaceuticals Inc.) as Raptor wholly-owned subsidiary for the purpose of developing clinical-stage drug product candidates through to commercialization.

Financing History

Initial Investors

On May 25, 2006, in exchange for all of the outstanding common stock of Raptor Pharmaceutical Inc., Raptor issued 8,000,000 shares of common stock to the Raptor Pharmaceutical Inc. stockholders including 3,000,000 shares of Raptor common stock to each of Christopher M. Starr, Ph.D., and Todd C. Zankel, Ph.D., Raptor s Chief Executive Officer and Chief Scientific Officer, respectively, 1,000,000 shares of Raptor common stock to Erich Sager, a member of Raptor s board of directors and 1,000,000 shares of common stock to an unrelated third party. These initial stockholders of Raptor Pharmaceutical Inc. purchased common stock of Raptor Pharmaceutical Inc. when it was a privately held company for the following amounts of proceeds: Dr. Starr $5,000; Dr. Zankel $5,000; Mr. Sager $100,000 and the unrelated third party $200,000.

$5 Million Financing and Reverse Merger

Pursuant to an agreement dated March 8, 2006, with HCCC, on May 25, 2006, Raptor closed a $5 million financing concurrent with a reverse merger. As part of that agreement, HCCC loaned Raptor $0.2 million to be repaid with accrued interest upon the earlier of six months or the closing of the financing. Also, the agreement stated that pending the closing of at least a $3.5 million financing, HCCC would be obligated to issue 800,000 units as fees to a placement agent and $30,000 in commissions to an investment broker. In the financing HCCC sold 8,333,333 units at $0.60 per unit. Each unit consisted of one share of Raptor s common stock and one common stock purchase warrant exercisable for one share of Raptor s common stock at $0.60 per share. The warrants were exercisable for 18 months and expired on November 25, 2007. Gross proceeds from the financing were $5 million and net proceeds after the repayment of the $0.2 million loan plus interest and the deduction of commissions and legal fees totaled approximately $4.6 million. Prior to the warrants expiring, Raptor received $3,895,000 in gross proceeds from the exercise of warrants in exchange for 6,491,667 shares of Raptor s common stock.

12.5 million shares of Raptor s common stock that were held by the original stockholders of HCCC prior to the reverse merger are reflected in Raptor s common stock outstanding. Prior to the reverse merger, certain previous stockholders of HCCC agreed to retire 26,805,000 shares of Raptor s common stock.

In connection with this financing, Raptor granted registration rights to the investors in this financing, pursuant to which Raptor agreed to file a registration statement with the SEC covering the resale of the common stock and all shares of common stock issuable upon the exercise of the warrants sold in this financing. The registration statement was filed on a Form SB-2 in June 2006 and became effective as of July 10, 2006. In July 2008, Raptor filed a registration statement covering Raptor 2008 private placement described below that amended, on a post-effective basis, the July 2006 Form SB-2. In August 2008, such registration statement was declared effective by the SEC.

Issuance of Common Stock Pursuant to Stock Option Exercises

Since inception, Raptor received $8,700 from the exercise of stock options resulting in the issuance of 14,500 shares of Raptor s common stock.

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2008 Private Placement

On May 21, 2008, referred to herein as the Initial Closing, Raptor entered into a Securities Purchase Agreement, referred to herein as the Purchase Agreement, with eight investors, referred to herein as the Initial Investors, for the private placement of units of Raptor, each unit comprised of one share of Raptor s common stock and one warrant to purchase one half of one share of Raptor s common stock, at a purchase price of $0.50 per unit. Immediately subsequent to the initial closing, Raptor and each initial investor entered into an Amendment to the Securities Purchase Agreement, principally in order to increase the amount able to be raised by Raptor in the private placement and to extend the outside closing date of such private placement, referred to herein as the Amendment, and, together with the Purchase Agreement, referred to herein as the Amended Purchase Agreement, dated as of May 21, 2008.

At the Initial Closing, Raptor sold an aggregate of 4,420,000 shares of common stock, referred to herein as the Initial Shares, to the Initial Investors for aggregate gross proceeds of $2,210,000 and issued to the Initial Investors warrants, referred to herein as the Initial Warrants. The Initial Warrants, exercisable for two years from the Initial Closing, entitle the Initial Investors to purchase up to an aggregate of 2,210,000 shares of Common Stock of Raptor, referred to herein as the Initial Warrant Stock, and have an exercise price of either $0.75 or $0.90 per share, depending on when such Initial Warrants are exercised, if at all.

Pursuant to the Amended Purchase Agreement, Raptor agreed to prepare and file a registration statement, referred to herein as the Registration Statement, within 60 days after the Initial Closing with the Securities and Exchange Commission under the Securities Act, on a Form S-1, covering the Shares and Warrant Stock sold pursuant to the Amended Purchase Agreement, referred to herein as the Restricted Stock, as well as Common Stock underlying warrants issued to placement agents each subject to volume limitations, and to use its commercially reasonable efforts to cause the Registration Statement to become effective with the SEC thereafter and to remain effective until the earlier to occur of the date (i) that is the second anniversary of the Initial Closing, (ii) the date the Restricted Securities may be sold under Rule 144 during any 90-day period and (iii) such time as all of the Restricted Securities have been publicly sold. Raptor filed the Form S-1 in July 2008, which the SEC declared effective on August 7, 2008.

Following the effectiveness of the Registration Statement, Raptor may, at any time, but no more than twice during any 12-month period, suspend the effectiveness of such registration for up to 45 calendar days, as appropriate, referred to herein as a Suspension Period, by giving notice to the holders of shares of Restricted Stock, if Raptor shall have determined that Raptor may be required to disclose any material corporate development which disclosure may have a material adverse effect on Raptor.

On May 30, 2008 Raptor sold an additional $150,000 of units at the same terms as outlined in the May 21, 2008 closing discussed above. As a result, Raptor issued 300,000 shares of Raptor s Common Stock and warrants to purchase 150,000 shares of Raptor s Common Stock.

On June 27, 2008 Raptor sold an additional $7,640,000 of units at the same terms as outlined in the May 21, 2008 closing discussed above. As a result, Raptor issued 15,280,000 shares of Raptor s Common Stock and warrants to purchase 7,640,000 shares of Raptor s Common Stock.

In connection with the May / June 2008 private placement, Raptor issued warrants and a cash fee to placement agents to compensate them for placing investors into the financing. Placement agents were issued warrants exercisable for 7% of Common Stock issued and issuable under the warrants issued to investors as part of the financing units and a cash fee based upon the proceeds of the sale of the units of the private placement. In connection with the sale of units, Raptor issued placement agent warrants to purchase 2,100,000 shares of Raptor s Common Stock at an exercise price of $0.55 per share for a five year term and cash fees to placement agents totaling $700,000. Of the placement agents compensated, Limetree Capital was issued warrants to purchase 1,882,650 shares of Raptor s Common Stock and cash commission of $627,550. One of Raptor s board members serves on the board of Limetree Capital.

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On April 29, 2009, in order to reflect current market prices, Raptor notified the holders of warrants purchased in the May/June 2008 private placement that Raptor was offering, in exchange for such warrants, new warrants to purchase Raptor s 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, occured 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. Raptor received approximately $2.6 million of proceeds from warrant exercises that resulted in the issuance of 8,715,000 shares of Raptor s common stock pursuant to the exchange described above.

Proprietary Rights

Raptor purchased from BioMarin the intellectual property owned by BioMarin for the research and development of the RAP technologies, including three 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™ . Raptor also entered into an exclusive worldwide license agreement with Washington University for Raptor s Mesd program for the treatment of cancer and bone diseases. Raptor has also protected its intellectual property through the filing of Raptor s own patent applications covering Raptor s 4-MP program as well as a new family of RAP peptides. In October 2007 Raptor 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, Raptor filed a provisional patent for trans-dermal formulation of 4-MP and a provisional patent for genotype specific methods for treating human subjects using 4-methylpyrazole. In December 2007, Raptor acquired an exclusive worldwide license agreement to pending patent applications from UCSD relating to Raptor s DR Cysteamine program, through Raptor s acquisition by merger of Encode Pharmaceuticals, Inc., a privately held pharmaceutical company. In March 2008, Raptor amended Raptor s license with UCSD to add exclusive worldwide rights to develop DR Cysteamine for the potential treatment of NASH.

Regulatory Exclusivities

Orphan Drug Designation

Raptor has been granted access to an Orphan Drug Designation from the FDA for use of DR Cysteamine to potentially treat cystinosis and the use of Cysteamine to potentially treat HD and Batten Disease. The Orphan Drug Act of 1983 generally provides incentives, including marketing exclusivity and tax benefits, to companies that undertake development and marketing of products to treat relatively rare diseases, which are defined as meaning diseases for which fewer than 200,000 persons in the U.S. would be likely to receive the treatment. A drug that receives orphan drug status is entitled to up to seven years of exclusive marketing in the U.S. for that indication. Equivalent European regulations would give Raptor ten years of marketing exclusivity for that indication in Europe. DR Cysteamine has already been granted Orphan Drug Designation by the FDA and Raptor plan to submit an orphan drug application in Europe. Raptor cannot be sure that Raptor will be granted orphan drug status or that it would prove advantageous. In addition, the testing and approval process will likely require a significant commitment of time, effort, and expense on Raptor s part. If Raptor fails to obtain or maintain orphan drug exclusivity for some of Raptor s drug product candidates, Raptor s competitors may sell products to treat the same conditions and Raptor s results of operations and revenues will be affected.

Facilities

Raptor s primary offices are located at 9 Commercial Blvd., Suite 200, Novato, CA 94949. Raptor s phone number is (415) 382-8111 and Raptor s facsimile number is (415) 382-1368. Raptor s website is located at www.raptorpharma.com.

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Competition

Primary Liver Cancer

Surgical resection of the primary tumor or liver transplantation remains the only curative options for HCC patients. The acute and tragic nature of this aggressive cancer and the widely preserved unmet medical need continues to attract a significant level of interest in finding ways of treating this disease. For example, there are currently over 140 ongoing clinical trials actively recruiting patients with HCC listed in the ClinicalTrials.gov website. Many of these trials are designed to evaluate ways of locally administering chemotherapeutics or various ways of performing surgical resections of the tumors. One drug that was approved in 2007 for treatment of inoperable HCC is currently the standard-of-care for this disease due to its claims of enhancing overall survival time. This enhancement has been determined to be even smaller within the Asian population of inoperable HCC patients. Raptor believes that a number of biotechnology and pharmaceutical companies may have internal programs targeting the development of new therapeutics that may be useful in treating HCC in the future.

Hepatitis

It has been estimated that approximately 3% of the world s population is chronically infected with hepatitis C, which translates to nearly 200 million people infected worldwide. Due to the latency of hepatitis C virus, or HCV, infection and slow disease progression, along with a lag in awareness of the disease, the number of patients with HCV is increasing and expecting to peak in the next 20-30 years. Over 50,000 people die of HCV infection every year. Up to 75% of chronically infected individuals carry the genotype I strain of HCV. The most effective current treatment for chronic HCV infection is Interferon, but nearly 60% of patients infected with genotype 1 do not show a sustained viral reduction with Interferon treatment, and the remaining 40% of such genotype 1 HCV cases are without any therapy.

The significant number of interferon non-responders has created a need for second generation therapies and a large number of pharmaceutical companies have active therapeutic programs to meet the requirements of this large and growing market. There are currently 28 compounds in clinical development for the treatment of chronic HCV infection. A large number of these clinical compounds are small molecule antivirals being developed by pharmaceutical companies including Novartis, Kemin, Vertex and Migenix. In addition, over a dozen non-interferon immunomodulators are currently under clinical development by companies including SciClone, Schering-Plough, Chiron and Innogenetics. These compounds are designed to attack different parts of the Hepatitis C virus and its ability to replicate or enhance the body s immune system to better recognize and destroy the virus. Most clinicians now believe that eventually these and future drugs will be used in combination to treat chronic HCV.

Brain Delivery

Raptor believes it will be competing with other pharmaceutical and biotechnology companies that provide, or are attempting to develop product candidates to provide, remedies and treatments for brain and neurodegenerative diseases.

Three approaches are primarily used to solve the problem of reaching the brain with therapeutic compounds:

- Neurosurgery or invasive techniques.
- Pharmacological techniques, which include less than 2% of currently available drugs.
- Physiologically based techniques, such as transcytosis.

Invasive techniques include bone marrow transplants or implants of polymers with drugs imbedded in the material for slow release. These implants extend from the skull surface to deep into brain tissue sites and use a permeation enhancer. Mannitol induced osmotic shock that creates leaks in the blood-brain barrier allowing

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intravenous administered chemotherapeutics into the brain is used in the treatment of brain tumors, but is not appropriate for administration of drugs for chronic therapies. Companies active in developing treatments based on these invasive technologies include Alza Corporation, Ethypharm, Guilford Pharmaceuticals, Medtronic Inc., Neurotech, and Sumitomo Pharmaceutical.

Other invasive procedures utilize catheter-based delivery of the drug directly into the brain. This technique has proven useful in the treatment of brain tumors, but has not been successful in distributing drugs throughout the entire brain. Amgen Inc. recently conducted clinical trials for the treatment of Parkinson s disease using intrathecal delivery through the use of various catheter/pump techniques.

The physiological route is a popular approach to cross the blood-brain barrier via lipid mediated free diffusion or by facilitated transport. This is the most common strategy used for the development of new neuropharmaceuticals, but has experienced limited success as it requires that the drug have sufficient lipophilic or fat-soluble properties so that it can pass through lipid membranes. The current method of delivery by this route, however, is nonspecific to the brain and side effects are common since most organs are exposed to the drug. Furthermore, many of the potential lipophilic therapeutic molecules are substrates for the blood-brain barrier s multi-drug resistant proteins, which actively transport the therapeutic agent back into the blood. Consequently, large doses need to be used so that sufficient amounts of the drug reach the brain. These high doses can result in significant side effects as the drug is delivered to essentially all tissues of the body, which is extremely inefficient. Companies and organizations that are developing treatments based on various physiological approaches include Angiochem, Axonyx, AramGen Technology, to-BBB, Xenoport Inc., Bioasis, Oregon Health and Science University Neuro-oncology, Xenova Group Ltd., d-Pharm, Neurochem Inc., and Vasogen Inc.

ALDH2 Deficiency

ALDH2 deficiency affects hundreds of millions of people worldwide, and is especially prevalent in East Asian populations. The association of this metabolic disorder with serious health risks, including liver diseases and digestive tract cancers, has emerged fairly recently (over the last 8-10 years). Raptor is not aware of any pharmaceutical products currently approved for this indication, either in the U.S. or internationally. However, given the size of the potential patient population and the emerging awareness of this disorder as a serious health risk, Raptor expects there are or will be other pharmaceutical companies, especially those with commercial operations in Asian countries, developing products to treat the symptoms of this condition. Many of these competitors may have greater resources, and existing commercial operations in the Asian countries which Raptor expects will be the primary markets for this product.

Additionally, there are non-pharmaceutical products available such as supplements and traditional remedies, especially in some Asian countries, which claim to be effective in reducing the symptoms associated with ALDH2 deficiency and other physical reactions to ethanol consumption. Although Raptor is not aware of any study which has demonstrated the efficacy of such non-pharmaceutical alternatives, these products may compete with Raptor s ALDH2 deficiency product.

Cystinosis

The only pharmaceutical product currently approved by FDA and EMEA to treat cystinosis is Cystagon® (rapid release cysteamine bitartrate capsules), marketed in the U.S. by Mylan Pharmaceuticals, and by Recordati and Swedish Orphan International in markets outside of the U.S. Cystagon® was approved by FDA in 1994 and is the standard of care for cystinosis treatment. Raptor expects that Raptor s improved DR Cysteamine formulation, if it receives marketing approval, will capture much of the Cystagon® market share because of Raptor s potential reduced dose frequency and improved tolerability. However, Cystagon® will remain a well-established competitive product which may retain many patients, especially those for whom the dose schedule and side effects do not pose significant problems.

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Raptor is not aware of any pharmaceutical company with an active program to develop an alternative therapy for cystinosis. There are companies developing and/or marketing products to treat symptoms and conditions related to, or resulting from cystinosis, but none developing products to treat the underlying metabolic disorder. Academic researchers in the US and Europe are pursuing potential cures for cystinosis through gene therapy and stem cell therapy, as well as pro-drug approaches as alternatives to cysteamine bitartrate for cystinosis treatment. The development timeline for these approaches is many years.

Huntington s Disease

There are no currently available treatment alternatives for HD, although there are products available such as Haldol, Klonopin and Xenazine to treat uncontrollable movements and mood swings that result from the disease. There are several pharmaceutical companies pursuing potential cures and treatments for HD, as well as numerous academic- and foundation-sponsored research efforts.

Companies with HD product candidates in development include Medivation, Inc.,; Amarin Eli Lilly & Co.,; and Pfizer. Several other companies have drug candidates in preclinical development. Additionally, nutritional supplements including creatinine and coenzyme Q10 have been investigated as potential treatments for HD. The Huntington Study Group sponsors numerous studies of potential therapies for HD, including coenzyme Q10 and the antibiotic minocycline.

NASH

There are no currently available treatment options for NASH. Weight loss, healthy diet, abstinence from alcohol and increased physical activity are typically suggested to slow the onset of NASH. There are numerous therapies being studied for NASH, including anti-oxidants (Vitamin E, betaine, Moexipril from Univasc), insulin sensitizing agents (Actos® from Takeda Pharmaceuticals for type 2 diabetes, in an ongoing phase III study for NASH sponsored by University of Texas) and drugs to improve blood flow (Trental® from Aventis for treatment of intermittent claudication, which failed to meet endpoints in a phaseII study for NASH). Gilead Sciences is developing a pan-caspase inhibitor for NASH. Other products being studied for NASH include Byetta from Amylin, in an ongoing phase II/III study for NASH; and siliphos, or milk thistle, in a UCSD phase II study for NASH.

Because, many of Raptor s competitors have greater capital resources and larger overall research and development staffs and facilities, than Raptor, there can be no assurances that Raptor will be successful in competing in the areas discussed above. See the section under Risk Factors titled, If Raptor s competitors succeed in developing products and technologies that are more effective than Raptor s own, or if scientific developments change Raptor s understanding of the potential scope and utility of Raptor s drug product candidates, then Raptor s technologies and future drug product candidates may be rendered less competitive.

Government Regulations of the Biotechnology Industry

Regulation by governmental authorities in the U.S. and foreign countries is a significant factor in the development, manufacture, and expected marketing of Raptor s drug product candidates and in Raptor s ongoing research and development activities. The nature and extent to which such regulation will apply to Raptor will vary depending on the nature of any drug product candidates developed. Raptor anticipates that all of its drug product candidates will require regulatory approval by governmental agencies prior to commercialization.

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In particular, human therapeutic products are subject to rigorous preclinical and clinical testing and other approval procedures of the FDA and similar regulatory authorities in other countries. Various federal statutes and regulations also govern or influence testing, manufacturing, safety, labeling, storage, and record-keeping related to such products and their marketing. The process of obtaining these approvals and the subsequent compliance with the appropriate federal statutes and regulations requires substantial time and financial resources. Any failure by Raptor or its collaborators to obtain, or any delay in obtaining, regulatory approval could adversely affect the marketing of any drug product candidates developed by Raptor, Raptor s ability to receive product revenues, and Raptor s liquidity and capital resources.

The FDA s Modernization Act codified the FDA s policy of granting fast track review of certain therapies targeting orphan indications and other therapies intended to treat severe or life threatening diseases and having potential to address unmet medical needs. Orphan indications are defined by the FDA as having a prevalence of less than 200,000 patients in the U.S. Raptor anticipates that certain neurodegenerative diseases and primary liver cancer which could potentially be treated using Raptor s technology could qualify for fast track review under these revised guidelines. There can be no assurances, however, that Raptor will be able to obtain fast track designation and, even with fast track designation, it is not guaranteed that the total review process will be faster or that approval will be obtained, if at all, earlier than would be the case if the drug product candidate had not received fast-track designation.

Before obtaining regulatory approvals for the commercial sale of any of Raptor s products under development, Raptor must demonstrate through preclinical studies and clinical trials that the product is safe and efficacious for use in each target indication. The results from preclinical studies and early clinical trials might not be predictive of results that will be obtained in large-scale testing. Raptor s clinical trials might not successfully demonstrate the safety and efficacy of any product candidates or result in marketable products.

In order to clinically test, manufacture, and market products for therapeutic use, Raptor will have to satisfy mandatory procedures and safety and effectiveness standards established by various regulatory bodies. In the U.S., the Public Health Service Act and the Federal Food, Drug, and Cosmetic Act, as amended, and the regulations promulgated thereunder, and other federal and state statutes and regulations govern, among other things, the testing, manufacture, labeling, storage, record keeping, approval, advertising, and promotion of Raptor s current and proposed product candidates. Product development and approval within this regulatory framework takes a number of years and involves the expenditure of substantial resources.

The steps required by the FDA before new drug products may be marketed in the U.S. include:

- completion of preclinical studies;
- the submission to the FDA of a request for authorization to conduct clinical trials on an IND, which must become effective before clinical trials may commence;
- adequate and well-controlled Phase I, Phase II and Phase III clinical trials to establish and confirm the safety and efficacy of a drug candidate;
- submission to the FDA of an NDA for the drug candidate; and
- review and approval of the NDA by the FDA before the product may be shipped or sold commercially.

In addition to obtaining FDA approval for each product, each product manufacturing establishment must be registered with the FDA and undergo an inspection prior to the approval of an NDA. Each manufacturing facility and its quality control and manufacturing procedures must also conform and adhere at all times to the FDA s cGMP regulations. In addition to preapproval inspections, the FDA and other government agencies regularly inspect manufacturing facilities for compliance with these requirements. If, as a result of these inspections, the FDA determines that any equipment, facilities, laboratories or processes do not comply with applicable FDA regulations and conditions of product approval, the FDA may seek civil, criminal, or administrative sanctions

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and/or remedies against Raptor, including the suspension of the manufacturing operations. Manufacturers must expend substantial time, money and effort in the area of production and quality control to ensure full technical compliance with these standards.

Preclinical testing includes laboratory evaluation and characterization of the safety and efficacy of a drug and its formulation. Preclinical testing results are submitted to the FDA as a part of an IND which must become effective prior to commencement of clinical trials. Clinical trials are typically conducted in three sequential phases following submission of an IND. Phase I represents the initial administration of the drug to a small group of humans, either patients or healthy volunteers, typically to test for safety (adverse effects), dosage tolerance, absorption, distribution, metabolism, excretion and clinical pharmacology, and, if possible, to gain early evidence of effectiveness. Phase II involves studies in a small sample of the actual intended patient population to assess the efficacy of the drug for a specific indication, to determine dose tolerance and the optimal dose range and to gather additional information relating to safety and potential adverse effects. Once an investigational drug is found to have some efficacy and an acceptable safety profile in the targeted patient population, Phase III studies are initiated to further establish clinical safety and efficacy of the therapy in a broader sample of the general patient population, in order to determine the overall risk-benefit ratio of the drug and to provide an adequate basis for any physician labeling. During all clinical studies, Raptor must adhere to Good Clinical Practice, or GCP, standards. The results of the research and product development, manufacturing, preclinical studies, clinical studies and related information are submitted in an NDA to the FDA.

The process of completing clinical testing and obtaining FDA approval for a new drug is likely to take a number of years and require the expenditure of substantial resources. If an application is submitted, there can be no assurance that the FDA will review and approve the NDA. Even after initial FDA approval has been obtained, further studies, including post-market studies, might be required to provide additional data on safety and will be required to gain approval for the use of a product as a treatment for clinical indications other than those for which the product was initially tested and approved. Also, the FDA will require post-market reporting and might require surveillance programs to monitor the side effects of the drug. Results of post-marketing programs might limit or expand the further marketing of the products. Further, if there are any modifications to the drug, including changes in indication, manufacturing process, labeling or a change in manufacturing facility, an NDA supplement might be required to be submitted to the FDA.

The rate of completion of any clinical trials will be dependent upon, among other factors, the rate of patient enrollment. Patient enrollment is a function of many factors, including the size of the patient population, the nature of the trial, the availability of alternative therapies and drugs, the proximity of patients to clinical sites and the eligibility criteria for the study. Delays in planned patient enrollment might result in increased costs and delays, which could have a material adverse effect on Raptor.

Raptor does not know whether its IND for future products or the protocols for any future clinical trials will be accepted by the FDA. Raptor does not know if its clinical trials will begin or be completed on schedule or at all. Even if completed, Raptor does not know if these trials will produce clinically meaningful results sufficient to support an application for marketing approval. The commencement of Raptor s planned clinical trials could be substantially delayed or prevented by several factors, including:

- a limited number of, and competition for, suitable patients with particular types of disease for enrollment in clinical trials;
- delays or failures in obtaining regulatory clearance to commence a clinical trial;
- delays or failures in obtaining sufficient clinical materials;
- delays or failures in reaching agreement on acceptable clinical trial agreement terms or clinical trial protocols with prospective sites; and
- delays or failures in obtaining Institutional Review Board, or IRB, approval to conduct a clinical trial at a prospective site.

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The completion of Raptor s clinical trials could also be substantially delayed or prevented by several factors, including:

- slower than expected rates of patient recruitment and enrollment;
- failure of patients to complete the clinical trial;
- unforeseen safety issues;
- lack of efficacy during clinical trials;
- inability or unwillingness of patients or medical investigators to follow Raptor s clinical trial protocols;
- inability to monitor patients adequately during or after treatment; and
- regulatory action by the FDA for failure to comply with regulatory requirements.

Failure to comply with applicable FDA requirements may result in a number of consequences that could materially and adversely affect Raptor. Failure to adhere to approved trial standards and GCPs in conducting clinical trials could cause the FDA to place a clinical hold on one or more studies which would delay research and data collection necessary for product approval. Noncompliance with GCPs could also have a negative impact on the FDA s evaluation of an NDA. Failure to adhere to GMPs and other applicable requirements could result in FDA enforcement action and in civil and criminal sanctions, including but not limited to fines, seizure of product, refusal of the FDA to approve product approval applications, withdrawal of approved applications, and prosecution.

Whether or not FDA approval has been obtained, approval of a product by regulatory authorities in foreign countries must be obtained prior to the commencement of marketing of the product in those countries. The requirements governing the conduct of clinical trials and product approvals vary widely from country to country, and the time required for approval might be longer or shorter than that required for FDA approval. Although there are some procedures for unified filings for some European countries, in general, each country at this time has its own procedures and requirements. There can be no assurance that any foreign approvals would be obtained.

In most cases, if the FDA has not approved a drug product candidate for sale in the U.S., the drug product candidate may be exported for sale outside of the U.S. only if it has been approved in any one of the following: the European Union, Canada, Australia, New Zealand, Japan, Israel, Switzerland and South Africa. Specific FDA regulations govern this process.

In addition to the regulatory framework for product approvals, Raptor and Raptor s collaborative partners must comply with federal, state, and local laws and regulations regarding occupational safety, laboratory practices, the use, handling and disposition of radioactive materials, environmental protection and hazardous substance control, and other local, state, federal and foreign regulation. All facilities and manufacturing processes used by third parties to produce Raptor s drug candidates for clinical use in the United States must conform with cGMPs. These facilities and practices are subject to periodic regulatory inspections to ensure compliance with cGMP requirements. Their failure to comply with applicable regulations could extend, delay, or cause the termination of clinical trials conducted for Raptor s drug candidates. The impact of government regulation upon Raptor cannot be predicted and could be material and adverse. Raptor cannot accurately predict the extent of government regulation that might result from future legislation or administrative action.

Scientific Advisory Board

The following describes the background of Raptor s Scientific Advisory Board.

Stephen C. Blacklow, M.D., Ph.D. Over the last ten years, Dr. Blacklow s research team has achieved international recognition both for their mechanistic and structural studies of proteins of the LDL receptor family, and for their work on the structure and function of human Notch proteins. Recently, Dr. Blacklow s team

determined the structure of RAP d3 complex with receptor. Dr. Blacklow graduated from Harvard College summa cum laude in 1983, and received his M.D. and Ph.D. in bioorganic chemistry from Harvard University in 1991. Dr. Blacklow is a board-certified pathologist and an Associate Professor of Pathology at Harvard Medical School where he is the Director of the Harvard M.D.-Ph.D. program, basic sciences track. He has directed a research laboratory at the Brigham and Women s Hospital, a teaching affiliate of the Harvard Medical School, since 1998.

Guojun Bu, Ph.D. Guojun Bu, Ph.D., is a molecular and cell biologist and a leader in the field of the LDL receptor family. Dr. Bu obtained his undergraduate degree from the Beijing Normal University in China. He then studied biochemistry and molecular biology in the Department of Biochemistry at Virginia Tech where he received his Ph.D. Dr. Bu moved to the Washington University School of Medicine for a postdoctoral training in cell biology where he later became a member of the faculty. He is currently Professor of Pediatrics, and of Cell Biology and Physiology. Among the numerous awards that he has received, Dr. Bu has been a Faculty Scholar of the Alzheimer s Association and an Established Investigator of the American Heart Association. He currently serves as the Editor-in-Chief of Molecular Neurodegeneration.

William C. Mobley, M.D., Ph.D. After completing undergraduate training in Chemistry and Zoology at the University of Nebraska at Lincoln, William C. Mobley, M.D., Ph.D., received his M.D. and Ph.D. in Neuroscience from Stanford University. Dr. Mobley trained in Pathology and Pediatrics at the Stanford University Hospital and completed a residency and fellowship in Neurology at Johns Hopkins University Hospital, where he also was Chief Resident in Pediatric Neurology. In 1985, he joined the faculty of the University of California, San Francisco School of Medicine where he rose to the rank of Professor of Neurology, Pediatrics and the Neuroscience Program and served as the Director of Child Neurology. In 1991, he was named Derek Denny Brown Scholar of the American Neurological Association. From 1997 to 2005, he served as the Chair of the Department of Neurology and Neurological Sciences at Stanford University, and he holds the John E. Cahill Family Endowed Chair. He was recently appointed Director of the Neuroscience Institute at Stanford. His laboratory studies the signaling biology of neurotrophic factors in the normal nervous system and in animal models of neurological disorders, including Alzheimer s disease, Down s syndrome and peripheral neuropathy. He is the recipient of both the Zenith Award and the Temple Award from the Alzheimer s Association and is a Fellow of the Royal College of Physicians. He was chosen to receive the Cotzias Award of the American Academy of Neurology for 2004. Dr. Mobley is Past President of the Association of University Professors of Neurology and is President of The Professors of Child Neurology. He was recently elected to the Institute of Medicine of the National Academy of Sciences.

Sam Teichman, M.D., FACC, FACP Sam Teichman, M.D., is an independent consultant in the area of strategic drug discovery and development. He has worked on over 40 medical products in various stages of development from the earliest identification of leads in research to supporting commercial-stage products. Most recently, Dr. Teichman served as Vice President and Chief Development Officer at ARYx Therapeutics, where he was involved in identifying and advancing three products from the research stage into clinical development. During the past 20 years, Dr. Teichman has held senior level executive positions at Genentech, Medco Research (now part of King Pharmaceuticals), Glycomed (now part of Ligand Pharmaceuticals), and Mimetix. He has provided scientific advisory services and has acted in an interim executive role for numerous early-stage and established biotechnology companies. Dr. Teichman holds an M.D. from Columbia University and a B.S. in Chemistry from Columbia College, Columbia University. He is board certified in Internal Medicine and Cardiology. Dr. Teichman is a Fellow of the American College of Cardiology (FACC) and the American College of Physicians (FACP). Dr. Teichman served as Associate Clinical Professor of Medicine at University of California in San Francisco from 1990 to 2001. He has more than 40 original publications, reviews and abstracts published in peer-reviewed and invited medical journals.

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Legal Proceedings

Raptor knows of no material, active or pending legal proceedings against it, nor is Raptor involved as a plaintiff in any material proceedings or pending litigation.

Research and Development

Raptor is a research and development company and its plan is to focus its efforts in the discovery, research, preclinical and clinical development of its RAP based platforms, complementary technologies and clinical drug candidates to provide therapies that Raptor believes will be safer, less intrusive, and more effective than current approaches in treating a wide variety of brain disorders and neurodegenerative diseases, genetic disorders and cancer. During the period from September 8, 2005 (inception) to May 31, 2009, Raptor incurred approximately $8.3 million in research and development costs. Please see the section titled, Raptor s Management s Discussion and Analysis of Financial Condition and Results of Operations in this joint proxystatement/prospectus for Raptor s planned research and development activities in the next twelve months.

Compliance with Environmental Laws

Raptor estimates the annual cost of compliance with environmental laws, comprised primarily of hazardous waste removal, will be approximately $5,000.

Employees

Raptor presently has nine full time employees, including five executives, two scientists and one program director in Raptor s research and development department and one senior manager in Raptor s finance department. Raptor also has one part-time research intern in Raptor s research and development department. Based on Raptor s current plan, over the next 12 month period, Raptor anticipates hiring a regulatory director. Raptor also plans to supplement Raptor s human resources needs through consultants and contractors as needed.

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TORREYPINES MANAGEMENT S DISCUSSION AND ANALYSIS OF

FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of financial condition and results of operations should be read together with the section titled, Selected Historical Consolidated Financial Data of TorreyPines in this joint proxy statement/prospectus and TorreyPines financial statements and accompanying notes appearing elsewhere in this joint proxy statement/prospectus. This discussion of TorreyPines financial condition and results of operations contains certain statements that are not strictly historical and are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and involve a high degree of risk and uncertainty. Actual results may differ materially from those projected in the forward-looking statements due to other risks and uncertainties that exist in TorreyPines operations, development efforts and business environment, including those set forth in the section titled, Risk Factors Risks Related to TorreyPines in this joint proxy statement/prospectus, the other risks and uncertainties described in the section titled, Risk Factors in this joint proxy statement/prospectus and the other risks and uncertainties described elsewhere in this joint proxy statement/prospectus. All forward-looking statements included in this joint proxy statement/prospectus are based on information available to TorreyPines as of the date hereof, and TorreyPines assumes no obligation to update any such forward-looking statement.

Proposed Merger with Raptor Pharmaceuticals Corp.

TorreyPines has effectively ceased all business operations related to the development of its product candidates to focus its efforts on the completion of the merger with Raptor and a possible strategic transaction related to its product candidates to the extent permitted under the merger agreement. Following the completion of the merger, the current management and board of directors of TorreyPines will have no control over the ultimate decisions regarding the combined company s operations and business, including whether the combined company will elect to dispose of TorreyPines product candidates in a strategic transaction, reinitiate their development, abandon them entirely or any combination of the foregoing. Most of TorreyPines financial condition and result of operations described below relates to TorreyPines current product candidates and related matters, and will only be relevant if the combined company attempts to continue to develop TorreyPines product candidates, which it may never do. Prior to executing the merger agreement with Raptor, TorreyPines board of directors approved a Plan of Liquidation and Dissolution and called a stockholder meeting to vote on that plan, which meeting was cancelled as a condition to the execution of the merger agreement. If TorreyPines is unable to complete the merger or another financing or strategic transaction, it does not expect to be able to continue as a going concern and may be required to liquidate in a voluntary dissolution under Delaware law or to seek protection under the provisions of the U.S. Bankruptcy Code.

Most, if not all, of the combined company s business immediately following the merger will be the business conducted by Raptor immediately prior to the merger, and most if not all of the descriptions of TorreyPines business in this joint proxy statement/prospectus, as well as the trends and risks that apply to TorreyPines business, will change from those described herein based on TorreyPines business to date and otherwise may no longer be applicable to the combined company. In addition, because of the pending merger with Raptor and the other strategic transactions TorreyPines may pursue with respect to its product candidates, TorreyPines believes its historical operating results are not indicative of future results. TorreyPines encourages you to review the section titled, Raptor s Management s Discussion and Analysis of Financial Condition and Results of Operations appearing elsewhere in this joint proxy statement/prospectus for a description of the substantial portion of the expected business and operations and financial condition of the combined company if the merger is approved and completed.

Overview

TorreyPines is a biopharmaceutical company that has been committed to providing patients with better alternatives to existing therapies through the development and commercialization of small molecule compounds. TorreyPines goal is to develop versatile product candidates each capable of treating a number of diseases and

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disorders characterized by moderate to severe pain, including acute migraine, migraine prophylaxis and chronic pain, such as neuropathic pain. Due to TorreyPines current financial condition as described further in this report, TorreyPines has been exploring strategic alternatives, including the proposed merger with Raptor, in order to continue the development of its two ionotropic glutamate receptor antagonist product candidates. If TorreyPines is unable to complete the merger with Raptor, it may be unable to continue as a going concern and may be forced to cease operations, seek protection under the provisions of the U.S. Bankruptcy Code or liquidate and dissolve.

TorreyPines two ionotropic glutamate receptor antagonists, NGX426 and tezampanel, are clinical stage product candidates. NGX426 and tezampanel competitively block the binding of glutamate at the AMPA and kainate glutamate receptor subtypes. While normal glutamate levels are essential, excess glutamate has been implicated in a number of diseases and disorders. NGX426 and tezampanel are the first glutamate receptor antagonists with this combined AMPA and kainite binding activity to be tested in humans.

NGX426 is an orally bioavailable prodrug of tezampanel that is ready to enter Phase II testing. In clinical trials, NGX426 has been shown to rapidly convert to tezampanel, the active moiety. In December 2008 TorreyPines announced that a single dose of NGX426 administered to healthy male adults demonstrated a statistically significant reduction in spontaneous pain, hyperalgesia (abnormally increased pain state) and allodynia (pain resulting from normally non-painful stimuli to the skin) compared to placebo following injection under the skin of capsaicin in an experimental model of pain. TorreyPines also completed two additional Phase I trials in healthy volunteers to evaluate the safety and tolerability of NGX426 given in either a single dose or given once daily for five consecutive days.

Tezampanel, the active parent compound of NGX426, has been shown to be safe and well tolerated in more than 500 healthy subjects and patients in single and multiple doses. Three Phase I and six Phase II clinical trials have been completed and all six Phase II trials demonstrated the analgesic effect of tezampanel across a variety of pain models. In the largest of the Phase II trials, a single dose of tezampanel given by injection was statistically significant compared to placebo in treating acute migraine headache in 306 migraineurs. TorreyPines held a successful end of Phase II meeting with the U.S. Food and Drug Administration (FDA) on September 29, 2008. Following the Phase II meeting, the FDA agreed that a Phase III program for tezampanel in acute migraine may be initiated.

These clinical data suggest that both NGX426 and tezampanel have potential therapeutic utility in treating moderate to severe acute pain, including acute migraine, migraine prophylaxis and chronic pain, such as neuropathic pain. In order to pursue further clinical development of NGX426 and tezampanel, TorreyPines will need to secure project financing, equity financing, or a development partner.

Going Concern and Management s Plan

TorreyPines independent registered public accounting firm has included an explanatory paragraph in their report on TorreyPines 2008 financial statements related to the uncertainty and substantial doubt of TorreyPines ability to continue as a going concern.

TorreyPines has incurred net losses of $22.8 million, $23.4 million and $25.4 million for the years ended December 31, 2008, 2007 and 2006, respectively. Since inception, and through June 30, 2009, TorreyPines has an accumulated deficit of $121.9 million. Based on TorreyPines operating plan, its existing cash and cash equivalents will only fund its operations through the third quarter, and possibly into the fourth quarter, of 2009. These conditions raise substantial doubt about TorreyPines ability to continue as a going concern. The accompanying financial statements have been prepared assuming that TorreyPines will continue as a going concern. This basis of accounting contemplates the recovery of TorreyPines assets and the satisfaction of liabilities in the normal course of business.

TorreyPines management plans to address the expected shortfall of working capital by completing the merger with Raptor or securing additional funding through project financing, equity financing, a development partner or sale of assets. There can be no assurance that TorreyPines will be able to obtain any sources of funding.

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If TorreyPines cannot complete the merger with Raptor in a timely manner, or otherwise obtain sufficient funding in the short-term, it may be forced to file for bankruptcy, cease operations or liquidate and dissolve. The consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts and classification of liabilities that might be necessary should TorreyPines be forced to take any such actions.

Financial Operations Overview

Revenue

All of TorreyPines revenue to date has been derived from license and option fees, research funding from TorreyPines strategic alliance agreements or the sale of research programs. TorreyPines will continue to seek partners or acquirers for all of its product candidates.

Research and Development

Since inception, TorreyPines has focused on discovery and development of novel small molecule compounds to treat a number of acute and chronic diseases and disorders.

TorreyPines expenses research and development costs as incurred. Research and development expense consists of expenses incurred in identifying, researching, developing and testing product candidates. These expenses primarily consist of the following:

- compensation of personnel and consultants associated with research and development activities;
- fees paid to contract research organizations and professional service providers for independent monitoring analysis and regulatory services for TorreyPines clinical trials;
- laboratory supplies and materials;
- manufacturing of product candidates for use in TorreyPines preclinical testing and clinical trials;
- preclinical studies;
- depreciation of equipment; and
- allocated costs of facilities and infrastructure.

Because of the risks inherent in research and development, TorreyPines cannot reasonably estimate or know the nature, timing and estimated costs of the efforts necessary to complete the development of its programs, the anticipated completion dates of these programs, or the period in which material net cash inflows are expected to commence, if at all, from the programs described above and any potential future product candidates. If either TorreyPines or any of its partners fail to complete any stage of the development of any potential products in a timely manner, it could have a material adverse effect on TorreyPines operations, financial position and liquidity.

General and Administrative

General and administrative expense consists primarily of salaries and other related costs related to the performance of executive, finance, accounting, business development, information technology and human resource functions. Other costs include facility costs not otherwise included in research and development expense and professional fees for legal and accounting services.

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Results of Operations

Comparison of the Three Months Ended June 30, 2009 and 2008

The following table summarizes the significant components of TorreyPines results of operations for the three months ended June 30, 2009 and 2008, in thousands, together with the change in such items in dollars and as a percentage.

	For the Three Months Ended June 30,			
	2009	2008	$ Change	% Change
Revenue	$ 280	$ 1,212	$ (932)	(77)%
Research and development expense	61	5,491	(5,430)	(99)%
General and administrative expense	742	1,751	1,009	(58)%
Interest income	2	113	(111)	(98)%
Interest expense	11	110	99	(90)%
Other income (expense), net	(76)	(1,423)	1,347	95%

Revenue. Revenue decreased to $0.3 million for the three months ended June 30, 2009 from $1.2 million for the same period in 2008. The decrease of $0.9 million was due to the conclusion of TorreyPines Alzheimer s disease genetics collaboration agreement with Eisai Co., Ltd., or Esai, in September 2008, partially offset by the sale of TorreyPines GSM program and rights to certain non-core technology assets. During 2009 TorreyPines recorded no revenue associated with its Alzheimer s disease genetics collaboration agreement with Eisai, compared to three months of revenue for the quarter ended June 30, 2008.

Research and development expense. Research and development decreased to $61,000 for the three months ended June 30, 2009 from $5.5 million for the same period in 2008. The $5.4 million decrease was attributable to a decrease in research expense of $1.2 million and a decrease in development expense of $4.2 million.

The decrease in research expense is due to the conclusion of TorreyPines GSM collaboration agreement with Eisai in February 2008 and the conclusion of TorreyPines Alzheimer s disease genetics collaboration agreement with Eisai in September 2008. In September 2008 TorreyPines initiated a strategic restructuring under which it transitioned from a discovery and development company to a development-only company. As a result, TorreyPines did not incur research expenses during the three months ended June 30, 2009.

During the second quarter of 2009 TorreyPines had no ongoing clinical development studies. The decrease in development expense is the result of a lack of working capital and is specifically due to decreased clinical development activities for tezampanel, NGX424 and NGX267 in the three months ended June 30, 2009 compared to the same period of 2008.

General and administrative expense. General and administrative expense decreased to $0.7 million for the three months ended June 30, 2009 from $1.8 million for the same period in 2008. The $1.0 million decrease was due to decreased personnel costs and related expenses and decreased professional services costs for the three months ended June 30, 2009 compared to the same period of 2008.

Interest income. Interest income decreased to $2,000 for the three months ended June 30, 2009 from $113,000 for the same period in 2008. The decrease of $111,000 was due to a lower average cash and cash equivalents balance during the second quarter of 2009 compared to the second quarter of 2008.

Interest expense. Interest expense decreased to $11,000 for the three months ended June 30, 2009 from $110,000 for the same period in 2008. The $99,000 decrease is due to the April 2009 payoff of TorreyPines note payable.

Other income (expense), net. Other income (expense), net for the three months ended June 30, 2009 is comprised of a loss on extinguishment of debt of $76,000. Other income (expense), net for the three months

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ended June 30, 2008 is comprised of a loss on the fair value of TorreyPines investment in OXIS International, Inc. of $1,258,000 and a loss on extinguishment of debt of $165,000.

Comparison of the Six Months Ended June 30, 2009 and 2008

The following table summarizes the significant components of TorreyPines results of operations for the six months ended June 30, 2009 and 2008, in thousands, together with the change in such items in dollars and as a percentage.

	For the Three Months Ended June 30,			
	2009	**2008**	**$ Change**	**% Change**
Revenue	$ 280	$ 3,258	$ (2,978)	(91)%
Research and development expense	916	10,751	(9,835)	(91)%
General and administrative expense	2,010	3,199	(1,189)	(37)%
Interest income	10	330	(320)	(97)%
Interest expense	56	257	(201)	(78)%
Other income (expense), net	(36)	(724)	688	95%

Revenue. Revenue decreased to $0.3 million for the six months ended June 30, 2009 from $3.3 million for the same period in 2008. The decrease of $3.0 million was due to the conclusion of TorreyPines Alzheimer s disease genetics collaboration agreement with Eisai in September 2008, partially offset by the sale of TorreyPines GSM program and rights to certain non-core technology assets. During 2009 TorreyPines recorded no revenue associated with its Alzheimer s disease genetics collaboration agreement with Eisai compared to six months of revenue for the six month period ended June 30, 2008.

Research and development expense. Research and development decreased to $0.9 million for the six months ended June 30, 2009 from $10.8 million for the same period in 2008. The $9.8 million decrease was attributable to a decrease in research expense of $2.9 million and a decrease in development expense of $6.9 million.

The decrease in research expense is due to the conclusion of TorreyPines GSM collaboration agreement with Eisai in February 2008 and the conclusion of TorreyPines Alzheimer s disease genetics collaboration agreement with Eisai in September 2008. In September 2008 TorreyPines initiated a strategic restructuring under which it transitioned from a discovery and development company to a development-only company. As a result, TorreyPines did not incur research expenses during the six months ended June 30, 2009.

During the first six months of 2009 TorreyPines had no ongoing clinical development studies. The decrease in development expense is the result of a lack of working capital and is specifically due to decreased clinical development activities for tezampanel, NGX424 and NGX267 in the six months ended June 30, 2009 compared to the same period of 2008.

General and administrative expense. General and administrative expense decreased to $2.0 million for the six months ended June 30, 2009 from $3.2 million for the same period in 2008. The $1.2 million decrease was due to decreased personnel costs and related expenses and decreased professional services costs for the six months ended June 30, 2009 compared to the same period of 2008.

Interest income. Interest income decreased to $10,000 for the six months ended June 30, 2009 from $330,000 for the same period in 2008. The decrease of $320,000 was due to a lower average cash and cash equivalents balance during the first six months of 2009 compared to the same period of 2008.

Interest expense. Interest expense decreased to $56,000 for the six months ended June 30, 2009 from $257,000 for the same period in 2008. The $201,000 decrease is due to the April 2009 payoff of TorreyPines note payable.

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Other income (expense), net. Other income (expense), net for the six months ended June 30, 2009 is comprised of a loss on extinguishment of debt of $76,000 offset by a gain on disposal of property and equipment of $41,000. Other income (expense), net for the six months ended June 30, 2008 is comprised of a loss on the fair value of TorreyPines investment in OXIS International, Inc. of $559,000 and a loss on extinguishment of debt of $165,000.

Comparison of the Year Ended December 31, 2008 and 2007

The following table summarizes TorreyPines results of operations with respect to the items set forth in such table for the years ended December 31, 2008 and 2007, in thousands, together with the change in such items in dollars and as a percentage.

	Years Ended December 31			
	2008	**2007**	**$ Change**	**% Change**
Revenue	$ 6,071	$ 9,850	$ (3,779)	(38)%
Research and development expenses	18,949	27,977	(9,028)	(32)%
General and administrative expenses	5,801	5,643	158	3%
Loss on impairment of purchased patents	3,074		3,074	100%
Interest income	453	2,069	(1,616)	(78)%
Interest expense	376	817	(441)	(54)%
Other income (expense), net	(1,109)	(851)	(258)	(30)%

Revenue. Revenue decreased to $6.1 million for the year ended December 31, 2008 from $9.8 million for the same period in 2007. The decrease of $3.7 million was due to the conclusion of TorreyPines GSM collaboration agreement with Eisai in February 2008 and the conclusion of TorreyPines Alzheimer s disease genetics collaboration agreement with Eisai in September 2008, partially offset by the sale of TorreyPines Alzheimer s disease genetics program for $1.5 million. During 2008 in connection with the GSM collaboration agreement TorreyPines recognized revenue for two of the twelve months ended December 31, 2008; during 2007 TorreyPines recognized revenue from this collaboration agreement for each of the twelve months ended December 31, 2007. During 2008 in connection with the Alzheimer s disease genetics collaboration agreement TorreyPines recognized revenue for nine of the twelve months ended December 31, 2008; during 2007 TorreyPines recognized revenue from this collaboration agreement for each of the twelve months ended December 31, 2007.

Research and development expense. Research and development expense decreased to $18.9 million in 2008 from $27.9 million in 2007. The $9.0 million decrease was attributable to a $6.0 million decrease in expense for TorreyPines development programs and a $3.0 million decrease in expense for TorreyPines discovery programs. The decrease in spending for TorreyPines development programs was due to decreased clinical development activities for tezampanel in 2008 compared to 2007. The decrease in spending for TorreyPines discovery programs was primarily due to the conclusion of its GSM collaboration agreement with Eisai in February 2008. Specifically, salaries and benefits expense and lab supplies expense were lower in 2008 compared to 2007.

General and administrative expense. General and administrative expense increased to $5.8 million in 2008 from $5.6 million in 2007. The $0.2 million increase was primarily attributable to increased professional services costs offset by decreased personnel costs and related expenses and decreased stock based compensation expense in 2008 compared to 2007.

Loss on impairment of purchased patents. Loss on impairment of purchased patents increased to $3.1 million in 2008 from $0 in 2007. As of December 31, 2008 TorreyPines estimates that the purchased patents have a fair value of $0, therefore it recorded an impairment for the total carrying value of the patents. TorreyPines did not record a loss on impairment of purchase patents during 2007.

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Interest income. Interest income in 2008 decreased to $0.5 million in 2008 from $2.1 million in 2007. The decrease of $1.6 million is due to a lower average cash and cash equivalents balance in 2008 compared to 2007.

Interest expense. Interest expense decreased to $0.4 million in 2008 from $0.8 million in 2007. The $0.4 million decrease is attributable to a lower average debt balance in 2008 compared to 2007 and a lower average interest rate in 2008 compared to 2007.

Other income (expense), net. Other income (expense), net for the twelve months ended December 31, 2008 is comprised of a decline in the fair value of TorreyPines investment in OXIS International, Inc. (OXIS) of $559,000, a loss on the sale of TorreyPines investment in OXIS of $377,000, a loss on the extinguishment of debt of $165,000, a loss on impairment of property and equipment of $153,000, and a gain on foreign currency translations of $145,000.

Other income (expense), net for the twelve months ended December 31, 2007 is comprised of an impairment of the investment in OXIS of $1,881,000 and other expense of $3,000, offset by income from a warrant valuation adjustment of $892,000 and equity in income of OXIS of $141,000.

Comparison of the Year Ended December 31, 2007 and 2006

The following table summarizes TorreyPines results of operations with respect to the items set forth in such table for the years ended December 31, 2007 and 2006, in thousands, together with the change in such items in dollars and as a percentage.

	Years Ended December 31			
	2007	**2006**	**$ Change**	**% Change**
Revenue	$ 9,850	$ 9,850	$	%
Research and development expenses	27,977	22,353	5,624	25%
General and administrative expenses	5,643	3,971	1,672	42%
Purchased in-process research and development		8,328	(8,328)	(100)%
Interest income	2,069	1,559	510	33%
Interest expense	817	994	(177)	(18)%
Other income (expense), net	(851)	(1,140)	289	25%

Revenue. Revenue for the year ended December 31, 2007 was unchanged from the same period in 2006. During 2007 there were no changes in TorreyPines strategic licensing agreements that affected its revenue from license and option fees or research funding.

Research and development expense. Research and development expense increased to $27.9 million in 2007 from $22.3 million in 2006. The $5.6 million increase was attributable to a $7.5 million increase in expense for TorreyPines development programs, offset by a $1.9 million decrease in expense for its discovery programs. The increase in spending for TorreyPines development programs was due to increased clinical development activities for tezampanel, NGX426 and NGX267 in 2007 compared to 2006. The decrease in spending for TorreyPines discovery programs was due to lower costs incurred for its GSM program and its Alzheimer s disease genetics program in 2007 compared to 2006.

General and administrative expense. General and administrative expense increased to $5.6 million in 2007 from $4.0 million in 2006. The $1.6 million increase was primarily attributable to increased personnel costs and related expenses and increased stock based compensation expense in 2007 compared to 2006. The increase in personnel costs and related expenses is due to the addition of key general and administrative personnel during the first quarter of 2007. The increase in stock based compensation expense in 2007 compared to 2006 is due to the recognition of a full year of expense associated with restricted stock units granted to executives in late 2006. TorreyPines also recognized stock based compensation expense in 2007 in connection with stock options granted to members of TorreyPines board of directors. There were no similar stock option grants in 2006.

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Purchased in-process research and development expense. There was no Purchased in-process research and development expense during the year ended December 31, 2007. Purchased in-process research and development for the year ended December 31, 2006 of $8.3 million resulted from the merger of TorreyPines with Axonyx Inc. in October 2006 and represents the estimated fair value of certain intangible assets acquired in that transaction. TorreyPines determined these assets had not reached technological feasibility and had no alternative future use, therefore the assets were fully expensed in 2006.

Interest income. Interest income in 2007 increased to $2.1 million in 2007 from $1.6 million in 2006. The increase of $0.5 million is due to higher average cash and cash equivalents balances in 2007 compared to 2006.

Interest expense. Interest expense decreased to $0.8 million in 2007 from $1.0 million in 2006. The $0.2 million decrease is attributable to a lower average debt balance in 2007 compared to 2006.

Other income (expense), net. Other income (expense), net for the twelve months ended December 31, 2007 is comprised of an impairment of the investment in OXIS of $1,881,000 and other expense of $3,000, offset by income from a warrant valuation adjustment of $892,000 and equity in income of OXIS of $141,000.

Other income (expense), net for the twelve months ended December 31, 2006 is comprised of equity in loss of OXIS of $916,000, a loss from a warrant valuation adjustment of $240,000 and other income of $16,000.

Liquidity and Capital Resources

Since inception, TorreyPines has funded its operations primarily through sales of its equity securities, payments under its research agreements, debt financings and interest income. Through June 30, 2009, TorreyPines had received approximately $68.0 million in net proceeds from the sale of equity securities, $47.4 million in payments under its research agreements, $22.4 million from debt issuances, and $5.5 million in interest income. In addition, as a result of a business combination TorreyPines completed in October 2006, it received $46.5 million of cash.

At June 30, 2009, TorreyPines had cash and cash equivalents of $1.2 million as compared to $10.9 million at December 31, 2008. The cash balance at June 30, 2009 is $9.7 million lower than the balance at December 31, 2008 due largely to the current quarter operating loss and repayments of debt.

TorreyPines believes it has sufficient funds to enable it to meet its ongoing working capital requirements through the third quarter, and possibly into the fourth quarter, of 2009. For a further discussion of the risks related to the availability of cash to fund TorreyPines future operations, please see the section titled, TorreyPines Risk Factors in this joint proxy statement/prospectus.

TorreyPines has been exploring financing and strategic alternatives, and is now pursuing the merger with Raptor. If the merger with Raptor is not consummated, TorreyPines may pursue a possible project financing, equity financing, or a partnership in order to continue the development of its two ionotropic glutamate receptor antagonist product candidates. The Merger Agreement with Raptor includes significant limitations on the financing alternatives TorreyPines may pursue without obtaining Raptor s consent. If TorreyPines is unable to complete the merger with Raptor, or, if that is not completed, a financing or strategic transaction during 2009, it will likely be unable to continue as a going concern and may be forced to file for bankruptcy, cease operations or liquidate and dissolve.

If TorreyPines raises additional capital by issuing equity securities, its existing stockholders ownership will be diluted. Any debt financing TorreyPines enters into may involve covenants that restrict its operations. These restrictive covenants may include limitations on additional borrowing, specific restrictions on the use of TorreyPines assets as well as prohibitions on its ability to create liens, pay dividends, redeem its stock or make investments. In addition, if TorreyPines raises additional funds through collaboration and licensing arrangements, it may be required to relinquish potentially valuable rights to it product candidates, or grant licenses on terms that are not favorable to it.

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Off-Balance Sheet Arrangements

TorreyPines does not have any off-balance sheet arrangements.

Critical Accounting Policies and Significant Judgments and Estimates

TorreyPines discussion and analysis of its financial condition and results of operations are based on its financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States, or GAAP. The preparation of these financial statements requires TorreyPines to make estimates and judgments that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting periods. Note 1 of the notes to TorreyPines financial statements included in its Annual Report on Form 10-K for the fiscal year ended December 31, 2008 and filed with the SEC on March 27, 2009 includes a summary of its significant accounting policies and methods used in the preparation of its financial statements. On an on-going basis, TorreyPines management evaluates its estimates and judgments, including those related to revenue, accrued expenses, in-process research and development and stock-based compensation. TorreyPines management bases its estimates on historical experience, known trends and events, and various other factors that it believes to be reasonable under the circumstances, the results of which form its basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

TorreyPines management believes the following accounting policies and estimates are most critical to aid you in understanding and evaluating its reported financial results.

Revenue Recognition

TorreyPines recognized revenue in accordance with the SEC s Staff Accounting Bulletin, or SAB, No. 104, *Revenue Recognition*, and Emerging Issues Task Force, or EITF, No. 00-21, *Revenue Arrangements with Multiple Deliverables*. To date, TorreyPines has recorded license and option fee revenue and research funding revenue from four research agreements with Eisai. The terms of the agreements typically include up-front payments to TorreyPines of non-refundable license and/or option fees and, in some cases, payments for research efforts. Future agreements could also include milestone payments and royalty payments.

TorreyPines recognized revenue from up-front non-refundable license and option fees on a straight-line basis over the contracted or estimated period of performance, which is typically the research term. Amounts received for research funding for a specific number of full-time researchers are recognized as revenue as the services are provided, as long as the amounts received are not refundable regardless of the results of the research project. Milestone payments, if any, will be recognized on achievement of the milestone, unless the amounts received are creditable against royalties or TorreyPines has on-going performance obligations. Royalty payments, if any, will be recognized on sale of the related product, provided the royalty amounts are fixed and determinable, and collection of the related receivable is probable.

Accrued Expenses

As part of the process of preparing financial statements, TorreyPines is required to estimate accrued expenses. This process involves identifying services which have been performed on TorreyPines behalf, and estimating the level of service performed and the associated cost incurred for such service as of each balance sheet date in TorreyPines financial statements. Examples of services for which TorreyPines must estimate accrued expenses include contract service fees paid to contract manufacturers in conjunction with the production of clinical drug supplies and to contract research organizations in connection with TorreyPines preclinical studies and clinical trials. In connection with such service fees, TorreyPines estimates are most affected by its understanding of the status and timing of services provided. The majority of TorreyPines service providers

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invoice TorreyPines in arrears for services performed. In the event that TorreyPines does not identify certain costs which have been incurred, or it under- or over-estimate the level of services performed or the costs of such services in a given period, TorreyPines reported expenses for such period would be too low or too high. The date on which certain services commence, the level of services performed on or before a given date, and the cost of such services are often determined based on subjective judgments. TorreyPines makes these judgments based upon the facts and circumstances known to it. To date, TorreyPines has been able to reasonably estimate these costs; however, as TorreyPines increases the level of services performed on its behalf, it will become increasingly more difficult for TorreyPines to estimate these costs, which could result in TorreyPines reported expenses for future periods being too high or too low.

Stock-Based Compensation

TorreyPines estimates the fair value of stock options granted using the Black-Scholes option valuation model and the fair value of restricted stock units granted using a Monte-Carlo simulation option-pricing model. The fair values of stock option and restricted stock unit awards are amortized over the requisite service periods of the awards. Both the Black-Scholes option valuation model and the Monte-Carlo simulation option-pricing model require the input of highly subjective assumptions, including the option or restricted stock unit s expected life, price volatility of the underlying stock, risk free interest rate and expected dividend rate. As stock-based compensation expense related to stock options is based on awards ultimately expected to vest, the stock-based compensation expense has been reduced for estimated forfeitures of stock options. Statement of Financial Accounting Standards, or SFAS, No. 123R, *Share-Based Payment*, requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Stock option forfeitures were estimated based on historical experience. TorreyPines may elect to use different assumptions under both the Black-Scholes option valuation model or the Monte-Carlo simulation option- pricing model in the future, which could materially affect TorreyPines net income or loss and net income or loss per share.

Recent Accounting Pronouncements

See Note 1 in the accompanying notes to TorreyPines consolidated financial statements beginning on page F-1 in this joint proxy statement/prospectus.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS,

AND DIRECTOR INDEPENDENCE

Related-Person Transactions Policy and Procedures

In 2007 TorreyPines adopted a written Related-Person Transactions Policy that sets forth its policies and procedures regarding the identification, review, consideration and approval or ratification of related-persons transactions. There have been no revisions to the Related-Persons Transactions Policy following its adoption in 2007. For purposes of TorreyPines policy only, a related-person transaction is a transaction, arrangement or relationship (or any series of similar transactions, arrangements or relationships) in which TorreyPines and any related person are participants involving an amount that exceeds $120,000. Transactions involving compensation for services provided to TorreyPines as an employee, director, consultant or similar capacity by a related person are not covered by this policy. A related person is any executive officer, director, or more than 5% stockholder of TorreyPines, including any of their immediate family members, and any entity owned or controlled by such persons.

Under the policy, where a transaction has been identified as a related-person transaction, management must present information regarding the proposed related-person transaction to TorreyPines Audit Committee (or, where TorreyPines Audit Committee approval would be inappropriate, to another independent body of the TorreyPines board of directors) for consideration and approval or ratification. The presentation must include a

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description of, among other things, the material facts, the interests, direct and indirect, of the related persons, the benefits to TorreyPines of the transaction and whether any alternative transactions were available. To identify related-person transactions in advance, TorreyPines relies on information supplied by its executive officers and directors. In considering related-person transactions, TorreyPines Audit Committee takes into account the relevant available facts and circumstances including, but not limited to (a) the risks, costs and benefits to TorreyPines, (b) the impact on a director s independence in the event the related person is a director, immediate family member of a director or an entity with which a director is affiliated, (c) the terms of the transaction, (d) the availability of other sources for comparable services or products and (e) the terms available to or from, as the case may be, unrelated third parties or to or from employees generally. In the event a director has an interest in the proposed transaction, the director must recuse himself or herself from the deliberations and approval. The policy requires that, in determining whether to approve, ratify or reject a related-person transaction, TorreyPines Audit Committee look at, in light of known circumstances, whether the transaction is in, or is not inconsistent with, the best interests of TorreyPines and its stockholders, as TorreyPines Audit Committee determines in the good faith exercise of its discretion.

Certain Related-Person Transactions

TorreyPines has entered into indemnity agreements with certain officers and directors which provide, among other things, that TorreyPines will indemnify such officer or director, under the circumstances and to the extent provided for therein, for expenses, damages, judgments, fines and settlements he or she may be required to pay in actions or proceedings which he or she is or may be made a party by reason of his or her position as a director, officer or other agent of TorreyPines, and otherwise to the fullest extent permitted under Delaware law and TorreyPines Bylaws.

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT

TORREYPINES MARKET RISK

TorreyPines is exposed to market risk related to changes in interest rates. TorreyPines current investment policy is to maintain an investment portfolio consisting mainly of U.S. money market and high-grade corporate securities, directly or through managed funds, with maturities of one and a half years or less. TorreyPines does not enter into investments for trading or speculative purposes. TorreyPines cash is deposited in and invested through highly rated financial institutions in North America. If market interest rates were to increase immediately and uniformly by 10% from levels at December 31, 2008 and 2007, TorreyPines cash and cash equivalents balances would not be significantly affected.

TorreyPines had foreign currency accounts that were exposed to currency exchange risk. The operations of TorreyPines Belgium subsidiary were closed in December 2008. The functional currency of TorreyPines European subsidiary, which was based in Belgium, was the local currency. Accordingly, the accounts of this subsidiary were translated from the local currency to the U.S. dollar using the exchange rate at the balance sheet date for the balance sheet accounts, and using the average exchange rate during the period for revenue and expense accounts. The effects of translation are recorded in accumulated other comprehensive loss as a separate component of stockholders deficit through the closure date for the subsidiary and in other income (expense) in the results of operations thereafter. For the years ended December 31, 2008 and 2007, TorreyPines recorded exchange gains of $145,000 and $0, respectively. For the year ended December 31, 2008 a total of $486,000 of foreign currency translation gains that were recorded in stockholders equity (deficit) were reclassified to other income (expense) upon the closure of the Belgium subsidiary.

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RAPTOR S MANAGEMENT S DISCUSSION AND ANALYSIS OF

FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of financial condition and results of operations should be read together with Selected Historical Financial Data of Raptor and Raptor s financial statements and accompanying notes appearing elsewhere in this joint proxy statement/prospectus. This discussion contains forward-looking statements, based on current expectations and related to future events and Raptor s future financial performance, that involve risks and uncertainties. Raptor s actual results may differ materially from those anticipated in these forward-looking statements as a result of many important factors, including those set forth in the section titled, Risk Factors in this joint proxy statement/prospectus and elsewhere in this joint proxy statement/prospectus.

Overview

PLAN OF OPERATION

You should read the following discussion in conjunction with Raptor s condensed consolidated financial statements as of May 31, 2009, and the notes to such condensed consolidated financial statements included elsewhere in this joint proxy statement/prospectus. All references to Raptor include the activities of Raptor Pharmaceuticals Corp. and its wholly-owned subsidiaries, Raptor Pharmaceutical Inc. and Raptor Therapeutics Inc. (f/k/a Bennu Pharmaceuticals Inc.), or Raptor Therapeutics.

This Management s Discussion and Analysis of Financial Condition or Plan of Operation section contains forward-looking statements. Please see Forward-Looking Statements for a discussion of the uncertainties, risks and assumptions associated with these statements. Raptor s actual results and the timing of certain events could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those discussed below and elsewhere in this joint proxy statement/prospectus, particularly under the section titled, Risk Factors.

Plan of Operation and Overview

Raptor believes that it is building a balanced pipeline of drug candidates that may expand the reach and benefit of existing therapeutics. Raptor s product portfolio includes both candidates from its proprietary drug targeting platforms and in-licensed and acquired product candidates.

Raptor s current pipeline includes four clinical development programs plus three preclinical programs that are based upon its proprietary drug-targeting platforms.

Clinical Development Programs

Raptor s four clinical development programs are based on existing therapeutics that it is reformulating for potential improvement in safety and/or efficacy and application for in new disease indications.

These clinical development programs include the following.

DR Cysteamine for the potential treatment of: cystinosis, NASH and HD; and

Convivia for the potential management of acetaldehyde toxicity due to alcohol consumption by individuals with ALDH2 deficiency.

Preclinical Programs

Raptor s preclinical platforms consist of targeted therapeutics, which it is developing for the potential treatment of multiple indications, including liver diseases, neurodegenerative diseases and breast cancer:

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Raptor s 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.

Raptor s Mesd platform consists of WntTide for the potential treatment of breast cancer.

Future Activities

Over the next 12 months, Raptor plans to conduct research and development activities based upon its DR Cysteamine product candidate, its Convivia™ product candidate, its RAP-based platform, its Mesd-based peptides, and future in-licensed technologies and acquired technologies. A brief summary of Raptor s primary objectives in the next 12 months for its research and development activities is provided below. Raptor s plans for research and development activities over the next 12 months can only be implemented if it is successful in raising significant funds during this period. In addition, there can be no assurances that Raptor s research and development activities will be successful. Raptor needs to make important progress towards achieving at least one of its major clinical objectives or its ability to continue as a going concern will be adversely impacted due to the potential inability for it to raise additional capital.

Clinical Development Programs

Raptor develops clinical-stage drug product candidates which are: internally discovered therapeutic candidates based on its 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 Raptor could repurpose or reformulate as potentially more effective or convenient treatments for a drug s currently approved indications.

Development of DR Cysteamine for the Potential Treatment of Nephropathic Cystinosis and Other Diseases

Raptor s DR Cysteamine product candidate is a proprietary delayed-release, enteric-coated microbead formulation of cysteamine bitartrate contained in a gelatin capsule. Raptor is investigating DR Cysteamine for the potential treatment of: cystinosis, NASH and HD.

Immediate-release cysteamine bitartrate, a cystine-depleting agent, is currently the only FDA and 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. Raptor s 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 to Raptor for: DR Cysteamine for the treatment of cystinosis in 2006; DR Cysteamine for the treatment of Batten Disease in 2008; and cysteamine for the treatment of HD in 2008.

In June 2009, Raptor commenced its Phase IIb clinical trial of DR Cysteamine in cystinosis, in which it has enrolled three cystinosis patients and plan to enroll up to four additional cystinosis patients with a history of compliance using the currently available immediate-release form of cysteamine bitartrate. The clinical trial will evaluate safety, tolerability, pharmacokinetics and pharmacodynamics of a single dose of DR Cysteamine in patients. Release of data from the study is expected in the fourth calendar quarter of 2009. Raptor plans to follow the Phase IIb clinical study with a pivotal, Phase III clinical study in cystinosis patients anticipated to commence in the fourth calendar quarter of 2009. In October 2008, Raptor commenced a clinical trial in collaboration with UCSD to investigate a prototype formulation of DR Cysteamine for the treatment of NASH in juvenile patients. Raptor also plans to support a clinical trial investigating DR Cysteamine in HD patients in collaboration with a French institution.

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Development of Convivia™ for ALDH2 Deficiency

Convivia is Raptor s 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 acetaldehyde levels 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 Raptor 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. Raptor believes that this subset represents approximately one-third of the ALDH2 deficient adult population. Raptor is actively seeking corporate partnerships with pharmaceutical companies in selected Asian countries to continue clinical development of Convivia™ in those countries.

Preclinical Development Programs

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

These applications are based on the assumption that Raptor s targeting molecules can be engineered to bind to a selective subset of receptors with restricted tissue distribution under particular conditions of administration. Raptor believes 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.

Development of HepTide™ for Hepatocellular Carcinoma and Hepatitis C

Drugs currently used to treat primary liver cancer are often toxic to other organs and tissues. Raptor believes 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 Raptor s radio-labeled HepTide™ (a variant of RAP), HepTide™, Raptor s 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 LRP1 receptors on hepatocytes. Raptor believes that the pharmacokinetics and systemic toxicity of a number of potent anti-tumor agents may be controlled in this way.

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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.

Raptor s 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, high levels of LRP1 expression are 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.

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

Raptor is 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.

Development of NeuroTrans™ for the Potential Treatment of Diseases Affecting the Brain

Nearly 1,000 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 Raptor s proprietary RAP-based technology program to research the delivery of therapeutics across the blood-brain barrier. Raptor believes its 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.

Raptor worked with Dr. William Mobley, while he was a professor and Chairman of the Department of Neurology and Neurological Sciences, and his lab at Stanford University to study the brain transport behavior of NeuroTrans candidates. In the first year of Raptor s collaboration, a number of RAP-based peptide transport candidates were tested for their ability to bind to receptors that are thought to reside on the cells that line the blood-brain barrier. From these experiments, a lead candidate peptide was selected. In the second year of Raptor s collaboration, it completed preclinical evaluations which it believes support that NeuroTrans conjugates injected into the blood stream have the ability to seek out, bind to, and rapidly enter the cells that line the blood-brain barrier. These experiments support the NeuroTrans peptide s ability to enhance the transport of cargo molecules into the cells that line the blood-brain barrier. This collaboration has lapsed.

In June 2009, Raptor entered into a collaboration and licensing agreement with 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

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exclusive worldwide license to NeuroTrans™ for use in the delivery of diagnostic and therapeutic molecules across the blood-brain barrier. Roche s and Raptor s scientists will actively collaborate on the project. Raptor has received an initial upfront payment for the collaboration to cover Raptor s portion of the initial studies, and may earn development milestone payments and royalties in exchange for the licensing of NeuroTrans™ to Roche.

Development of 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 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 Raptor from the University. Professor Bu sits on Raptor s Scientific Advisory Board.

WntTide is Raptor s proprietary, Mesd-based peptide that it is developing as a potential therapeutic to inhibit the growth and metastasis of tumors over-expressing LRP5 or LRP6.

In November 2006, Raptor licensed the use of Mesd from Washington University in St. Louis for the potential treatment of cancer and bone density disorders. In June 2007, Raptor s preclinical study demonstrated that both Mesd and WntTide accelerated bone loss in a model of osteoporosis, suggesting inhibition of a key cellular signaling pathway was taking place. These findings indicate that WntTide may treat diseases known to be caused by an over-activation of the Wnt pathway, including certain forms of breast cancer. 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 be published in the second calendar half of 2009. Raptor is currently evaluating the next steps with researchers at Washington University in the continued development of WntTide™.

Other Development Areas

Securing Additional and Complementary Technology Licenses from Others

Raptor intends to continue to extend its development of RAP, RAP-variants and Mesd to applications in other potential therapeutics. Raptor plans 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 Raptor s ability to establish such collaborations over the next 12 months, or at all. Raptor intends to focus its 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.

Business Development Activities

As part of Raptor s ongoing business development activities, it intends to seek out industry partners interested in potential clinical applications of its proprietary molecules and co-development or drug partnerships. In the cancer area, Raptor plans to contact institutions and companies with an expressed interest in developing therapeutics to its potential anti-cancer targets. Out-licensing arrangements with these companies may include technology transfer, partnerships, or joint ventures. Joint activities may include drug product candidate development, drug product candidate manufacturing, preclinical testing or clinical research studies. Raptor plans to enter partnerships with one or more pharmaceutical companies in Asian countries for development and commercialization of its Convivia™ product candidate. Raptor also plans to seek distribution or co-development agreements with one or more companies for ex-US territories for its DR Cysteamine product candidate. There

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can be no assurance that Raptor will be able to identify appropriate industry partners or, if it is able to, that it will be able to enter into mutually acceptable agreements with them on terms that are satisfactory to Raptor, or at all.

Raptor also intends to continue its efforts to in-license or acquire clinical stage products and preclinical drugs or drug technologies. These products may be in later stage clinical development or already approved and on the market. Raptor may obtain these products through collaborations, joint ventures or through merger and/or acquisitions with other biotechnology companies.

Strategic Acquisitions

Purchase of Convivia™

In October 2007, Raptor purchased certain assets of Convivia, Inc., or Convivia, including intellectual property, know-how and research reports related to a product candidate targeting liver ALDH2 deficiency, a genetic metabolic disorder. Raptor hired Convivia s chief executive officer and founder, Thomas E. (Ted) Daley, as President of its clinical development division. In exchange for the assets related to the ALDH2 deficiency program, what Raptor now calls Convivia™, Raptor issued to Convivia 200,000 shares of Raptor s common stock, an additional 200,000 shares of Raptor s common stock to a third party in settlement of a convertible loan between the third party and Convivia, and another 37,500 shares of Raptor s common stock in settlement of other obligations of Convivia. Mr. Daley, as the former sole stockholder of Convivia, may earn additional shares of Raptor s common stock based on certain triggering events or milestones related to the development of the Convivia assets. In addition, Mr. Daley may earn cash bonuses based on the same triggering events pursuant to his employment agreement. In January 2008, Mr. Daley earned a $30,000 cash bonus pursuant to his employment agreement as a result of the milestone of Raptor s execution of a formulation agreement for manufacturing Convivia™ with Patheon. In March 2008, Raptor issued to Mr. Daley 100,000 shares of Raptor s common stock pursuant to Raptor s Convivia purchase agreement as a result of the milestone of Raptor s execution of an agreement to supply it with the active pharmaceutical ingredient for Convivia™ and two $10,000 cash bonuses pursuant to his employment agreement for reaching his six-month and one-year employment anniversaries. In October 2008, Raptor issued to Mr. Daley 100,000 shares of Raptor s common stock valued at $27,000 and a $30,000 cash bonus as a result of fulfilling a clinical milestone.

Purchase of DR Cysteamine

In December 2007, through a merger between Encode and Raptor s wholly-owned subsidiary, Raptor Therapeutics, Raptor purchased certain assets, including the clinical development rights to DR Cysteamine. Under the terms of and subject to the conditions set forth in the merger agreement, it issued 3,444,297 shares of Raptor s common stock to Encode Stockholders, Encode Options to purchase up to, in the aggregate, 357,427 shares of Raptor s common stock to the Encode Optionholders, and Encode Warrants to purchase up to, in the aggregate, 1,098,276 shares of Raptor s common stock to the Encode Warrantholders, as of the date of such agreement. Such common stock, Encode Options to purchase Raptor s common stock, and Encode Warrants to purchase Raptor s common stock combine for an aggregate amount of 4.9 million shares of Raptor s common stock issuable to the Encode Securityholders as of the closing of the merger. The Encode Securityholders are eligible to receive up to an additional 2.4 million shares of Raptor s common stock, Encode Options and Encode Warrants to purchase Raptor s common stock in the aggregate based on certain triggering events related to regulatory approval of DR Cysteamine, an Encode product program, if completed within the five year anniversary date of the merger agreement.

As a result of the Encode merger, Raptor received the exclusive worldwide license to the License Agreement, developed by clinical scientists at the UCSD, School of Medicine. In consideration of the grant of the license, prior to the merger with Raptor Therapeutics, Encode paid an initial license fee and Raptor is obligated to pay an annual maintenance fee of $15,000 until it begins commercial sales of any products developed pursuant to the License Agreement. In addition to the maintenance fee, Raptor is obligated to pay during the life of the License Agreement: milestone payments ranging from $20,000 to $750,000 for orphan

indications and from $80,000 to $1,500,000 for non-orphan indications upon the occurrence of certain events, if ever; royalties on commercial net sales from products developed pursuant to the License Agreement ranging from 1.75% to 5.5%; a percentage of sublicense fees ranging from 25% to 50%; a percentage of sublicense royalties; and a minimum annual royalty commencing the year Raptor begins commercially selling any products pursuant to the License Agreement, if ever. Under the License Agreement, Raptor is obligated to fulfill predetermined milestones within a specified number of years ranging from 0.75 to 6 years from the effective date of the License Agreement, depending on the indication. In addition, Raptor is obligated, among other things, to spend annually at least $200,000 for the development of products (which Raptor satisfied, as of its fiscal year ended August 31, 2008 by spending approximately $900,000 on such programs) pursuant to the License Agreement. As of May 31, 2009, Raptor accrued $40,000 due to UCSD for the milestone related to the first patient dosing in the NASH trial which commenced in October 2008. To the extent that Raptor fails to perform any of its obligations under the License Agreement, then UCSD may terminate the license or otherwise cause the license to become non-exclusive.

Application of Critical Accounting Policies

Raptor s condensed consolidated financial statements and accompanying notes are prepared in accordance with generally accepted accounting principles used in the U.S. Preparing financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, and expenses. These estimates and assumptions are affected by management s application of accounting policies. Raptor believes that understanding the basis and nature of the estimates and assumptions involved with the following aspects of its condensed consolidated financial statements is critical to an understanding of Raptor s condensed consolidated financial position.

Raptor believes the following critical accounting policies require it to make significant judgments and estimates in the preparation of Raptor s condensed consolidated financial statements.

Fair Value of Financial Instruments

The carrying amounts of certain of Raptor s financial instruments including cash and cash equivalents, prepaid expenses, accounts payable, accrued liabilities and capital lease liability approximate fair value due to their short maturities.

Cash and Cash Equivalents

Raptor considers all highly liquid investments with original maturities of three months or less to be cash equivalents.

Intangible Assets

Intangible assets include the intellectual property and other rights relating to DR Cysteamine and Raptor s RAP technology. Raptor s intangible assets are amortized using the straight-line method over the estimated useful life of 20 years, which is the life of Raptor s intellectual property patents. The 20 year estimated useful life is also based upon the typical development, approval, marketing and life cycle management timelines of pharmaceutical drug products.

Fixed Assets

Fixed assets, which mainly consist of leasehold improvements, lab equipment, computer hardware and software and capital lease equipment, are stated at cost. Depreciation is computed using the straight-line method over the related estimated useful lives, except for leasehold improvements and capital lease equipment, which are depreciated over the shorter of the useful life of the asset or the lease term. Significant additions and

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improvements that have useful lives estimated at greater than one year are capitalized, while repairs and maintenance are charged to expense as incurred.

Impairment of Long-Lived Assets

Raptor evaluates its long-lived assets for indicators of possible impairment by comparison of the carrying amounts to future net undiscounted cash flows expected to be generated by such assets when events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. Should an impairment exist, the impairment loss would be measured based on the excess carrying value of the asset over the asset s fair value or discounted estimates of future cash flows. Raptor has not identified any such impairment losses to date.

Income Taxes

Income taxes are recorded under the liability method, under which deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

Research and Development

Raptor is an early development stage company. Research and development costs are charged to expense as incurred. Research and development expenses include scientists salaries, lab collaborations, preclinical studies, clinical trials, clinical trial materials, regulatory and clinical consultants, lab supplies, lab services, lab equipment maintenance and small equipment purchased to support the research laboratory, amortization of intangible assets and allocated executive, human resources and facilities expenses.

In-Process Research and Development

Raptor records in-process research and development expense for a product candidate acquisition where there is not more than one potential product or usage for the assets being acquired. Raptor reviews each product candidate acquisition to determine if the purchase price should be expensed as in-process research and development or capitalized and amortized over the life of the asset.

Stock-Based Compensation

In May 2006, Raptor s stockholders approved the 2006 Equity Compensation Plan, referred to herein as the Plan. The Plan s term is ten years and allows for the granting of options to Raptor s employees, directors and consultants. Typical option grants are for ten years with exercise prices at or above market price based on the last closing price as of the date prior to the grant date as quoted on the OTC Bulletin Board and vest over four years as follows: 6/48ths on the six month anniversary of the date of grant; and 1/48th per month thereafter.

Effective September 1, 2006, Raptor s stock-based compensation is accounted for in accordance with Statement of Financial Accounting Standards (SFAS) No. 123(R) (SFAS 123(R)), *Share-Based Payment* and related interpretations. Under the fair value recognition provisions of this statement, share-based compensation cost is measured at the grant date based on the value of the award and is recognized as expense over the vesting period. Determining the fair value of share-based awards at the grant date requires judgment, including estimating future stock price volatility and employee stock option exercise behavior. If actual results differ significantly from these estimates, stock-based compensation expense and results of operations could be materially impacted.

In March 2005, the SEC issued Staff Accounting Bulletin (SAB) No. 107 (SAB 107), which offers guidance for SFAS 123(R). SAB 107 was issued to assist preparers by simplifying some of the implementation

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challenges of SFAS 123(R) while enhancing the information that investors receive. SAB 107 creates a framework that is premised on two overarching themes: (a) considerable judgment will be required by preparers to successfully implement SFAS 123(R), specifically when valuing employee stock options; and (b) reasonable individuals, acting in good faith, may conclude differently on the fair value of employee stock options. Key topics covered by SAB 107 include valuation models, expected volatility and expected term. Raptor is applying the principles of SAB 107 in conjunction with its adoption of SFAS 123(R).

For the three month period ended May 31, 2009, stock-based compensation expense was based on the Black-Scholes option-pricing model assuming the following: risk-free interest rate of 2.6%; 7 year expected life; 233% volatility; 10% turnover rate; and 0% dividend rate.

Raptor based its Black-Scholes inputs on the following factors: the risk-free interest rate was based upon Raptor s review of current constant maturity treasury bill rates for seven years; the expected life was based upon Raptor s assessment of the ten-year term of the stock options issued along with the fact that it are a development-stage company and Raptor s anticipation that option holders will exercise stock options when the company is at a more mature stage of development; the volatility was based on the actual volatility of Raptor s common stock price as quoted on the over the counter bulletin board; the turnover rate was based on Raptor s assessment of the size of Raptor and the minimum potential for employee turnover at the current development-stage of Raptor; and the dividend rate was based on Raptor s current decision to not pay dividends on Raptor s stock at its current development stage.

If factors change and different assumptions are employed in the application of SFAS 123(R), the compensation expense recorded in future periods may differ significantly from what was recorded in the current period. See Note 7 of Raptor s condensed consolidated financial statements for further discussion of its accounting for stock based compensation.

Raptor recognizes as consulting expense the fair value of options granted to persons who are neither employees nor directors. Stock options issued to consultants are accounted for in accordance with the provisions of EITF Issue No. 96-18, *Accounting for Equity Instruments that are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services*. The fair value of expensed options is based on the Black-Scholes option-pricing model assuming the same factors as stock-based compensation expense discussed above.

On November 10, 2005, the Financial Accounting Standards Board (FASB) issued FASB Staff Position (FSP) No. FAS 123(R)-3 *Transition Election Related to Accounting for Tax Effects of Share-Based Payment Awards*. This FSP provides a practical transition election related to the accounting for the tax effects of share-based payment awards to employees, as an alternative to the transition guidance for the additional paid-in capital pool (APIC pool) in paragraph 81 of SFAS 123(R). The alternative transition method includes simplified methods to establish the beginning balance of the APIC pool related to the tax effects of employee stock-based compensation, and to determine the subsequent impact on the APIC pool and statements of cash flows of the tax effects of employee stock-based compensation awards that are outstanding upon adoption of SFAS 123(R). The guidance in this FSP is effective after November 10, 2005. Raptor may take up to one year from the later of adoption of SFAS 123(R) or the effective date of this FSP to evaluate its available transition alternatives and make its one-time election. Raptor has elected the short-form method to calculating excess tax benefits available for use in offsetting future tax shortfalls in accordance with FSP FAS 123(R)-3.

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Results of Operations

Three month periods ended May 31, 2009 and 2008

General and Administrative

General and administrative expenses (including officer and employee compensation allocated to general and administrative expenses) for the quarter ended May 31, 2009 increased by $0.14 million compared to the prior year s comparable period. The increase was primarily due to an increase of $0.11 million in intellectual property expenses associated with preclinical and clinical programs, an increase of $0.10 million in employee salaries, benefits, recruiting and other employment-related costs due to employee raises that occurred in July 2008 and the hiring of a Chief Medical Officer in April 2009, a $0.09 million increase in consultant expense related to business development and strategic advisory services, a $0.02 million increase in press releases issued, all of which were partially offset by (i) a $0.09 million increase in allocation of support services to research and development expenses, (ii) a $0.07 million decrease in milestone-related bonuses that occurred in the third fiscal quarter of 2008, but did not repeat in the third fiscal quarter of 2009 and (iii) a $0.02 million decrease in amortization and depreciation due to fixed assets that became fully depreciated in the third fiscal quarter of 2009.

Research and Development

Research and development expenses (including officer and employee compensation allocated to research and development) for the quarter ended May 31, 2009 increased by $0.3 million over the prior year s comparable period primarily due to the costs associated with the formulation manufacturing expenses of Raptor s proprietary formulation of DR Cysteamine of $0.22 million in preparation for its clinical trial in cystinosis, a $0.20 million increase representing its ongoing NASH clinical trial expenses, an increase of $0.11 million in research and development consulting related to the preparation of Raptor s IND for DR Cysteamine for cystinosis, an increase of $0.09 million in salaries and benefits due to the hiring of Raptor s director of program management in October 2008 and Raptor s Chief Medical Officer in April 2009, an increase of $0.03 million related to preclinical testing that did not occur in the prior year, a $0.09 increase of support services to research and development due to the increase in headcount of the research and development department, all of which were partially offset by (i) a decrease in lab collaboration fees of $0.06 million due to the lapse of the Stanford collaboration on NeuroTrans™, (ii) a decrease of $0.18 million in HepTide™ conjugates produced for studies in the prior year, and (iii) a decrease of $0.2 million in clinical trial expense related to the Convivia™ clinical trial in the prior year which did not reoccur in the current year.

Research and development expenses include the following: (in $ millions)

Major Program (stage of development)	Estimated next 12 months	Cumulative through May 31, 2009	Three month period ended May 31, 2009	Three month period ended May 31, 2008	Nine month period ended May 31, 2009	Nine month period ended May 31, 2008
DR Cysteamine All Indications (clinical)	5.1	4.1	1.3	0.2	3.1	0.5
Convivia™ (clinical)		2.0		0.7	0.3	1.0
HepTide™ (preclinical)	0.1	1.5	0.1	0.3	0.3	0.5
NeuroTrans™ (preclinical)		0.7		0.1	0.1	0.2
WntTide™ (preclinical)		0.3			0.1	0.1
Minor or Inactive Programs		0.7			0.1	0.1
R & D Personnel and Other Costs Not Allocated to Programs	1.8	4.4	0.5	0.3	1.4	1.2
Total Research & Development Expenses	7.0	13.7	1.9	1.6	5.4	3.6

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Major Program expenses recorded as general and administrative expenses: (in $ millions)

Major Program (stage of development)	Estimated next 12 months	Cumulative through May 31, 2009	Three month period ended May 31, 2009	Three month period ended May 31, 2008	Nine month period ended May 31, 2009	Nine month period ended May 31, 2008
DR Cysteamine All Indications (clinical)	0.03	0.17	0.01	0.01	0.09	0.04
Convivia™ (clinical)	0.01	0.06	0.02	0.03	0.02	0.09
HepTide™ (preclinical)	0.04	0.15	0.05	0.01	0.05	0.01
NeuroTrans™ (preclinical)	0.03	0.12			0.02	0.02
WntTide™ (preclinical)	0.02	0.05				

Additional major program expenses include patent fees and patent expenses which were recorded as general and administrative expenses as these fees are to support patent applications (not issued patents).

Any of Raptor s major programs could be partnered for further development and/or could be accelerated, slowed or ceased due to scientific results or challenges in funding Raptor. Raptor will need significant additional funding in order to pursue its plans for the next 12 months. In addition, the timing and costs of development of Raptor s programs beyond the next 12 months is highly uncertain and difficult to estimate. See Item 1A titled Risk Factors for further discussion about the risks and uncertainties pertaining to drug development.

Current Status of Major Programs

Please refer to the section titled, Raptor s Management s Discussion and Analysis of Financial Condition and Results of Operation in this joint proxy statement/prospectus for a detailed discussion of each of its major programs. In summary, DR Cysteamine is being developed in cystinosis, NASH and HD. In April 2009, Raptor submitted an IND application to allow it to study DR Cysteamine in cystinosis patients in a Phase IIb clinical trial. In June 2009, Raptor began dosing patients in its cystinosis trial. In February 2009, Raptor completed enrollment of its NASH clinical trial. Both Raptor s NASH andcystinosis clinical trials are currently ongoing. Raptor anticipates studying DR Cysteamine in HD patients in the clinic in the second half of 2009.

Raptor s Convivia™ product candidate completed its initial clinical study in 2008 and it is actively seeking to partner any further development of its Convivia™ product candidate with an Asian company where its potential market exists. NeuroTrans™ is currently being studied under a collaboration agreement with Roche. HepTide™ and WntTide™ are undergoing preclinical proof of concept studies, which will require further study prior to potentially moving into a clinical phase of development.

Interest Income

Interest income decreased by $8,000 over the equivalent quarter of the prior fiscal year due to the significant decrease in money market interest rates from 1.5% during the three month period ended May 31, 2008 to approximately 0.5% during the three month period ended May 31, 2009 and the lower cash balances maintained in the current fiscal quarter compared to the equivalent period in the prior year.

Interest expense

Interest expense decreased by $16,000 over the equivalent quarter of the prior fiscal year due to the capitalized finder s fee for a convertible loan of 200,000 shares of Raptor s common stock valued at $102,000, which was amortized as interest expense from August 2007 to April 2008, the term of the convertible loan. No draws were made on the convertible loan prior to its expiration in April 2008.

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Nine month periods ended May 31, 2009 and 2008

General and Administrative

General and administrative expenses (including officer and employee compensation allocated to general and administrative expenses) for the nine month period ended May 31, 2009 increased by $0.35 million compared to the prior year s comparable period. The increase was primarily due to an increase of $0.25 million in employee salaries, bonuses, benefits and other employment-related costs due to employee raises that occurred in July 2008, milestone related bonuses paid in October 2008 and recruiting fees related to the hiring of Raptor s director of program management in October 2008 offset by prior year s bonuses not repeated in the current year, plus an increase of $0.22 million in administrative consulting due to the retention of a strategic business advisor in May 2008, an increase of $0.08 million of board fees and expenses due to the addition of a new board member in July 2008, an increase of $0.03 million related to attendance at trade shows, all of which were partially offset by (i) a $0.09 million decrease in legal fees related to due diligence and the closing of two strategic acquisitions during the prior year nine month period that did not recur in the current year, (ii) a decrease of $0.04 million in amortization and depreciation related to fully depreciated fixed assets and (iii) the increase of support services allocation to research and development expenses of $0.1 million.

Research and Development

Research and development expenses (including officer and employee compensation allocated to research and development) for the nine month period ended May 31, 2009 increased by $1.73 million over the prior year s comparable period primarily due to the costs associated with the formulation manufacturing expenses of Raptor s proprietary formulation of DR Cysteamine of $1.00 million in preparation for its clinical trial in cystinosis, an increase of $0.50 million in research and development consulting related to the preparation for Raptor s pre-IND meeting with the FDA and in preparation for Raptor s IND submission, an increase of $0.20 million in milestone payments for the commencement of the NASH trial in October 2008, an increase of $0.22 million in clinical trial costs for Raptor s NASH indication, an increase of $0.17 million in salaries and benefits due to the hiring of Raptor s director of program management in October 2008 and Raptor s Chief Medical Officer in April 2009, an increase of $0.1 million in preclinical studies of its DR Cysteamine program in NASH which occurred in the current year, an increase of $0.1 million in allocated support services, all of which were partially offset by (i) a decrease in lab collaboration fees of $0.2 million due to the lapse of the Stanford collaboration on NeuroTrans™, (ii) a decrease of $0.2 million due to the Convivia™ clinical trial in the prior year that did not repeat in the current year, (iii) a decrease of $0.1 million of HepTide™ conjugates that were manufactured in the prior year but did not repeat in the current year, (iv) a decrease of $0.04 million in preclinical studies due to the reduction of resources allocated to preclinical programs and (v) a decrease of $0.02 million in tradeshow costs which Raptor incurred in the prior year but not in the current year.

In-Process Research and Development Expenses

In-process research and development expenses decreased by $0.2 million over the nine month period ended May 31, 2008 due to the recording of the purchase of Raptor s Convivia™ program during the nine month period ended May 31, 2008. No such expense was incurred in the nine month period ended May 31, 2009. In-process research and development expenses were calculated based on the value of Raptor s stock issued in connection with the purchase of certain intellectual property rights to develop Convivia™ (4-MP) for the treatment of acetaldehyde toxicity.

Interest Income

Interest income decreased by $19,000 during the nine month period ended May 31, 2009 over the nine month period ended May 31, 2008 due to the significant decrease in money market interest rates from 4% to 4.5% in 2008 to approximately 0.5% to 1.5% in 2009, partially offset by a higher money market balance during the nine month period ended May 31, 2009.

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Interest expense

Interest expense decreased by $0.1 million in the nine month period ended May 31, 2009 over the nine month period ended May 31, 2008 due to the capitalized finder s fee of 200,000 shares of Raptor s common stock valued at $102,000, which was amortized as interest expense from August 2007 to April 2008, the term of the convertible loan. No draws were made on the convertible loan prior to its expiration.

Year ended August 31, 2008 and 2007

Research and development expenses (including officer and employee compensation allocated to research and development) for the fiscal year ended August 31, 2008 increased by $3.4 million over the prior fiscal year primarily due to the costs incurred during Raptor s fiscal year ended August 31, 2008 associated with its Phase IIa clinical trial for the Convivia™ program of $0.6 million, formulation manufacturing expenses of the proprietary formulation of Convivia™ of $0.3 million and DR Cysteamine of $0.1 million, preclinical studies of Convivia™ of $0.2 million and of DR Cysteamine of $0.1 million, clinical and regulatory consulting for Convivia™ of $0.6 million and DR Cysteamine of $0.6 million, amortization of intangible assets related to the purchase of DR Cysteamine of $0.1 million and incremental executive, finance and facilities costs allocated to the research and development department of Raptor s clinical division of $0.5 million.

General and administrative expenses (including officer and employee compensation allocated to general and administrative expenses) for the fiscal year ended August 31, 2008 increased by $0.7 million over the prior fiscal year primarily due to the costs incurred during Raptor s fiscal year ended August 31, 2008 for the patent expenses for its clinical programs of $0.1 million, the salary and benefits of Raptor s clinical subsidiary s President $0.3, legal and accounting expenses attributable to Raptor s clinical subsidiary of $0.3 million.

In-process research and development expenses increased by $0.3 million over the prior fiscal year due to the recording of the purchase of Raptor s Convivia™ program during its fiscal year ended August 31, 2008. No such expense was incurred in the prior year. In-process research and development expenses were calculated based on the value of Raptor s stock issued in connection with the purchase of certain intellectual property rights to develop Convivia™ (4-MP) for the treatment of acetaldehyde toxicity. For further details about the calculation of in-process research and development expenses, please refer to Note 6 of Raptor s audited financial statements located elsewhere in this joint proxy statement/prospectus.

Interest income decreased by $0.07 million over the prior fiscal year due to the significant decrease in money market interest rates from 4.5% during the fiscal year ended August 31, 2007 to an average of approximately 2% during the fiscal year ended August 31, 2008, which was partially offset by the increase in money market balances during the fiscal year ended August 31, 2008 due to the $10 million raised in May and June 2008.

Interest expense increased by $0.1 million over the prior fiscal year due to the capitalized finder s fee of 200,000 shares of Raptor s common stock paid in connection with a convertible loan. These shares were valued at $102,000, which was amortized as interest expense from August 2007 to April 2008, the term of the convertible loan. No draws were made on the loan prior to its expiration.

Liquidity and Capital Resources

Capital Resource Requirements

As of May 31, 2009, Raptor had approximately $0.5 million in cash, approximately $0.8 million in current liabilities and approximately $(0.1) million of net working capital deficit. Raptor s forecasted average monthly cash expenditures for the next twelve months are approximately $691,000.

Raptor believes that its cash and cash equivalents balances as of August 14, 2009 will be sufficient to meet Raptor s obligations into the first calendar quarter of 2010. Raptor s cash and cash equivalents as of July 15,

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2009, will be sufficient to meet its minimum obligations into the fourth calendar quarter of 2009. Raptor is currently in the process of reviewing strategic partnerships, collaborations and merger candidates in order to fully fund Raptor s preclinical and clinical programs through the end of 2010. If Raptor is not able to close a strategic transaction, it anticipates raising additional capital in the fourth calendar quarter of 2009.

On April 29, 2009, in order to reflect current market prices, Raptor notified the holders of warrants purchased in the May/June 2008 private placement that Raptor was offering, in exchange for such warrants, new warrants to purchase Raptor s 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. Raptor received approximately $2.6 million of proceeds from warrant exercises that resulted in the issuance of 8,715,000 shares of Raptor s common stock pursuant to the exchange described above.

There can be no assurance that Raptor will be able to obtain funds required for its continued operation. There can be no assurance that additional financing (including the financing that it is currently pursuing) will be available to it or, if available, that it can be obtained on commercially reasonable terms. If Raptor is not able to obtain financing on a timely basis, it will not be able to meet its obligations as they become due and it will be forced to scale down or perhaps even cease the operation of its business. This also may be the case if Raptor becomes insolvent or if it breaches its asset purchase agreement with BioMarin or its licensing agreements with Washington University and UCSD due to non-payment (and it does not cure its non-payment within the stated cure period). If this happens, Raptor would lose all rights to the RAP technology assigned to it by BioMarin and/or the rights to Mesd licensed to it by Washington University and/or the rights to DR Cysteamine licensed to it by UCSD, depending on which agreement is breached. If Raptor loses its rights to the intellectual property related to the RAP technology purchased by it from BioMarin, Raptor s agreement with Roche would likely be terminated and any milestone or royalty payments from Roche to it would thereafter cease to accrue.

Raptor will need to raise significant long-term financing in order to implement its 12 month operating plan. If Raptor is able to raise significant additional financing, for the next 12 months it intends to expend a total of approximately $8.3 million to implement Raptor s operating plan of researching and developing its RAP based platform, is licensed technologies, as well as Convivia™ and DR Cysteamine.

Specifically, Raptor estimates its operating expenses and working capital requirements for the next 12 months to be as follows:

Estimated spending for the next 12 months:	
Research and development activities	$ 6,000,000
Research and development compensation and benefits	1,050,000
General and administrative activities	600,000
General and administrative compensation and benefits	630,000
Capital expenditures	20,000
Total estimated spending for the next 12 months	$ 8,300,000

Raptor anticipates that it will not be able to generate revenues from the sale of products until it further develop its drug product candidates and obtain the necessary regulatory approvals to market its future drug product candidates, which could take several years or more, if it is able to do so at all. Accordingly, Raptor s cash flow projections are subject to numerous contingencies and risk factors beyond its control, including successfully developing its drug product candidates, market acceptance of its drug product candidates, competition from well-funded competitors, and its ability to manage its expected growth. It is likely that for many years, Raptor will not be able to generate internal positive cash flow from the sales of its drug product candidates sufficient to meet its operating and capital expenditure requirements.

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There is substantial doubt about Raptor s ability to continue as a going concern as the continuation of its business is dependent upon obtaining further long-term financing, the successful development of its drug product candidates and related technologies, the successful and sufficient market acceptance of any product offerings that it may introduce and, finally, the achievement of a profitable level of operations. The issuance of additional equity securities by Raptor is likely to result in a significant dilution in the equity interests of its current stockholders. Obtaining commercial loans, assuming those loans would be available, including on acceptable terms, will increase Raptor s liabilities and future cash commitments.

Research and Development Activities

Raptor plans to conduct further research and development, seeking to improve upon its RAP-based and in-licensed technology and run several clinical trials for DR Cysteamine in the next 12 months. Raptor plans to conduct research and development activities by its own laboratory staff and also by engaging contract research organizations, clinical research organizations and contract manufacturing organizations. Raptor also plans to incur costs for the production of its clinical study drug candidate, DR Cysteamine, clinical trials, clinical and medical advisors and consulting and collaboration fees. Assuming Raptor obtains additional long-term financing, it anticipates its research and development costs for the next 12 months, excluding in-house research and development compensation, will be approximately $6.0 million. Raptor will need to scale down its research and development plans and expenses detailed herein in the next fiscal year if it is not able to raise significant additional financing over the next 12 months as detailed in the section titled, Capital Resource Requirements.

Officer and Employee Compensation

Raptor currently employs five executive officers. Raptor also has two permanent scientific staff members, one permanent clinical development staff member, one permanent finance staff member and one temporary part-time research intern. Assuming Raptor obtains significant additional long-term financing, it anticipates spending up to approximately $1.68 million in officer and employee compensation during the next 12 months, of which $1.05 million is allocated to research and development expenses and $0.63 million is allocated to general and administrative expenses. Raptor will need to scale down its officer and employee compensation expenses detailed herein in the next fiscal year if it is not able to raise significant additional financing over the next 12 months as detailed in the section titled, Capital Resource Requirements.

General and Administrative

Assuming Raptor obtains additional long-term financing, it anticipates spending approximately $0.60 million on general and administrative costs in the next 12 months. These costs will consist primarily of legal and accounting fees, patent legal fees, investor relations expenses, board fees and expenses, insurance, rent and facility support expenses, excluding finance and administrative compensation. Raptor will need to scale down its general and administrative plans and expenses detailed herein in the next fiscal year if it is not able to raise significant additional financing over the next 12 months as detailed in the section titled, Capital Resource Requirements.

Capital Expenditures

Raptor anticipates spending approximately $20,000 in the next 12 months on capital expenditures for lab equipment and office furniture. Raptor will need to scale down its capital expenditures detailed herein in the next fiscal year if it is not able to raise significant additional financing over the next 12 months as detailed in the section titled, Capital Resource Requirements.

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Contractual Obligations with BioMarin

Pursuant to the terms of the asset purchase agreement Raptor entered into with BioMarin for the purchase of intellectual property related to it RAP based technology (including NeuroTrans™), Raptor is obligated to make the following milestone payments to BioMarin upon the achievement of the following events:

- $50,000 (paid by Raptor in June 2006) within 30 days after it receive total aggregate debt or equity financing of at least $2,500,000;
- $100,000 (paid by Raptor in June 2006) within 30 days after it receive total aggregate debt or equity financing of at least $5,000,000;
- $500,000 upon Raptor s filing and acceptance of an investigational new drug application for a drug product candidate based on its NeuroTrans™ product candidate;
- $2,500,000 upon Raptor s successful completion of a Phase II human clinical trial for a drug product candidate based on its NeuroTrans™ product candidate;
- $5,000,000 upon Raptor s successful completion of a Phase III human clinical trial for a drug product candidate based on its NeuroTrans™ product candidate;
- $12,000,000 within 90 days of Raptor s obtaining marketing approval from the FDA or other similar regulatory agencies for a drug product candidate based on its NeuroTrans™ product candidate;
- $5,000,000 within 90 days of Raptor s obtaining marketing approval from the FDA or other similar regulatory agencies for a second drug product candidate based on its NeuroTrans™ product candidate;
- $5,000,000 within 60 days after the end of the first calendar year in which Raptor s aggregated revenues derived from drug product candidates based on its NeuroTrans™ product candidate exceed $100,000,000; and
- $20,000,000 within 60 days after the end of the first calendar year in which Raptor s aggregated revenues derived from drug product candidates based on its NeuroTrans™ product candidate exceed $500,000,000.

In addition to these milestone payments, Raptor is also obligated to pay BioMarin a royalty at a percentage of its aggregated revenues derived from drug product candidates based on its NeuroTrans™ product candidate. On June 9, 2006, Raptor made a milestone payment in the amount of $150,000 to BioMarin because it raised $5,000,000 in its May 25, 2006 private placement financing. If Raptor becomes insolvent or if it breaches its asset purchase agreement with BioMarin due to non-payment and it does not cure its non-payment within the stated cure period, all of Raptor s rights to RAP technology (including NeuroTrans™) will revert back to BioMarin.

Contractual Obligations with Thomas E. Daley (assignee of the dissolved Convivia, Inc.)

Pursuant to the terms of the asset purchase agreement, or theAsset Purchase Agreement that Raptor entered into with Convivia, Inc. and Thomas E. Daley, pursuant to which it purchased intellectual property related to Raptor s 4-MP product candidate program, Mr. Daley will be entitled to receive the following, if at all, in such amounts and only to the extent certain future milestones are accomplished by Raptor, as set forth below:

100,000 shares of Raptor s restricted, unregistered common stock within fifteen (15) days after it enters into a manufacturing license or other agreement to produce any product that is predominantly based upon or derived from any assets purchased from Convivia, or Purchased Assets, in quantity, referred to as Product, if such license agreement is executed within one (1) year of execution of the Asset Purchase Agreement or, if thereafter, 50,000 shares of Raptor s restricted, unregistered common stock. Should Raptor obtain a second such license or agreement for a Product, Mr. Daley will be entitled to receive 50,000 shares of Raptor s restricted, unregistered common stock within 30 days of execution of such second license or other agreement. On March 31, 2008, Raptor issued 100,000 shares of its

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common stock valued at $56,000 to Mr. Daley pursuant to this milestone reflecting the execution of an agreement to supply the active pharmaceutical ingredient for Convivia™, combined with the execution of a formulation agreement to produce the oral formulation of Convivia™.

100,000 shares of Raptor s restricted, unregistered common stock within fifteen (15) days after Raptor receive its first patent allowance on any patents which constitute part of the Purchased Assets in any one of certain predetermined countries, or Major Market.

50,000 shares of Raptor s restricted, unregistered common stock within fifteen (15) days after it receive Raptor s second patent allowance on any patents which constitute part of the Purchased Assets different from the patent referenced in the immediately preceding bullet point above in a Major Market.

100,000 shares of Raptor s restricted, unregistered common stock within fifteen (15) days of completion of predetermined benchmarks in a Major Market by it or Raptor s licensee of the first phase II human clinical trial for a Product, or Successful Completion if such Successful Completion occurs within one (1) year of execution of the Asset Purchase Agreement or, if thereafter, 50,000 shares of Raptor s restricted, unregistered common stock within thirty (30) days of such Successful Completion. In October 2008, it issued 100,000 shares of Raptor s common stock valued at $27,000 and a $30,000 cash bonus (pursuant to Mr. Daley s employment agreement) to Mr. Daley pursuant to the fulfillment of this milestone.

50,000 shares of Raptor s restricted, unregistered common stock within fifteen (15) days of a Successful Completion in a Major Market by Raptor or its licensee of the second phase II human clinical trial for a Product (other than the Product for which a distribution is made under the immediately preceding bullet point above).

100,000 shares of Raptor s restricted, unregistered common stock within fifteen (15) days after Raptor or its licensee applies for approval to market and sell a Product in a Major Market for the indications for which approval is sought, or Marketing Approval.

50,000 shares of Raptor s restricted, unregistered common stock within fifteen (15) days after Raptor or its licensee applies for Marketing Approval in a Major Market (other than the Major Market for which a distribution is made under the immediately preceding bullet point above).

200,000 shares of Raptor s restricted, unregistered common stock within fifteen (15) days after Raptor or its licensee obtains the first Marketing Approval for a Product from the applicable regulatory agency in a Major Market.

100,000 shares of Raptor s restricted, unregistered common stock within fifteen (15) days after Raptor or its licensee obtains Marketing Approval for a Product from the applicable regulatory agency in a Major Market (other than the Major Market for which a distribution is made under the immediately preceding bullet point above).

As discussed above, in aggregate, Raptor issued to Mr. Daley, 200,000 shares of Raptor s common stock valued at $83,000 and paid $30,000 in cash bonuses related to Convivia™ milestones along with another $20,000 in cash bonuses related to employment milestones pursuant to Mr. Daley s employment agreement.

Contractual Obligations with Former Encode Securityholders

Pursuant to the terms of the merger agreement (Merger Agreement) it entered into with Encode Pharmaceuticals, Inc. and Nicholas Stergis, former Encode securityholders will be entitled to receive the following, if at all, in such amounts and only to the extent certain future milestones are accomplished by it, as set forth below:

Restricted, unregistered common stock, stock options to purchase Raptor s common stock, and warrants to purchase Raptor s common stock in an amount equal to, in the aggregate, Five Hundred Thousand (500,000) shares of Raptor s common stock upon the receipt by it at any time prior to the

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fifth-year anniversary of the Merger Agreement of approval to market and sell a product for the treatment of Cystinosis predominantly based upon and derived from the assets acquired from Encode, or Cystinosis Product, from the applicable regulatory agency (e.g., FDA and European Agency for the Evaluation of European Medical Products or EMEA) in a given major market in the world.

Restricted, unregistered common stock, stock options to purchase Raptor s common stock, and warrants to purchase Raptor s common stock in an amount equal to One Million Nine Hundred Thousand (1,900,000) shares of Raptor s common stock upon the receipt by it at any time prior to the fifth anniversary of the Merger Agreement of approval to market and sell a product, other than a Cystinosis Product, predominantly based upon and derived from the assets acquired from Encode, from the applicable regulatory agency (e.g., FDA and EMEA) in a given major market in the world.

If within five years from the date of the Merger Agreement, there occurs a transaction or series of related transactions that results in the sale of all or substantially all of the assets acquired from Encode other than to Raptor s affiliate in such case where such assets are valued at no less than $2.5 million, the former Encode stockholders will be entitled to receive, in the aggregate, restricted, unregistered common stock, stock options to purchase Raptor s common stock, and warrants to purchase Raptor s common stock in an amount equal to 2.4 million shares of common stock, less the aggregate of all milestone payments previously made or owing, if any.

Pursuant to the terms of the Merger Agreement, it will at any time following 140 days from the closing date of the merger and prior to the expiration of the fourth anniversary of the Merger Agreement, grant to an Encode stockholder the right to demand the registration of its portion of the initial restricted, unregistered common stock issued to it in connection with the execution of the Merger Agreement and future restricted, unregistered common stock issued to it in the future relating to the milestone payments outlined above, if any.

Contractual Obligations with UCSD

As a result of the merger of Raptor s clinical subsidiary and Encode, it received the exclusive worldwide license to DR Cysteamine, or License Agreement for use in the field of human therapeutics for metabolic and neurologic disorders, developed by clinical scientists at the UCSD, School of Medicine. DR Cysteamine is a proprietary, delayed-release, enteric-coated microbead formulation of cysteamine bitartrate, a cystine depleting agent currently approved by the FDA. Cysteamine bitartrate is prescribed for the management of the genetic disorder known as cystinosis, a lysosomal storage disease. The active ingredient in DR Cysteamine has also demonstrated potential in studies as a treatment for other metabolic and neurodegenerative diseases, such as HD and NASH.

In consideration of the grant of the license, prior to the merger, Encode paid an initial license fee and Raptor will be obligated to pay an annual maintenance fee of $15,000 until Raptor begins commercial sales of any products developed pursuant to the License Agreement. In addition to the maintenance fee, Raptor will be obligated to pay during the life of the License Agreement: milestone payments ranging from $20,000 to $750,000 for orphan indications and from $80,000 to $1,500,000 for non-orphan indications upon the occurrence of certain events, if ever; royalties on commercial net sales from products developed pursuant to the License Agreement ranging from 1.75% to 5.5%; a percentage of sublicense fees ranging from 25% to 50%; a percentage of sublicense royalties; and a minimum annual royalty commencing the year Raptor begins commercially selling any products pursuant to the License Agreement, if ever. Under the License Agreement, Raptor is obligated to fulfill predetermined milestones within a specified number of years ranging from 0.75 to 6 years from the effective date of the License Agreement, depending on the indication. In addition, Raptor is obligated to, among other things, annually spend at least $200,000 for the development of products (which, as of Raptor s fiscal year ended August 31, 2008, it has fulfilled by spending approximately $900,000 on such programs) pursuant to the License Agreement. As of May 31, 2009, Raptor accrued $40,000 due to UCSD for the milestone related to the first patient dosing in the NASH trial which commenced in October 2008. To the extent that Raptor fails to

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perform any of its obligations under the License Agreement, UCSD may terminate the license or otherwise cause the license to become non-exclusive.

Off-Balance Sheet Arrangements

Raptor does not have any outstanding derivative financial instruments, off-balance sheet guarantees, interest rate swap transactions or foreign currency contracts. Raptor does not engage in trading activities involving non-exchange traded contracts.

Reverse Acquisition

Raptor treated the merger of Raptor Pharmaceuticals Corp., a Delaware corporation, into its subsidiary, Raptor Pharmaceutical Inc., as a reverse acquisition and the reverse acquisition has been accounted for as a recapitalization.

For accounting purposes, Raptor Pharmaceutical Inc. is considered the acquirer in the reverse acquisition. The historical financial statements are those of Raptor Pharmaceutical Inc. consolidated with its parent, Raptor Pharmaceuticals Corp. and its other subsidiary, Raptor Therapeutics. Earnings per share for periods prior to the merger have been restated to reflect the number of equivalent shares received by the acquiring company.

Going Concern

Due to the uncertainty of Raptor s ability to meet its current operating and capital expenses, in their reports on Raptor s audited financial statements for the years ended August 31, 2008, 2007 and for the period September 8, 2005 (inception) to August 31, 2006, Raptor s independent registered public accounting firm, Burr, Pilger & Mayer, LLP included an explanatory paragraph regarding substantial doubt about its ability to continue as a going concern. Raptor s financial statements contain additional note disclosures describing the circumstances that led to this disclosure by its independent registered public accounting firm.

New Accounting Pronouncements.

In September 2006, the Financial Accounting Standards Board (FASB) issued SFAS No. 157, *Fair Value Measurements* (SFAS 157). SFAS 157 defines fair value, establishes a framework for measuring fair value in accordance with generally accepted accounting principles, and expands disclosures about fair value measurements. SFAS 157 does not require any new fair value measurements; rather, it applies under other accounting pronouncements that require or permit fair value measurements. The provisions of SFAS 157 are to be applied prospectively as of the beginning of the fiscal year in which it is initially applied, with any transition adjustment recognized as a cumulative-effect adjustment to the opening balance of retained earnings. The provisions of SFAS 157 are effective for fiscal years beginning after November 15, 2007; therefore, Raptor adopted SFAS 157 as of September 1, 2008 for financial assets and liabilities. In accordance with FASB Staff Position 157-2, *Effective Date of FASB Statement No. 157*, Raptor elected to defer the adoption of the provisions of SFAS 157 for its non-financial assets and non-financial liabilities. Raptor has determined that SFAS 157 had no material impact on its financial results for the three and nine month periods ended May 31, 2009.

In February 2007, the FASB issued SFAS 159, *The Fair Value Option for Financial Assets and Financial Liabilities, Including an Amendment of FASB Statement No. 115*, which permits the measurement of many financial instruments and certain other asset and liabilities at fair value on an instrument-by-instrument basis (the fair value option). The guidance is applicable for fiscal years beginning after November 15, 2007; therefore, Raptor adopted SFAS 159 as of September 1, 2008. Raptor has determined that SFAS 159 had no material impact on its financial results for the three and nine month periods ended May 31, 2009.

In June 2007, the Emerging Issues Task Force (EITF) reached a consensus on EITF No. 07-3, *Accounting for Nonrefundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities* (EITF 07-3). EITF 07-3 specifies the timing of expense recognition for non-refundable advance

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payments for goods or services that will be used or rendered for research and development activities. EITF 07-3 was effective for fiscal years beginning after December 15, 2007, and early adoption is not permitted; therefore, Raptor adopted EITF 07-3 as of September 1, 2008. Raptor has determined that EITF 07-3 had no material impact on Raptor s financial results for the three and nine month periods ended May 31, 2009.

In December 2007, the EITF reached a consensus on EITF No. 07-1, *Accounting for Collaborative Arrangements Related to the Development and Commercialization of Intellectual Property* (EITF 07-1). EITF 07-1 discusses the appropriate income statement presentation and classification for the activities and payments between the participants in arrangements related to the development and commercialization of intellectual property. The sufficiency of disclosure related to these arrangements is also specified. EITF 07-1 is effective for fiscal years beginning after December 15, 2008. As a result, EITF 07-1 is effective for it as of September 1, 2009. Raptor is currently evaluating the impact of EITF 07-1 on its financial position and results of operations. Based upon the nature of Raptor s business, EITF 07-1 could have a material impact on its financial position and consolidated results of operations in future years.

In December 2007, FASB issued Statement No. 141 (Revised 2007), *Business Combinations* (SFAS 141(R)) and SFAS No. 160, *Accounting and Reporting of Non-controlling Interests in Consolidated Financial Statements*, an amendment of ARB No. 51 (SFAS 160). These statements will significantly change the financial accounting and reporting of business combination transactions and non-controlling (or minority) interests in consolidated financial statements. SFAS 141(R) requires companies to: (i) recognize, with certain exceptions, 100% of the fair values of assets acquired, liabilities assumed, and non-controlling interests in acquisitions of less than a 100% controlling interest when the acquisition constitutes a change in control of the acquired entity; (ii) measure acquirer shares issued in consideration for a business combination at fair value on the acquisition date; (iii) recognize contingent consideration arrangements at their acquisition-date fair values, with subsequent changes in fair value generally reflected in earnings; (iv) with certain exceptions, recognize pre-acquisition loss and gain contingencies at their acquisition-date fair values; (v) capitalize in-process research and development (IPR&D) assets acquired; (vi) expense, as incurred, acquisition-related transaction costs; (vii) capitalize acquisition-related restructuring costs only if the criteria in SFAS No. 146, *Accounting for Costs Associated with Exit or Disposal Activities*, are met as of the acquisition date; and (viii) recognize changes that result from a business combination transaction in an acquirer s existing income tax valuation allowances and tax uncertainty accruals as adjustments to income tax expense. SFAS 141(R) is required to be adopted concurrently with SFAS 160 and is effective for business combination transactions for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008 (Raptor s fiscal 2010). Early adoption of these statements is prohibited. Raptor believes the adoption of these statements will have a material impact on significant acquisitions, if any, completed after September 1, 2009.

In March 2008, the FASB issued SFAS No. 161, *Disclosures about Derivative Instruments and Hedging Activities* (SFAS 161). This statement will require enhanced disclosures about derivative instruments and hedging activities to enable investors to better understand their effects on an entity s financial position, financial performance, and cash flows. It is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008, with early application encouraged. Raptor adopted SFAS 161 on December 1, 2008 and has determined that SFAS 161 had no material impact on its financial results for the three and nine month periods ended May 31, 2009.

In May 2008, FASB issued SFAS No. 162, *The Hierarchy of Generally Accepted Accounting Principles* (SFAS 162). This standard is intended to improve financial reporting by identifying a consistent framework, or hierarchy, for selecting accounting principles to be used in preparing financial statements that are presented in conformity with U.S. GAAP for non-governmental entities. SFAS No. 162 is effective 60 days following the U.S. Securities and Exchange Commission s approval of the Public Company Accounting Oversight Board amendments to AU Section 411, the meaning of Present Fairly in Conformity with GAAP . Raptor has determined it did not have a material impact on its condensed consolidated financial statements.

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In May 2008, the FASB released FASB Staff Position (FSP) APB 14-1 *Accounting For Convertible Debt Instruments That May Be Settled in Cash Upon Conversion (Including Partial Cash Settlement)* (FSP APB 14-1) that alters the accounting treatment for convertible debt instruments that allow for either mandatory or optional cash settlements. FSP APB 14-1 specifies that issuers of such instruments should separately account for the liability and equity components in a manner that will reflect the entity s nonconvertible debt borrowing rate when interest cost is recognized in subsequent periods. Furthermore, it would require recognizing interest expense in prior periods pursuant to retrospective accounting treatment. FSP APB 14-1 is effective for financial statements issued for fiscal years beginning after December 15, 2008; therefore, Raptor anticipates adopting FSP APB 14-1 as of September 1, 2009. Raptor is in the process of evaluating the impact, if any, of FSP APB 14-1 on its condensed consolidated financial statements.

In June 2008, the FASB issued EITF No. 07-5 (EITF 07-5), *Determining Whether an Instrument (or Embedded Feature) is Indexed to an Entity s Own Stock*. EITF 07-5 requires entities to evaluate whether an equity-linked financial instrument (or embedded feature) is indexed to its own stock by assessing the instrument s contingent exercise provisions and settlement provisions. Instruments not indexed to their own stock fail to meet the scope exception of SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*, paragraph 11(a), and should be classified as a liability and marked-to-market. The statement is effective for fiscal years beginning after December 15, 2008 and interim periods within those fiscal years and is to be applied to outstanding instruments upon adoption with the cumulative effect of the change in accounting principle recognized as an adjustment to the opening balance of retained earnings. Raptor is adopting EITF 07-5 as of September 1, 2009 and is in the process of evaluating the impact, if any, of EITF 07-5 on its condensed consolidated financial statements.

In April 2008, the FASB issued FSP SFAS No. 142-3, *Determination of the Useful Life of Intangible Assets* (FSP SFAS 142-3). FSP SFAS 142-3 provides guidance with respect to estimating the useful lives of recognized intangible assets acquired on or after the effective date and requires additional disclosure related to the renewal or extension of the terms of recognized intangible assets. FSP SFAS 142-3 is effective for fiscal years and interim periods beginning after December 15, 2008. Raptor is adopting FSP SFAS 142-3 as of September 1, 2009 and are currently evaluating the impacts and disclosures of this standard, but do not expect FSP SFAS 142-3 to have a material impact on its condensed consolidated financial statements.

In May 2009, the FASB issued SFAS No. 165, *Subsequent Events* (SFAS 165). SFAS 165 establishes general standards of accounting for and disclosure of events that occur after the balance sheet date but before financial statements are issued or are available to be issued. SFAS 165 is effective for fiscal years and interim periods ending after June 15, 2009. Raptor is adopting SFAS 165 as of September 1, 2009 and does not expect it to have a material impact on its condensed consolidated financial statements.

Quantitative And Qualitative Disclosures About Market Risk.

Interest Rate Market Risk

Raptor s exposure to market risk for changes in interest rates relates primarily to Raptor s investment portfolio. By policy, it place Raptor s investments with highly rated credit issuers and limit the amount of credit exposure to any one issuer. As stated in Raptor s policy, it seeks to improve the safety and likelihood of preservation of Raptor s invested funds by limiting default risk and market risk.

Raptor mitigate default risk by investing in high credit quality securities and by positioning its portfolio to respond appropriately to a significant reduction in a credit rating of any investment issuer or guarantor. The portfolio includes only marketable securities with active secondary or resale markets to ensure portfolio liquidity.

As of May 31, 2009, Raptor s investment portfolio does not include any investments with significant exposure to the subprime mortgage market issues. Based on Raptor s investment portfolio, which consists 100%

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of money market accounts, and interest rates at May 31, 2009, it believes that a 100 basis point decrease in interest rates could result in a potential loss of future interest income of approximately $4,930 annually, however it would have no effect on the fair value of the money market principal balances.

Of Raptor s total consolidated cash and cash equivalent balance of approximately $0.5 million, its money market balances represent $0.3 million or 60%.

Raptor s debt obligations consist of its capital lease to finance its photocopier, which carries a fixed imputed interest rate and, as a result, it is not exposed to interest rate market risk on its capital lease obligations. The carrying value of Raptor s capital lease obligation approximates its fair value at May 31, 2009.

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MANAGEMENT FOLLOWING THE MERGER

Executive Officers, Directors and Other Key Employees

Resignation of TorreyPines Current Executive Officers

Pursuant to the merger agreement, all of TorreyPines current executive officers will resign immediately prior to the completion of the merger. Each of TorreyPines three executive officers are party to employment agreements with TPTX, Inc., a wholly-owned subsidiary of TorreyPines, that will become effective on the closing of the merger, assuming the TorreyPines stockholders approve the merger. Pursuant to the employment agreements each of the current TorreyPines executive officers will be paid by TPTX, Inc. following the merger through February 28, 2010, whether or not they remain employees of TPTX, Inc. following the merger. In addition, the employment agreements provide for bonus payments to each of the executives in the event that TPTX, Inc. is able to secure funding, a partnership, sale or similar transaction related to NGX426 in excess of $10 million on or before February 28, 2010. Such employment agreements are discussed in greater detail in the section titled, The Merger Interests of TorreyPines Directors and Executive Officers in the Merger Employment Agreements Following the Merger in this joint proxy statement/prospectus.

Executive Officers, Directors and Other Key Employees of the Combined Company Following the Merger

TorreyPines board of directors is currently comprised of four directors. Pursuant to the merger agreement, all of TorreyPines current directors will resign immediately prior to the completion of the merger. Following the merger, the board of directors will be comprised of four directors from Raptor.

Following the merger, the management team of the combined company is expected to be composed of the management team of Raptor. The following table lists the names and ages as of June 30, 2009 and positions of the individuals who are expected to serve as executive officers, directors and other key employees of the combined company upon completion of the merger:

Name	Age	Position
Executive Officers and Directors		
Christopher M. Starr, Ph.D	57	Chief Executive Officer, President and Director
Todd C. Zankel, Ph.D.	46	Chief Scientific Officer
Thomas (Ted) E. Daley	46	President, Raptor Therapeutics Inc. (f/k/a Bennu Pharmaceuticals Inc.)
Patrice P. Rioux., M.D., Ph.D.	58	Chief Medical Officer, Raptor Therapeutics Inc.
Kim R. Tsuchimoto, C.P.A.	46	Chief Financial Officer, Treasurer and Secretary
Raymond W. Anderson	66	Director
Erich Sager	51	Director
Richard Franklin, M.D., Ph.D.	63	Director
Directors		

Christopher M. Starr, Ph.D. is Raptor s co-founder, and has served as Chief Executive Officer, President and director since Raptor s inception in 2006. Dr. Starr has served as Chief Executive Officer of Raptor s wholly-owned subsidiary, Raptor Pharmaceutical Inc., since its inception in September 2005. Dr. Starr co-founded BioMarin Pharmaceutical Inc. (BioMarin) in 1997 where he last served as Senior Vice President and Chief Scientific Officer prior to joining Raptor in 2006. As Senior Vice President at BioMarin, Dr. Starr was responsible for managing a Scientific Operations team of 181 research, process development, manufacturing and quality personnel through the successful development of commercial manufacturing processes for its enzyme replacement products, and supervised the cGMP design, construction and licensing of BioMarin s proprietary biological manufacturing facility. From 1991 to 1998, Dr. Starr supervised research and commercial programs at BioMarin s predecessor company, Glyko, Inc., where he served as Vice President of Research and Development.

Prior to his tenure at Glyko, Inc., Dr. Starr was a National Research Council Associate at the National Institutes of Health. Dr. Starr earned a B.S. from Syracuse University and a Ph.D. in Biochemistry and Molecular Biology from the State University of New York Health Science Center, in Syracuse, New York.

Raymond W. Anderson has served as a director of Raptor since May 25, 2006 and is the Chief Financial Officer and Vice President, Finance & Administration of Dow Pharmaceutical Sciences, Inc. Mr. Anderson has more than 30 years of healthcare industry experience, primarily focused in financial management within the biopharmaceutical sector. Prior to joining Dow in 2003, he was Chief Financial Officer for Transurgical, Inc., a private medical technology company. Prior to that, Mr. Anderson served as Chief Operating Officer and Chief Financial Officer at BioMarin from June 1998 to January 2002. Prior to June 1998, Mr. Anderson held similar executive-level positions with other biopharmaceutical companies including Syntex, Chiron, Glycomed and Fusion Medical Technologies. Mr. Anderson holds an M.B.A. from Harvard University, an M.S. in Administration from George Washington University, and a B.S. in Engineering from the United States Military Academy.

Erich Sager has served as a director of Raptor since May 25, 2006. He is a founding partner of Limetree Capital SA, a Swiss-based investment banking boutique. Mr. Sager also serves as Chairman and member of the board of directors at Calltrade Carrier Services AG, a European wholesale phone operator, and has held such position since 2004. He is also a current Board member of Zecotek Medical Systems Inc. and Pulse Capital Corp. Mr. Sager served on the board of directors of BioMarin Pharmaceutical Inc. from November 1997 to March 2006 and as Chairman of LaMont Asset Management SA, a private investment management firm, from September 1996 until August 2004. Mr. Sager has held the position of Senior Vice President, Head of the Private Banking for Dresdner Bank (Switzerland) Ltd., Vice President, Private Banking, Head of the German Desk for Deutsche Bank (Switzerland) Ltd., and various positions at banks in Switzerland. Mr. Sager received a business degree from the School of Economics and Business Administration, Zurich, Switzerland.

Richard L. Franklin, M.D., Ph.D. has served as a director of Raptor since July 2008 and has served as Chairman of the board of directors of SyntheMed, Inc., a biomaterials company engaged in the development and commercialization of medical devices, since June 2003 and as a director of SyntheMed, Inc., since December 2000. Since September 2002, Dr. Franklin has been Chairman of DMS Data Systems, an internet-based information services company. From May 1996 to September 2002, Dr. Franklin had been Chief Executive of Phairson, Ltd., a medical product development company. From January 1991 to May 1996, Dr. Franklin was founder and principal of Richard Franklin & Associates and from January 1988 to December 1990, Dr. Franklin was with Boston Capital Group, both of which are consulting firms to the healthcare industry. From July 1986 to December 1987, Dr. Franklin was head of Healthcare Corporate Finance at Tucker Anthony, an investment banking firm.

Independence of Raptor s Board of Directors

Raptor s board of directors has determined that all members of the Raptor board of directors are independent (as independence is currently defined in Rule 5605(a)(2) of the NASDAQ listing standards), except for Dr. Starr and Mr. Sager. Raptor s board of directors has determined that all members of the Raptor Audit Committee are independent (as independence is currently defined in Rule 5605(c)(2)(A)(i) and (ii) of the NASDAQ listing standards), except for Mr. Sager.

Executive Officers

Todd C. Zankel Ph.D is a co-founder of Raptor and has been Chief Scientific Officer of its wholly-owned subsidiary, Raptor Pharmaceutical Inc., since its inception in 2006. Dr. Zankel has served as Raptor s Chief Scientific Officer since May 25, 2006. From 1997 to 2005, Dr. Zankel served as a Senior Director of Research at BioMarin. Prior to 1997, Dr. Zankel was a fellow for the National Institutes of Health at the Plant Gene Expression Center in Berkeley, California and at the Swiss Institute of Technology in Zurich, Switzerland. Dr. Zankel has been the author of a number of peer-reviewed articles in a variety of scientific areas. Dr. Zankel earned a B.A. from Reed College in Portland, Oregon and a Ph.D. from Columbia University.

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Thomas (Ted) E. Daley joined Raptor as President and a board member of Raptor Therapeutics Inc. (f/k/a Bennu Pharmaceuticals Inc.) following the acquisition by Raptor Therapeutics Inc. (f/k/a Bennu Pharmaceuticals Inc.) of Convivia, Inc., which Mr. Daley founded. Mr. Daley was co-founder, VP business development and chief operating officer of Instill Corporation, a leading electronic commerce services provider to the US foodservice industry. Between 1993 and 2001 Mr. Daley helped raise over $50 million in venture capital and build Instill to a 150+ person operation with a nationwide customer base. After leaving Instill, from 2001-2007, Mr. Daley served in executive and consulting roles to a number of technology startup companies including MetricStream, Inc., PartsRiver and Certicom Security. Prior to that time, Mr. Daley worked in operations management for Anheuser-Busch, Inc., and consulted to Gordon Biersch Brewing Company and Lion Breweries (New Zealand). Mr. Daley received a BS in Fermentation Science from University of California at Davis, and an MBA from Stanford University.

Patrice P. Rioux, M.D., Ph.D. joined Raptor as Chief Medical Officer of Raptor s clinical subsidiary, Raptor Therapeutics Inc. Prior to joining Raptor in April 2009, from November 2008 until March 2009, Dr. Rioux served as Chief Medical Officer of FerroKin Biosciences, an early-stage developer of iron chelator for treatment of anemias. From May 2005 to October 2008, he was Chief Medical Officer and Vice President Clinical/Regulatory for Edison Pharmaceuticals, which focused on developing drugs to treat inherited and acquired energy impairment diseases. From January 2004 through March 2006, Dr. Rioux was an independent clinical operations consultant. Dr. Rioux three-decade career includes positions at Repligen Corp., Arrow International, Variagenics, Inc., Biogen and GRP (Groupement de Recherche en Pharmacologie). From 1975 to 1995, Dr. Rioux was a researcher in Clinical Research and Epidemiology at INSERM (Institut National de la Sante et de la Recherche Medicale), a French organization that supports national research in the medical field. Educated in France, Dr. Rioux has an M.D., a Ph.D. in Mathematical Statistics, and a Masters degree in Pharmacology.

Kim R. Tsuchimoto, C.P.A., has served as the Chief Financial Officer, Treasurer and Secretary of Raptor s wholly-owned subsidiary, Raptor Pharmaceutical Inc., since its inception in 2006 and currently serves as Raptor s Chief Financial Officer, Secretary and Treasurer since May 25, 2006. Prior to this, Ms. Tsuchimoto served as Interim Controller at International Microcomputer Software, Inc., a software and Internet content company, from October 2005 to March 2006. From June 2005 to August 2005, Ms. Tsuchimoto served as Assistant Vice President, Controller at SpatiaLight Inc., a high technology company. From February 1997 to June 2005, Ms. Tsuchimoto served at BioMarin and its predecessor company, Glyko, Inc., most recently as Vice President, Treasurer for two years, Vice President, Controller for two years and prior to that, as Controller. Prior to her employment at BioMarin, Ms. Tsuchimoto served as Controller of a marketing consulting firm and an international venture capital firm and worked as a staff accountant in a local public accounting firm. Ms. Tsuchimoto is an inactive licensed California Certified Public Accountant and holds a B.S. in Business Administration with an emphasis in Accounting from San Francisco State University.

Executive Compensation and Option Grants

Compensation Discussion and Analysis

Overview

The Compensation Committee of Raptor s board of directors has overall responsibility for the compensation program for Raptor s executive officers. Specifically, Raptor s Compensation Committee establishes policies and otherwise discharges the responsibilities of Raptor s board of directors with respect to the compensation of Raptor s executive officers, senior management, and other employees. In evaluating executive officer pay, Raptor s Compensation Committee may retain the services of an independent compensation consultant or research firm and consider recommendations from the chief executive officer and persons serving in supervisory positions over a particular officer or executive officer with respect to goals and compensation of the other executive officers. The executive officers are not present or involved in deliberations concerning their compensation. Raptor s Compensation Committee assesses the information it receives in accordance with its business judgment. All decisions with respect to executive compensation, other than compensation for Raptor s

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Chief Executive Officer, are first approved by Raptor s Compensation Committee and then submitted, together with the Compensation Committee s recommendations, to Raptor s full board of directors for final approval. Compensation of Raptor s Chief Executive Officer is approved only by Raptor s Compensation Committee.

Raptor chose to pay the various elements of compensation discussed in order to attract and retain the necessary executive talent, reward annual performance and provide incentive for primarily long-term strategic goals, while considering short-term performance.

Elements of compensation for Raptor s executives generally include:

- base salary (typically subject to upward adjustment annually based on inflation factors, industry competitive salary levels, and individual performance);
- cash bonuses;
- stock option awards;
- 401(k) plan contributions; and
- health, disability and life insurance.

Raptor believes that the compensation of Raptor s executives should reflect their success in attaining key Raptor objectives and individual factors. The key Raptor objectives include: (1) establishing and executing on program milestones within planned budgetary expenditures; (2) securing adequate funds to achieve program objectives and to maintain Raptor s solvency and moderate financial risk; (3) meeting or exceeding program timelines and milestones; (4) expanding Raptor s preclinical product pipeline through creation of novel proprietary products or by utilization of technology, or acquiring or in-licensing new preclinical or clinical products and technology; (5) creating corporate partnerships, contracts, collaborations and out-licensing product technologies to achieve strategic objectives; (6) submitting and receiving satisfactory results of regulatory submissions; (7) establishing long-term competitive advantages, which leads to attaining an increased market price for Raptor s stock; (8) asset growth; and (9) developing a strong intellectual property position, which enhances the value of Raptor s products and technologies.

The key individual factors for each executive include: (1) the value of their unique skills and capabilities to support long-term performance of Raptor; (2) performance of their management responsibilities; (3) whether an increase in responsibility or change in title is warranted; (4) leadership qualities; (5) business responsibilities; (6) current compensation arrangements, especially in comparison to the compensation of other executives in similar positions in competitive companies within Raptor s industry; (7) short- and long-term potential to enhance stockholder value; and (8) contribution as a member of Raptor s executive management team.

Raptor s allocation between long-term and currently paid compensation is intended to ensure adequate base compensation to attract and retain personnel, while providing incentives to maximize long-term value for Raptor and Raptor s stockholders. Raptor provides cash compensation in the form of base salary and annual, discretionary cash bonuses to reward performance against pre-set written goals and objectives. Raptor provides non-cash compensation to reward performance against specific objectives and long-term strategic goals. Raptor s compensation package for its executive officers for the Fiscal Year 2008 ranges from 100% to 77% in cash compensation and 0% to 23% in non-cash compensation, including benefits and equity-related awards. Raptor believes that this ratio is competitive within the marketplace for companies at Raptor s stage of development and appropriate to fulfill Raptor s stated policies.

Elements of Compensation

Base Salary

Raptor s Compensation Committee has established base salary compensation for it s executive officers taking into account: (1) the officer s equity interest in Raptor; (2) the status of Raptor as an early-stage development company; (3) competitive levels of compensation; and (4) Raptor s ability to pay at this stage of its

funding cycle. In recommending base salaries for Fiscal Year 2008, Raptor s Compensation Committee considered individual performance and salaries paid to executive officers of other biotechnology companies similar in size, stage of development and other characteristics. In making its recommendations, Raptor s Compensation Committee takes into account recommendations submitted by persons serving in a supervisory position over a particular executive officer. In July 2008, Raptor s Compensation Committee hired an outside consultant to review Raptor s executive compensation and compensation for positions in which it is currently recruiting in order to offer a competitive compensation package to new employees and in an effort to compensate Raptor s executives closer to competitive levels. The outside consultant utilized a well-established industry salary survey and benchmarked Raptor s executive salaries with salaries of companies of similar size and located in the San Francisco Bay Area. Due to the significant differences between market rates and Raptor s Fiscal Year 2007 executive base salaries, Raptor s Compensation Committee recommended a pro rata three-step increase (over three years) for Dr. Starr, Raptor s Chief Executive Officer, and a pro rata two-step increase (over two years) for Raptor s other three executive officers. Based on the input from the outside consultant, the recommendation by Raptor s Compensation Committee and approval of Raptor s full board of directors, effective July 10, 2008, Raptor s executives base salaries* were as follows:

Christopher M. Starr, Ph.D.	Chief Executive Officer, President and Director	$ 213,610
Todd C. Zankel, Ph.D.	Chief Scientific Officer	$ 192,300
Kim R. Tsuchimoto, C.P.A.	Chief Financial Officer, Secretary and Treasurer	$ 208,401
Ted Daley	President, Raptor Therapeutics Inc. (f/k/a Bennu Pharmaceuticals Inc.)	$ 208,401**
Patrice P. Rioux, M.D., Ph.D.	Chief Medical Officer, Raptor Therapeutics Inc.	$ 280,000***

* Prior to July 10, 2008, executive salaries were as follows: Dr. Starr $150,000; Dr. Zankel $150,000; Ms. Tsuchimoto $176,000; and Mr. Daley $150,000.

** Mr. Daley commenced employment on September 10, 2007.

*** Dr. Rioux commenced employment on April 15, 2009.

Bonus and Other Non-Equity Incentive Plan Compensation

Given Raptor s stage of development and its desire to conserve cash, Raptor limited awarding cash bonuses to its executive officers and did not provide for other non-equity incentive plan compensation. Pursuant to his employment agreement, Mr. Daley received the following: a bonus of $30,000 in January 2008 related to the execution of a manufacturing contract to formulate 4-MP; in March 2008, a bonus of $10,000 for reaching his six-month employment anniversary; and in September 2008 a bonus of $10,000 for reaching his one-year anniversary.

In March 2008, pursuant to an asset purchase agreement with Convivia, Inc., which corporation has been dissolved and Mr. Daley was the sole stockholder, Mr. Daley received a bonus of 100,000 shares of Raptor s common stock related to the execution of a supply agreement for the active pharmaceutical ingredient for 4-MP and in October 2008, Mr. Daley received a bonus of 100,000 shares of Raptor s common stock and $30,000 related to the achievement of a clinical milestone. All of Raptor s executive officers are eligible for annual and discretionary cash and stock option bonuses pursuant to their employment agreements.

Pursuant to Dr. Rioux offer letter executed in April 2009, Dr. Rioux is eligible for bonus stock options exercisable for up to 50,000 shares of Raptor s common stock if the following milestones are achieved during his employment: Raptor s achievement of a successful pilot clinical trial of DR Cysteamine in cystinosis; first patient dosed in a pivotal clinical trial of DR Cysteamine in cystinosis; Raptor s filing of a New Drug Application for DR Cysteamine in cystinosis; and marketing approval of DR Cysteamine in cystinosis. To-date none of these milestones have been achieved and no bonuses have been granted to Dr. Rioux.

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Stock Option and Equity Incentive Programs

Raptor believes that equity grants provide Raptor s executive officers with a strong link to Raptor s long-term performance, create an ownership culture, and closely align the interests of Raptor s executive officers with the interests of Raptor s Stockholders. Because of the direct relationship between the value of an option and the market price of Raptor s common stock, Raptor have always believed that granting stock options is the best method of motivating the executive officers to manage Raptor in a manner that is consistent with the interests of Raptor and Raptor s stockholders. In addition, the vesting feature of Raptor s equity grants should aid officer retention because this feature provides an incentive to Raptor s executive officers to remain in Raptor s employ during the vesting period. In determining the size of equity grants to Raptor s executive officers, Raptor s Compensation Committee considers Raptor s Company-level performance, the applicable executive officer s performance, the period during which an executive officer has been in a key position with Raptor, the amount of equity previously awarded to or owned by the applicable executive officer, the vesting of such awards, the number of shares available under Raptor s 2006 Equity Incentive Plan and the recommendations of management and any other consultants or advisors with whom Raptor s Compensation Committee may choose to consult.

In Fiscal Year 2008, stock options were granted under the 2006 Equity Incentive Plan as an incentive to aid in the retention of the executive officers and to align their interests with those of Raptor s stockholders.

Raptor currently does not have any formal plan requiring it to grant, or not to grant, equity compensation on specified dates. With respect to newly hired executives, Raptor s practice is typically to consider stock option grants upon initial drafting of the executive s employment agreement followed by a Stock Option Committee unanimous written consent approving such stock option grant. The stock option exercise price is based on the closing price the day preceding the later of the Stock Option Committee approval or the executive s first day of employment. Raptor intend to ensure that Raptor does not award equity grants in connection with the release, or the withholding, of material non-public information, and that the grant exercise price of all equity awards is equal to the fair market value of the equity on the date of grant.

In September 2007, pursuant to his employment agreement, Raptor issued to Mr. Daley initial employment stock options to purchase 150,000 shares of Raptor s common stock at an exercise price of $0.52 per share which vests 6/48^{ths} on the six-month anniversary of the grant date and 1/48th per month thereafter and expire ten years from the grant date. In August 2008, Raptor s Compensation Committee recommended, and the full board of directors approved, a stock option grant to Mr. Daley for the purchase of 100,000 shares of Raptor s common stock at an exercise price of $0.44 per share, which vests 6/48^{ths} upon the six-month anniversary of the grant date and 1/48th per month thereafter and expires ten years from the grant date. Mr. Daley s 2008 stock option was granted in order to increase his initial employment stock option grant to be equal to the stock option grants of Raptor s other executive officers. In July 2008, Raptor granted stock options to Dr. Franklin to purchase 150,000 shares of Raptor s common stock at an exercise price of $0.52 per share, which vests 6/48^{ths} upon the six-month anniversary of the grant date and 1/48th per month thereafter and expires ten years from the grant date. No other stock options were granted to Raptor s executive officers or Raptor s board of directors during Fiscal Year 2008. The options that were granted to Raptor s officers are set forth in the Grants of Plan-Based Awards table below. All options granted to officers are intended to be qualified stock options as defined under Section 422 of the Internal Revenue Code of 1986, as amended, to the extent possible. All options to members of Raptor s board of directors were non-qualified stock options pursuant to Raptor s 2006 Equity Incentive Plan. In Fiscal Year 2009, pursuant to Dr. Rioux offer letter executed in April 2009, Raptor s Stock Option Committee approved, a stock option grant to Dr. Rioux for the purchase of 150,000 shares of Raptor s common stock at an exercise price of $0.20 per share, which vests 6/48^{ths} upon the six-month anniversary of the grant date and 1/48th per month thereafter and expires ten years from the grant date.

Perquisites

Raptor s executives do not receive any perquisites and are not entitled to benefits that are not otherwise available to all of Raptor s employees. In this regard it should be noted that Raptor does not provide pension arrangements, post-retirement health coverage, or similar benefits for Raptor s executives or employees.

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Defined Contribution Plan

Raptor maintains a qualified retirement plan pursuant to Internal Revenue Code Section 401(k) covering substantially all employees subject to certain minimum age and service requirements. Raptor s 401(k) plan allows employees to make voluntary contributions. The assets of the 401(k) plan are held in trust for participants and are distributed upon the retirement, disability, death or other termination of employment of the participant.

Employees who participate in Raptor s 401(k) may contribute to their 401(k) account up to the maximum amount that varies annually in accordance with the Internal Revenue Code. Raptor also makes available to 401(k) plan participants the ability to direct the investment of their 401(k) accounts in a well-balanced spectrum of various investment funds.

Raptor provides for a 401(k) matching, at its discretion, in the amount of 100% of the first 3% of employee deferral and 50% of the next 2% of employee deferral, in compliance with the Internal Revenue Service s Safe Harbor rules.

Employment Agreements

Drs. Starr and Zankel and Ms. Tsuchimoto entered into employment agreements with Raptor s wholly-owned subsidiary, Raptor Pharmaceutical Inc. in May 2006. Each employment agreement has an initial term of three years commencing on May 1, 2006 in the case of Dr. Starr and Ms. Tsuchimoto and May 15, 2006 in the case of Dr. Zankel, and will automatically renew for additional one year periods unless either party under such agreement notifies the other that the term will not be extended. Under their agreements, each officer is entitled to an annual salary ($150,000 each for Drs. Starr and Zankel and $160,000 for Ms. Tsuchimoto), the amount of which may be increased from time to time in the discretion of Raptor s board of directors, and stock options to purchase 250,000 shares of Raptor s common stock, which vest over three years with a six month cliff vest. Officers annual salaries are subject to annual review and potential increase by Raptor s board of directors. In addition, they are each eligible to receive annual bonuses in cash or stock options as awarded by Raptor s board of directors, at its discretion. On September 7, 2007, Raptor entered into an employment agreement with Ted Daley for a term of 18 months and will automatically renew for additional one year periods unless either party under such agreement notifies the other that the term will not be extended. Under Mr. Daley s agreement, Mr. Daley is entitled to an annual salary of $150,000 and stock options to purchase 150,000 shares of Raptor s common stock, which vest over four years with a six month cliff vest. Mr. Daley s annual salary is subject to annual review and potential increase by Raptor s board of directors. In addition, Mr. Daley is eligible to receive certain bonuses in cash and stock options based on triggering events related to the successful development of Raptor s Convivia™ product development program. Each of Drs. Starr s and Zankel s, Ms. Tsuchimoto s and Mr. Daley s respective employment agreements were amended effective as of January 1, 2009 for purposes of bringing such employment agreements into compliance with the applicable provisions of Section 409A of the Code and the Treasury Regulations and interpretive guidance issued thereunder.

If any officer s employment is constructively terminated or terminated by Raptor without cause, including in the event of a change of control, then the officer will be entitled to continue to receive his or her base salary, bonuses and other benefits for a period of 12 months from the date of termination. A description of the terms of these agreements, including post-employment payments and triggers, is included in the section titled, Executive Payments Upon Termination as of August 31, 2008.

For further detail please refer to the officers respective employment agreements filed as exhibits 10.5, 10.6 and 10.7 to Raptor s Current Report on Form 8-K, which was filed by Raptor with the SEC on May 26, 2006; exhibit 10.1 to Raptor s Form 10-QSB, which was filed by Raptor with the SEC on January 14, 2008; and exhibits 10.1, 10.2, 10.3 and 10.4 to Raptor s Current Report on Form 8-K, which was filed by Raptor with the SEC on January 5, 2009.

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Equity Incentive Plan

In May 2006, Raptor s stockholders approved the 2006 Equity Compensation Plan (the Plan). The Plan life is ten years and allows for the granting of options to Raptor s employees, directors and consultants. Typical option grants are for ten years with exercise prices at or above market price based on the last closing price as of the date prior to the grant date as quoted on the OTC Bulletin Board and vest over four years as follows: 6/48ths on the six -month anniversary of the date of grant and 1/48ths per month thereafter.

Accounting and Tax Considerations

Raptor selects and implements its various elements of compensation for their ability to help Raptor achieve its performance and retention goals and not based solely on any unique or preferential financial accounting treatment. In this regard, Section 162(m) of the Internal Revenue Code generally sets a limit of $1.0 million on the amount of annual compensation (other than certain enumerated categories of performance-based compensation) that Raptor may deduct for federal income tax purposes with respect to the executive officers (other than Raptor s chief financial officer) listed in the Summary Compensation Table below. Compensation realized upon the exercise of stock options is considered performance based if, among other requirements, the plan pursuant to which the options are granted has been approved by Raptor s stockholders and has a limit on the total number of shares that may be covered by options issued to any plan participant in any specified period.

Stock options granted under Raptor s 2006 Equity Incentive Plan are considered performance based. Therefore, any compensation realized upon the exercise of stock options granted under the 2006 Equity Incentive Plan will be excluded from the deductibility limits of Section 162(m). While Raptor has not adopted a policy requiring that all compensation be deductible, Raptor considers the consequences of Section 162(m) in designing its compensation practices.

Generally, the exercise of an incentive stock option does not trigger any recognition of income or gain to the holder but may be subject to Alternative Minimum Tax. If the stock is held until at least one year after the date of exercise (or two years from the date the option is granted, whichever is later), all of the gain on the sale of the stock, when recognized for income tax purposes will be capital gain, rather than ordinary income to the recipient. Consequently, Raptor does not receive a tax deduction. For stock options that do not qualify as incentive stock options, Raptor is entitled to a tax deduction in the year in which the stock options are exercised equal to the spread between the exercise price and the fair market value of the stock on the exercise date. The holders of the non-qualified stock options are generally taxed on this same amount in the year of exercise. If the holder of an incentive stock option exercises their options and sells the stock received from such exercise before the one year holding period or before two years from grant date, this is known as a disqualifying disposition, which will be subject to ordinary income tax for the option holder and will be tax deductible to Raptor.

Stock Ownership Guidelines

Although Raptor has not adopted any stock ownership guidelines, Raptor believes that its compensation of executive officers, which includes the use of stock options, results in an alignment of interest between these individuals and Raptor s Stockholders.

Benchmarking and Consultants

Raptor s Compensation Committee reviews the history of all the elements of each executive officer s total compensation over Raptor s short history and compares the compensation of the executive officers with that of the executive officers in an appropriate market comparison group comprised of other biotechnology companies similar in size, stage of development and other characteristics.

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Named Executive Officer Compensation

Summary Compensation Table(4)

Name and Principal Position	Fiscal Year (ending August 31)	Salary $(1)	Bonus $	Stock Awards $	Option Awards $(2)	Non-equity Incentive Plan Compensation $	Change in Pension Value and NQDC Earnings $	All Other Compensation $(3)	Total $
Christopher M. Starr, Ph.D.	2008	156,116			42,864			7,188	206,168
		150,000			40,612			2,789	193,401
Chief Executive Officer	2007								51,385
		51,346						39	
and Director	2006								
Todd C. Zankel, Ph.D.	2008	154,067			42,864			7,106	204,037
		150,000			40,612			2,789	193,401
Chief Scientific	2007								45,616
		45,577						39	
Officer	2006								
Kim R. Tsuchimoto, C.P.A.	2008	179,115			47,881			8,171	235,167
		163,333	25,000		38,739			4,098	231,170
Chief Financial Officer,	2007								66,456
		66,204						252	
Secretary, And	2006								
Treasurer									
Ted Daley,	2008	146,962	40,000	56,000	14,594			7,866	265,422
President, Raptor Therapeutics Inc. (f /k/a Bennu Pharmaceuticals Inc.)									

(1) Dr. Starr and Ms. Tsuchimoto s full time employment commenced on May 1, 2006 at an annual base salary of $150,000 and $160,000, respectively. Ms. Tsuchimoto s annual base salary increased to $176,000 in June 2007 and to $208,401 in July 2008. Dr. Starr s salary increased to $213,610 in July 2008. Dr. Zankel s full time employment commenced on May 15, 2006 at an annual base salary of $150,000 which increased to $192,300 in July 2008. Mr. Daley s full-time employment commenced on September 10, 2007 at an annual base salary of $150,000 which increased to $208,401 in July 2008.

(2) This column represents the dollar amount recognized for financial statement reporting purposes with respect to Fiscal Years 2008 and 2007 for the fair value of the stock options granted to each of the named executive officers since inception, in accordance with SFAS 123R. The amounts shown exclude the impact of estimated forfeitures related to service-based vesting conditions. For additional information on the valuation assumptions with respect to the Fiscal Years 2008 and 2007 grants, please refer to the notes in Raptor s financial statements filed with the SEC on October 30, 2008 in Raptor s annual report on Form 10-K for the fiscal year ended August 31, 2008. These amounts reflect Raptor s accounting expense for these awards, and do not correspond to the actual value that will be recognized by the named executive officers. In May 2006 Drs. Starr and Zankel and Ms. Tsuchimoto were granted stock options to purchase 250,000 shares of Raptor s common stock at an exercise price of $0.66 per share for Drs. Starr and Zankel and $0.60 per share for Ms. Tsuchimoto. The options vest 6/36^{ths} on the six month anniversary of the grant date and 1/36th per month thereafter and expire 10 years from grant date. No dollar amount is reflected in this column for Raptor s fiscal year ended August 31, 2006 due to the fact that SFAS 123R was not adopted by Raptor until Raptor s Fiscal Year 2007.

(3) All Other Compensation includes 401(k) match funded by Raptor and life insurance premiums paid by Raptor where the executive is the beneficiary.

(4) Dr. Patrice P. Rioux employment commenced on April 15, 2009 at an annual base salary of $280,000.

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Stock Option Grants and Exercises During the Fiscal Year Ended August 31, 2008

The following table sets forth information concerning stock option grants made during Fiscal Year 2008, to Raptor s executive officers named in the Summary Compensation Table above. The fair value information in the far right column is for illustration purposes only and is not intended to predict the future price of Raptor s common stock. The actual future value of the stock options will depend on the market value of Raptor s common stock.

Grants of Plan-Based Awards Table

		Estimated Future Payouts Under Non-Equity Incentive Plan Awards			Estimated Future Payouts Under Equity Incentive Plan Awards			All Other Stock Awards: Number of Shares of Stock or Units	All Other Options Awards: Number of Securities Underlying Options	Exercise or Base Price of Option Awards	Grant Date Fair Value of Option Awards
Name	Grant Date	Threshold ($)	Target ($)	Maximum ($)	Threshold ($)	Target ($)	Maximum ($)	(#)	(#)(1)	($/Sh)(2)	($)(3)
Ted Daley	9/10/07								150,000	0.52	14,138
	8/12/08								100,000	0.44	456

(1) These stock options vest 6/48^{ths} on the six-month anniversary of the grant date and 1/48th per month thereafter. The options expire 10 years from grant date.

(2) This column shows the exercise price for the stock options granted, which was the closing price of Raptor s common stock one day preceding the stock option grant date.

(3) This column represents the dollar amount recognized for financial statement reporting purposes with respect to Fiscal Year 2008 for the fair value of the stock options granted to each of the named executive officers in Fiscal Year 2008 in accordance with SFAS 123R. The amounts shown exclude the impact of estimated forfeitures related to service-based vesting conditions. These amounts reflect Raptor s accounting expense for these awards, and do not correspond to the actual value that will be recognized by the named executive officers.

The following table sets forth certain information with respect to outstanding stock option awards of the named executive officers for Fiscal Year 2008.

Outstanding Equity Awards at August 31, 2008

	Option Awards				
Name	Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)(1)	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price ($)	Option Expiration Date(2)
Christopher M. Starr, Ph.D.	187,500(1)	62,500		0.66	5/26/2016
Todd C. Zankel, Ph.D.	187,500(1)	62,500		0.66	5/26/2016
Kim R. Tsuchimoto, C.P.A.	185,000(1)	62,500		0.60	5/26/2016
	14,583(2)	35,417		0.60	6/14/2017
	8,799(2)	21,251		0.60	6/14/2017
Ted Daley	34,374(2)	115,626		0.52	9/10/2017
	0(2)	100,000		0.44	8/12/2018

(1) Stock options vest 6/36^{ths} on the six month anniversary of grant date and 1/36th per month thereafter.
(2) Stock options vest 6/48^{ths} on the six month anniversary of grant date and 1/48th per month thereafter.

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Option Exercises

There were no option exercises by Raptor s executive officers during Raptor s Fiscal Year 2008.

Post-Employment Compensation

Employment Agreements

Drs. Starr and Zankel and Ms. Tsuchimoto entered into employment agreements with Raptor s wholly-owned subsidiary, Raptor Pharmaceutical Inc. in May 2006. Each employment agreement has an initial term of three years commencing on May 1, 2006 in the case of Dr. Starr and Ms. Tsuchimoto and May 15, 2006 in the case of Dr. Zankel, and will automatically renew for additional one year periods unless either party under such agreement notifies the other that the term will not be extended. Under their agreements, each officer is entitled to an annual salary ($150,000 each for Drs. Starr and Zankel and $160,000 for Ms. Tsuchimoto), the amount of which may be increased from time to time in the discretion of Raptor s board of directors, and stock options to purchase 250,000 shares of Raptor s common stock, which vest over three years with a six month cliff vest. Officers annual salaries are subject to annual review and potential increase by Raptor s board of directors. In addition, they are each eligible to receive annual bonuses in cash or stock options as awarded by Raptor s board of directors, at its discretion. On September 7, 2007, Raptor entered into an employment agreement with Ted Daley for a term of 18 months and will automatically renew for additional one year periods unless either party under such agreement notifies the other that the term will not be extended. Under Mr. Daley s agreement, Mr. Daley is entitled to an annual salary of $150,000 and stock options to purchase 150,000 shares of Raptor s common stock, which vest over four years with a six month cliff vest. Mr. Daley s annual salary is subject to annual review and potential increase by Raptor s board of directors. In addition, Mr. Daley is eligible to receive certain bonuses in cash and stock options based on triggering events related to the successful development of Raptor s Convivia product development program. In April 2009, Raptor executed an employment offer to Dr. Patrice Rioux with an annual base salary of $280,000.

Except for Dr. Rioux, if any officer s employment is constructively terminated or terminated by Raptor without cause, including in the event of a change of control, then the officer will be entitled to continue to receive his or her base salary, bonuses and other benefits for a period of 12 months from the date of termination. In the case of a change of control, such officer s outstanding and unvested stock options shall become fully vested. In the case of Dr. Rioux, upon a change of control, Dr. Rioux is entitled to receive 6 months of base salary and all of his outstanding and unvested stock options shall become fully vested.

Except for Dr. Rioux, if any officer s employment is terminated for cause, by death or due to a voluntary termination, Raptor shall pay to such officer, or in the case of termination due to death, his or her estate, the compensation and benefits payable through the date of termination.

Except for Dr. Rioux, if any officer s employment is terminated due to disability, Raptor shall pay to such officer the compensation and benefits payable through the date of termination and shall continue to pay such officer salary and a prorated bonus for three months following such termination, at the end of which time such officer shall receive short-term and eventually long-term disability benefits pursuant to Raptor s current disability insurance plans.

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The following table quantifies the amounts that Raptor would owe each of its executive officers upon each of the termination triggers discussed above:

Executive Payments Upon Termination (As of August 31, 2008)*

Christopher M. Starr, Ph.D.

Chief Executive Officer

Executive Benefits and Payments Upon Termination	Disability	Death	Termination Without Cause or Constructive Termination	CIC Whether or Not Services are Terminated(1)
Severance Payments				
Base Salary	$ 53,403(3)	$	$ 213,610(2)	$ 213,610(2)
Short-Term Incentive	(4)	(4)	(5)	(5)
Value of Unvested Equity Awards and Accelerated Vesting				
Stock Options				27,883(6)
Total	**$ 53,403**	**$**	**$ 213,610**	**$ 241,493**

(1) CIC means change in control, as defined within the officer s employment agreement.
(2) 12 months base salary.
(3) 3 months base salary.
(4) Pro rata bonus.
(5) Full cash bonus otherwise payable.
(6) Vesting of all stock options granted in accordance with SFAS 123R. The amounts shown exclude the impact of estimated forfeitures related to service-based vesting conditions. These amounts reflect Raptor s accounting expense for these awards, and do not correspond to the actual value that will be recognized by the named executive officers.

Todd C. Zankel, Ph.D.

Chief Scientific Officer

Executive Benefits and Payments Upon Termination	Disability	Death	Termination Without Cause or Constructive Termination	CIC Whether or Not Services are Terminated(1)
Severance Payments				
Base Salary	$ 48,075(3)	$	$ 192,300(2)	$ 192,300(2)
Short-Term Incentive	(4)	(4)	(5)	(5)
Value of Unvested Equity Awards and Accelerated Vesting				
Stock Options				27,883(6)
Total	**$ 48,075**	**$**	**$ 192,300**	**$ 220,183**

(1) CIC means change in control, as defined within the officer s employment agreement.
(2) 12 months base salary.
(3) 3 months base salary.
(4) Pro rata bonus.
(5) Full cash bonus otherwise payable.
(6) Vesting of all stock options granted in accordance with SFAS 123R. The amounts shown exclude the impact of estimated forfeitures related to service-based vesting conditions. These amounts reflect Raptor s accounting expense for these awards, and do not correspond to

the actual value that will be recognized by the named executive officers.

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Kim R. Tsuchimoto, C.P.A.

Chief Financial Officer, Secretary and Treasurer

Executive Benefits and Payments Upon Termination	Disability	Death	Termination Without Cause or Constructive Termination	CIC Whether or Not Services are Terminated(1)
Severance Payments				
Base Salary	$ 52,100(3)		$ 208,401(2)	$ 208,401(2)
Short-Term Incentive	(4)	(4)	(5)	(5)
Value of Unvested Equity Awards and Accelerated Vesting				
Stock Options				37,529(6)
Total	**$ 52,100**	**$**	**$ 208,401**	**$ 245,930**

(1) CIC means change in control, as defined within the officer s employment agreement.
(2) 12 months base salary.
(3) 3 months base salary.
(4) Pro rata bonus.
(5) Full cash bonus otherwise payable.
(6) Vesting of all stock options granted in accordance with SFAS 123R. The amounts shown exclude the impact of estimated forfeitures related to service-based vesting conditions. These amounts reflect Raptor s accounting expense for these awards, and do not correspond to the actual value that will be recognized by the named executive officers.

Ted Daley,

President, Raptor Therapeutics Inc. (f/k/a Bennu Pharmaceuticals Inc.)

Executive Benefits and Payments Upon Termination	Disability	Death	Termination Without Cause or Constructive Termination	CIC Whether or Not Services are Terminated(1)
Severance Payments				
Base Salary	$ 52,100(3)	$	$ 208,401(2)	$ 208,401(2)
Short-Term Incentive	(4)	(4)	(5)	(5)
Value of Unvested Equity Awards and Accelerated Vesting				
Stock Options				77,831(6)
Total	**$ 52,100**	**$**	**$ 208,401**	**$ 286,232**

(1) CIC means change in control, as defined within the officer s employment agreement.
(2) 12 months base salary.
(3) 3 months base salary.
(4) Pro rata bonus.
(5) Full cash bonus otherwise payable.
(6) Vesting of all stock options granted in accordance with SFAS 123R. The amounts shown exclude the impact of estimated forfeitures related to service-based vesting conditions. These amounts reflect Raptor s accounting expense for these awards, and do not correspond to the actual value that will be recognized by the named executive officers.
* In the case of Dr. Rioux, upon a change of control, Dr. Rioux will be entitled to $140,000 of base salary.

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Compensation Committee Interlocks and Insider Participation

All compensation decisions made during Fiscal Year 2008 were made exclusively by the independent directors serving on Raptor s Compensation Committee, with respect to Raptor s Chief Executive Officer, executive officers and other officers. The members of Raptor s Compensation Committee during Fiscal Year 2008 were Mr. Anderson and Mr. Sager, none of whom were officers or employees of Raptor or any of Raptor s subsidiaries during Fiscal Year 2008 or in any prior year. None of Raptor s executive officers served as a member of the board or compensation committee of any other company that has an executive officer serving as a member of Raptor s board of directors or Compensation Committee.

Securities Authorized for Issuance Under Equity Compensation Plans

The following table provides information as of August 31, 2008 with respect to shares of Raptor common stock that may be issued under its existing equity compensation plans, including the 2006 Equity Incentive Plan. Stockholders approved Raptor s 2006 Equity Incentive Plan in May 2006, and Raptor s board of directors approved Amendment No. 1 in February 2007 and Amendment No. 2 in December 2008.

	Equity Compensation Plan Information		
Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights as of August 31, 2008 (a)	Weighted-average exercise price of outstanding options, warrants and rights as of August 31, 2008 (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) as of August 31, 2008 (c)
Equity compensation plans approved by security holders	3,893,227	$ 0.59	2,092,273
Equity compensation plans not previously approved by security holders	0	0	0
Total	3,893,227	$ 0.59	2,092,273

In May 2006 Raptor s stockholders approved the 2006 Equity Compensation Plan (the Plan). The Plan life is ten years and allows for the granting of options to Raptor s employees, directors and consultants. Typical option grants are for ten years at or above market price based on the last closing price as of the date immediately preceding the grant date as quoted on the OTC Bulletin Board and vests over four years as follows: 6/48ths on the six month anniversary of the date of grant and 1/48th per month thereafter.

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CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Review, Approval or Ratification of Transactions with Related Persons

As provided in the charter of Raptor s Audit Committee, it is Raptor s policy that it will not enter into any transactions required to be disclosed under Item 404 of the SEC s Regulation S K unless the Audit Committee or another independent body of Raptor s board of directors first reviews and approves the transactions. The Raptor Audit Committee is required to review on an on-going basis, and pre-approve all related party transactions before they are entered into including those transaction that are required to be disclosed under Item 404 of Regulation S-K promulgated by the SEC. If such transaction relates to compensation, it must be approved by the Raptor Compensation Committee as well. All related party transactions must also be approved by the disinterested members of the Raptor board of directors. It is the responsibility of Raptor s employees and directors to disclose any significant financial interest in a transaction between Raptor and a third party, including an indirect interest. All related party transactions shall be disclosed in Raptor s filings with the SEC as required under SEC rules. The Board has determined that each of Mr. Anderson and Mr. Sager is independent under the rules of the SEC.

In addition, pursuant to Raptor s Code of Business Conduct and Ethics, all employees, officers and directors of Raptor and its subsidiaries are prohibited from engaging in any relationship or financial interest that is an actual or potential conflict of interest with Raptor without approval. Employees, officers and directors are required to provide written disclosure to the Chief Executive Officer as soon as they have any knowledge of a transaction or proposed transaction with an outside individual, business or other organization that would create a conflict of interest or the appearance of one.

Pursuant to the terms of a share purchase agreement, Raptor issued to each of Drs. Starr and Zankel (its Chief Executive Officer and its Chief Scientific Officer, respectively) 3,000,000 shares of Raptor s common stock and to Erich Sager (one of Raptor s directors) 1,000,000 shares of its common stock. Mr. Sager purchased his shares pursuant to a promissory note when Raptor was privately held in February 2006 in the amount of $100,000 plus accrued interest at 8% per annum. Mr. Sager repaid $50,000 of the note on February 8, 2006, another $50,000 on March 9, 2006 and $373 of accrued interest on April 11, 2006. Drs. Starr and Zankel and Mr. Sager did not own any shares of Raptor s common stock at the time when such share purchase agreement was first approved and executed.

Pursuant to the terms of an asset purchase agreement, Raptor and its wholly-owned subsidiary, Raptor Therapeutics Inc. (f/k/a Bennu Pharmaceuticals Inc.) purchased certain assets of Convivia, Inc., which is wholly-owned by Ted Daley, President of Raptor Therapeutics Inc. (f/k/a Bennu Pharmaceuticals Inc.). To date, in aggregate Mr. Daley received 400,000 shares of Raptor s common stock and $80,000 in cash bonuses and may receive additional common stock and cash bonuses based on the successful development of Raptor s Convivia development program. Mr. Daley was hired to develop the Convivia product candidate along with other clinical-stage programs at Raptor Therapeutics Inc. (f/k/a Bennu Pharmaceuticals Inc.).

With respect to Raptor s May and June 2008 private placement, Limetree Capital was issued warrants to purchase 1,882,650 shares of Raptor s common stock at an exercise price of $0.55 per share and cash commissions of $627,550. Erich Sager, the Chairman of Raptor s board of directors serves on the board of directors of Limetree Capital.

In the ordinary course of Raptor s business, its officers have loaned money to Raptor by paying travel expenses and equipment and other costs from their personal funds on behalf of Raptor. Raptor has promptly reimbursed the officers.

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REPORT OF THE COMPENSATION COMMITTEE OF THE RAPTOR BOARD OF DIRECTORS

Raptor s Compensation Committee has reviewed and discussed the preceding Compensation Disclosure and Analysis with management and, based on such review and discussions, Raptor s Compensation Committee recommended to Raptor s board of directors that the Compensation Disclosure and Analysis be included in this joint proxy statement/prospectus.

Compensation Committee

Erich Sager, (Chair)

Raymond W. Anderson

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UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL STATEMENTS

Except where specifically noted, the following information and all other information contained in this proxy statement/prospectus do not give effect to the proposed reverse stock split described in TorreyPines Proposal No. 2.

The following unaudited pro forma condensed combined financial statements give effect to the proposed business combination of TorreyPines and Raptor. For accounting purposes Raptor is considered to be acquiring TorreyPines in the merger. Accordingly, the purchase price is allocated among the fair values of the assets and liabilities of TorreyPines, while the historical results of Raptor are reflected in the results of the combined company. The transaction will be accounted for under the purchase method of accounting in accordance with Statement of Financial Accounting Standards, or SFAS, No. 141(R), *Business Combinations*. Under the purchase method of accounting, the total estimated purchase price, calculated as described in Note 2 to these unaudited pro forma condensed combined financial statements, is allocated to the tangible and intangible assets acquired and liabilities assumed in connection with the transaction, based on their estimated fair values as of the completion of the transaction.

For purposes of these unaudited pro forma condensed combined financial statements, TorreyPines and Raptor have made a preliminary allocation of the estimated purchase price to the assets acquired and liabilities assumed based on various preliminary estimates of their fair value, as described in Note 2 to these unaudited pro forma condensed combined financial statements. A final determination of these estimated fair values, which cannot be made prior to the completion of the merger, will be based on the actual net assets of TorreyPines that exist as of the date of completion of the merger. The actual amounts recorded as of the completion of the merger may differ materially from the information presented in these unaudited pro forma condensed combined financial statements as a result of:

- cash cost of TorreyPines operations between the signing of the merger agreement and the closing of the merger,
- the timing of completion of the merger, and
- other changes in TorreyPines assets that occur prior to completion of the merger, which could cause material differences in the information presented below.

The unaudited pro forma condensed combined financial statements presented below are based on the historical financial statements of TorreyPines and Raptor, adjusted to give effect to the acquisition of TorreyPines by Raptor for accounting purposes. The pro forma adjustments are described in the accompanying notes presented on the following pages.

The unaudited pro forma condensed combined financial statements were prepared using the purchase method of accounting. For accounting purposes, Raptor is considered to be acquiring TorreyPines in the merger. TorreyPines and Raptor s unaudited pro forma condensed combined balance sheet assumes that the merger took place on May 31, 2009 and combines Raptor s historical balance sheet at May 31, 2009 with TorreyPines historical balance sheet at June 30, 2009. The historical balance sheet for Raptor was derived from its unaudited consolidated balance sheet included in its Form 10-Q for the quarterly period ended May 31, 2009, included herein. The historical balance sheet for TorreyPines was derived from its unaudited consolidated balance sheet included in its Form 10-Q for the quarterly period ended June 30, 2009, included herein.

TorreyPines and Raptor s unaudited pro forma condensed combined statements of operations assume that the merger took place as of the beginning of the periods presented. The unaudited pro forma condensed combined statement of operations for the year ended August 31, 2008 combines Raptor s historical statement of operations for the year ended August 31, 2008 with TorreyPines derived historical statement of operations for the year ended September 30, 2008. The unaudited pro forma condensed combined statement of operations for the nine months ended May 31, 2009 combines Raptor s historical statement of operations for the nine months

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ended May 31, 2009 with TorreyPines derived historical statement of operations for the nine months ended June 30, 2009. The historical statements of operations for Raptor were derived from its audited consolidated statement of operations included in its Annual Report on Form 10-K for the year ended August 31, 2008, and its unaudited consolidated statement of operations included in its Form 10-Q for the quarterly period ended May 31, 2009, included herein. The derived historical statements of operations for TorreyPines were derived from its audited consolidated statement of operations included in its Annual Report on Form 10-K for the year ended December 31, 2008, and its unaudited consolidated statement of operations included in its Form 10-Q for the quarterly period ended June 30, 2009, included herein.

The unaudited pro forma condensed combined financial statements have been prepared for illustrative purposes only and are not necessarily indicative of the consolidated financial position or results of operations in future periods or the results that actually would have been realized had TorreyPines and Raptor been a combined company during the specified periods. The pro forma adjustments are based on the preliminary information available at the time of the preparation of this joint proxy statement/prospectus. The unaudited pro forma condensed combined financial statements, including the notes thereto, are qualified in their entirety by reference to, and should be read in conjunction with, the historical consolidated financial statements of Raptor included in it Form 10-Q for the nine months ended May 31, 2009 and its Annual Report on Form 10-K for the year ended August 31, 2008 included herein, and the historical condensed consolidated financial statements of TorreyPines included in its Form 10-Q for the six months ended June 30, 2009, and the historical consolidated financial statements of TorreyPines included in its Annual Report on Form 10-K for the year ended December 31, 2008, also included herein.

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Unaudited Pro Forma Condensed Combined Balance Sheet

	May 31, 2009					
	Raptor Pharmaceuticals Historical May 31, 2009	TorreyPines Therapeutics Historical June 30, 2009	Pro Forma Adjustments		Purchase Accounting Adjustments		Pro Forma Combined
Assets							
Current assets							
Cash and cash equivalents	$ 492,963	$ 1,175,000	$		$		$ 1,667,963
Other current assets	163,508	243,000					406,508
Total current assets	656,471	1,418,000					2,074,471
Intangible assets, net	2,559,417				1,321,000	E	3,880,417
Fixed assets, net	162,490						162,490
Deposits	100,207						100,207
Total assets	$ 3,478,585	$ 1,418,000	$		$ 1,321,000		$ 6,217,585
Liabilities and stockholders equity							
Current Liabilities							
Accounts payable & accrued liabilities	$ 785,302	$ 149,000	$ 700,000	A	$		$ 1,634,302
Deferred rent	3,203						3,203
Capital lease liability, current	3,948						3,948
Total current liabilities	792,453	149,000	700,000				1,641,453
Capital lease liability, long-term	7,770						7,770
Total liabilities	800,223	149,000	700,000				1,649,223
Stockholders equity							
Common stock	60,430	16,000			(16,000)	B	319,981
					(60,430)	C	
					319,981	D	
Additional paid-in capital	22,547,701	123,167,000			(123,167,000)	B	24,528,150
					60,430	C	
					(319,981)	D	
					2,240,000	E	
Accumulated deficit	(19,929,769)	(121,914,000)	(700,000)	A	122,264,000	B	(20,279,769)
Total stockholders equity	2,678,362	1,269,000	(700,000)		1,321,000		4,568,362
Total Liabilities & Equity	$ 3,478,585	$ 1,418,000	$		$ 1,321,000		$ 6,217,585

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Unaudited Pro Forma Condensed Combined Statement of Operations

	Nine Months Ended May 31, 2009			
	Raptor Pharmaceuticals Historical May 31, 2009	TorreyPines Therapeutics Historical June 30, 2009	Pro Forma Adjustments	Pro Forma Combined
Revenue				
License and option fees	$	$ 90,000		$ 90,000
Other revenue		1,780,000		1,780,000
Total revenue		1,870,000		1,870,000
Operating expenses				
Research and development	5,369,922	4,136,000		9,505,922
General and administrative	1,935,612	3,485,000		5,420,612
Loss on impairment of purchased patents		3,074,000		3,074,000
Total operating expenses	7,305,534	10,695,000		18,000,534
Loss from operations	(7,305,534)	(8,825,000)		(16,130,534)
Other income (expense)				
Interest income	32,930	46,000		78,930
Interest expense	(1,876)	(111,000)		(112,876)
Loss on extinguishment of debt		(76,000)		(76,000)
Foreign exchange gain		145,000		145,000
Impairment of property and equipment		5,000		5,000
Gain on asset disposal		40,000		40,000
Total other income (expense)	31,054	49,000		80,054
Net loss	$ (7,274,480)	$ (8,776,000)	$	$ (16,050,480)
Basic and diluted net loss per share	$ (0.12)	$ (0.55)		$ (0.05)
Weighted average shares used in computation of basic and diluted net loss per share	60,411,732	15,906,280		319,981,160

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Unaudited Pro Forma Condensed Combined Statement of Operations

	Twelve Months Ended August 31, 2008			
	Raptor Pharmaceuticals Historical Aug. 31, 2008	TorreyPines Therapeutics Historical Sept. 30, 2008	Pro Forma Adjustments	Pro Forma Combined
Revenue				
License and option fees	$	$ 3,893,000		$ 3,893,000
Research funding		3,050,000		3,050,000
Total revenue		6,943,000		6,943,000
Operating expenses				
Research and development	5,558,871	23,316,000		28,874,871
General and administrative	2,229,140	5,760,000		7,989,140
In-process research and development	240,625			240,625
Total operating expenses	8,028,636	29,076,000		37,104,636
Loss from operations	(8,028,636)	(22,133,000)		(30,161,636)
Other income (expense)				
Interest income	77,871	787,000		864,871
Interest expense	(103,198)	(492,000)		(595,198)
Equity in income of OXIS International, Inc.		84,000		84,000
Impairment of equity investment in OXIS International, Inc.		(1,881,000)		(1,881,000)
Fair value adjustment to Investment in OXIS International, Inc.		(559,000)		(559,000)
Loss on sale of Investment in OXIS International, Inc.		(377,000)		(377,000)
Loss on extinguishment of debt		(165,000)		(165,000)
Impairment of property and equipment		(158,000)		(158,000)
Foreign exchange gain		1,000		1,000
Total other income (expense)	(25,327)	(2,760,000)		(2,785,327)